

**GENERATION Y FEMALE STUDENTS'  
INCLINATION TOWARDS ENTREPRENEURSHIP:  
A COMPARATIVE STUDY BETWEEN SOUTH  
AFRICA AND THE NETHERLANDS**

**Luzaan Hamilton**

**Thesis submitted in fulfilment of the requirements for the degree**

**Philosophiae Doctor**

in

**BUSINESS MANAGEMENT**

at the

**Vaal Triangle Campus**

of the

**North-West University**

Promoter: Prof N de Klerk  
Co-promoter: Prof AL Bevan-Dye  
Vanderbijlpark  
2015

## **DECLARATION**

---

I declare that: GENERATION Y FEMALE STUDENTS' INCLINATION TOWARDS ENTREPRENEURSHIP: A COMPARATIVE STUDY BETWEEN SOUTH AFRICA AND THE NETHERLANDS is my own work; that all sources used or quoted have been indicated and acknowledged by means of complete references, and that this thesis was not previously submitted by me or any other person for degree purposes at this or any other university.

---

SIGNATURE

---

DATE

## LETTER FROM LANGUAGE EDITOR

---

Ms Linda Scott  
English language editing  
SATI membership number: 1002595  
Tel: 083 654 4156  
E-mail: lindascott1984@gmail.com

**8 November 2015**

To whom it may concern

This is to confirm that I, the undersigned, have language edited the **thesis** of

**Luzaan Hamilton**

for the degree

***Philosophiae Doctor in Business Management***

entitled:

**Generation Y female students' inclination towards entrepreneurship: a  
comparative study between South Africa and The Netherlands**

The responsibility of implementing the recommended language changes rests with the  
author of the thesis.

Yours truly,



Linda Scott

## ACKNOWLEDGEMENTS

---

A special word of thanks to the following persons for their assistance in completing this study:

- To God, who inspires me, who provided me with strength and for never leaving me through all my trials and testing.
- To my husband, Riaan Hamilton for his constant love, support, encouragement and patience.
- To my children, Denicia and Ryan Hamilton for their patience and love.
- To my parents, Hannes and Ritha Nel, for their love, support and motivation.
- To my sister, Bianca Els for her love and ongoing support.
- To my other two siblings, Hannes Nel and Saira-Lee Nel for their love and ongoing support.
- To my grandmother Corrie Buys, in-laws, family, friends and colleagues who gave additional support and advice in assisting me to complete the study.
- To Prof Herman van der Merwe for all his guidance and support.
- To my promoter, Prof Natasha de Klerk, for all her advice, constant motivation, support, encouragement, guidance and expertise in assisting me to complete the study.
- To my co-promoter, Prof Ayesha Bevan-Dye, who provided additional guidance and expertise in assisting me to complete the study.
- To Aldine Oosthuyzen of the North-West University (Vaal Triangle Campus) for her expert assistance with the statistical aspects and processes involved in this study.
- To Linda Scott for her professionalism in the language editing of the study.
- To all students in South Africa and the Netherlands who participated in the piloting and main survey questionnaires.

Luzaan Hamilton  
Vanderbijlpark  
2015

## ABSTRACT

---

**Key words:** inclination, entrepreneurship, females, Generation Y, South Africa, Netherlands

Entrepreneurship is considered a vital driving force for stimulating economic growth, economic competitiveness and for creating employment opportunities. Consequently, the creation of new ventures and the growth of existing entrepreneurial businesses are vital contributing factors to a robust economy. Female entrepreneurship, in particular, is a phenomenon that is viewed as a driving force in the economy because it has a significant effect on employment growth and the global business environment. More specifically, female entrepreneurs are perceived as important agents of social and economic change, significantly contributing to the world economic development in terms of employment generation, innovation and wealth. Understanding female Generation Y students' inclination towards entrepreneurship from an emerging and developed economy makes an important contribution in that it will help better tailor marketing strategies designed to stimulate interest in entrepreneurship amongst female students.

As such, the primary objective of this study was to determine and compare undergraduate university female Generation Y students' inclination towards entrepreneurship in the South African and the Netherlands' context in order to facilitate the creation of a strong entrepreneurial climate amongst South African female Generation Y students.

For the purpose of this study, two samples were conveniently selected, namely Sample South Africa (SA) and Sample Netherlands (NL). A non-probability, convenience sample of 400 South African Generation Y female students (Sample SA) and 400 Generation Y female students from the Netherlands (Sample NL) were drawn in order to conduct this study. In both the South African and Netherlands' samples, the questionnaires were divided equally between the two HEIs sampled per country. A structured self-administered questionnaire was utilised to gather the required data for this study. This questionnaire comprised scales measuring Generation Y students' motivations, perceived barriers and attitudes towards entrepreneurship.

The collected data were analysed using exploratory factor analysis, reliability and validity analysis, descriptive statistics analysis, correlation analysis, logistic regression analysis and a two independent-samples t-test.

The findings of this study suggest that independence motives, intrinsic motives and personal motivational barriers have a significant influence on female Generation Y cohort members' entrepreneurial interest. In addition, the findings of this study suggest that economic and financial barriers, positive attitudes, extrinsic motives, personal competence barriers, organisational barriers, entry barriers and negative attitudes do not have a significant influence on female Generation Y cohort members' entrepreneurial interest. Furthermore, the findings of this study indicate no statistically significant difference between South African and Dutch female students concerning perceived economic and financial barriers as a determinant of entrepreneurial inclination. However, in comparison to Sample NL, South African female Generation Y students (Sample SA) scored a statistically significant higher means for independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, entry barriers, positive attitudes and negative attitudes.

This model developed in this study represents an important tool for predicting the Generation Y female student cohort's entrepreneurial inclination in both the South African and the Netherlands context. In addition, the recommendations emanating from the study will enable HEIs and industry professionals, such as business incubator managers, academics and incubator managers to tailor marketing strategies designed to stimulate interest in entrepreneurship as well as tailor entrepreneurship programmes towards the female generation cohort in South Africa and the Netherlands.

## TABLE OF CONTENTS

---

<b>DECLARATION .....</b>	<b>i</b>
<b>LETTER FROM LANGUAGE EDITOR .....</b>	<b>ii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>iii</b>
<b>ABSTRACT .....</b>	<b>iv</b>
<b>TABLE OF CONTENTS .....</b>	<b>vi</b>
<b>LIST OF TABLES .....</b>	<b>xii</b>
<b>LIST OF FIGURES.....</b>	<b>xiii</b>
<b>CHAPTER 1 INTRODUCTION AND PROBLEM STATEMENT .....</b>	<b>1</b>
<b>1.1 INTRODUCTION .....</b>	<b>1</b>
<b>1.2 PROBLEM STATEMENT .....</b>	<b>6</b>
<b>1.3 OBJECTIVES OF THE STUDY .....</b>	<b>8</b>
1.3.1 Primary objective .....	8
1.3.2 Theoretical objectives .....	8
1.3.3 Empirical objectives .....	8
<b>1.4 HYPOTHESES .....</b>	<b>9</b>
<b>1.5 RESEARCH DESIGN AND METHODOLOGY .....</b>	<b>11</b>
1.5.1 Literature review .....	11
1.5.2 Empirical study .....	11
1.5.2.1 Target population.....	12
1.5.2.2 Sampling frame .....	12
1.5.2.3 Sample method .....	12
1.5.2.4 Sample size .....	13
1.5.2.5 Measuring instrument and data collection method .....	13

---

1.5.3	Statistical analysis .....	14
<b>1.6</b>	<b>ETHICAL CONSIDERATIONS.....</b>	<b>15</b>
<b>1.7</b>	<b>DEMARCATON OF THE STUDY .....</b>	<b>15</b>
<b>1.8</b>	<b>CONTRIBUTION of the study .....</b>	<b>15</b>
<b>1.9</b>	<b>CHAPTER CLASSIFICATION .....</b>	<b>16</b>
<b>1.10</b>	<b>GENERAL.....</b>	<b>17</b>
<b>1.11</b>	<b>CONCLUSION .....</b>	<b>17</b>
	<b>CHAPTER 2 ENTREPRENEURSHIP .....</b>	<b>19</b>
<b>2.1</b>	<b>INTRODUCTION.....</b>	<b>19</b>
<b>2.2</b>	<b>ENTREPRENEURSHIP DEFINED .....</b>	<b>19</b>
<b>2.3</b>	<b>IMPORTANCE OF ENTREPRENEURSHIP .....</b>	<b>21</b>
<b>2.4</b>	<b>AN ENTREPRENEUR.....</b>	<b>24</b>
<b>2.5</b>	<b>ENTREPRENEURSHIP EDUCATION.....</b>	<b>26</b>
2.5.1	Entrepreneurial education in South Africa.....	28
2.5.2	Entrepreneurial education in the Netherlands .....	29
<b>2.6</b>	<b>THE ENTREPRENEURIAL PROCESS.....</b>	<b>30</b>
2.6.1	Identify and evaluate the opportunity .....	31
2.6.2	Developing the business plan .....	32
2.6.3	Determine the required resources.....	35
2.6.4	Launching a new business .....	36
<b>2.7</b>	<b>FEMALE ENTREPRENEURSHIP .....</b>	<b>36</b>
<b>2.8</b>	<b>GENERATION Y .....</b>	<b>41</b>
2.8.1	Generation Y cohort defined.....	41
2.8.2	Generation Y and entrepreneurship.....	43
2.8.3	Generation Y in South Africa .....	44
2.8.4	Generation Y in the Netherlands.....	45



<b>2.9</b>	<b>CONCLUSION .....</b>	<b>45</b>
	<b>CHAPTER 3 ENTREPRENEURIAL INCLINATION .....</b>	<b>47</b>
<b>3.1</b>	<b>INTRODUCTION .....</b>	<b>47</b>
<b>3.2</b>	<b>ENTREPRENEURIAL INTENTION .....</b>	<b>47</b>
<b>3.3</b>	<b>ENTREPRENEURIAL INTENTION MODELS .....</b>	<b>49</b>
3.3.1	Shapero-Krueger entrepreneurial intentions model.....	52
3.3.2	Theory of planned behaviour .....	53
<b>3.4</b>	<b>DETERMINANTS OF ENTREPRENEURIAL INCLINATION.....</b>	<b>59</b>
3.4.1	Entrepreneurial motivation .....	59
3.4.1.1	Defining entrepreneurial motivation .....	59
3.4.1.2	Entrepreneurial motivation process.....	60
3.4.1.3	Important factors in entrepreneurial motivation .....	62
3.4.2	Barriers towards entrepreneurship.....	64
3.4.2.1	Defining entrepreneurial barriers .....	64
3.4.2.2	Important factors in entrepreneurial barriers .....	64
3.4.3	Attitude towards entrepreneurship behaviour.....	66
3.4.3.1	Defining entrepreneurial attitude.....	66
3.4.3.2	Different attitudes towards entrepreneurship .....	67
<b>3.5</b>	<b>PROPOSED MODEL FOR ENTREPRENEURIAL INCLINATION .....</b>	<b>68</b>
<b>3.6</b>	<b>CONCLUSION .....</b>	<b>69</b>
	<b>CHAPTER 4 RESEARCH DESIGN AND METHODOLOGY .....</b>	<b>71</b>
<b>4.1</b>	<b>INTRODUCTION .....</b>	<b>71</b>
<b>4.2</b>	<b>RESEARCH DESIGN.....</b>	<b>72</b>
<b>4.3</b>	<b>RESEARCH APPROACH .....</b>	<b>73</b>

<b>4.4</b>	<b>SAMPLING STRATEGY .....</b>	<b>74</b>
4.4.1	Target population.....	74
4.4.2	Sampling frame .....	75
4.4.3	Sample method .....	75
4.4.4	Sample size .....	77
<b>4.5</b>	<b>DATA COLLECTION METHOD .....</b>	<b>78</b>
4.5.1	Questionnaire design.....	80
4.5.2	Questioning format .....	80
4.5.3	Questionnaire layout.....	83
<b>4.6</b>	<b>PRE-TESTING OF THE QUESTIONNAIRE .....</b>	<b>85</b>
<b>4.7</b>	<b>ADMINISTRATION OF THE QUESTIONNAIRE .....</b>	<b>86</b>
<b>4.8</b>	<b>PRELIMINARY DATA ANALYSIS .....</b>	<b>87</b>
<b>4.9</b>	<b>STATISTICAL ANALYSIS .....</b>	<b>88</b>
4.9.1	Factor analysis .....	88
4.9.2	Reliability analysis .....	91
4.9.3	Validity analysis .....	92
4.9.4	Descriptive statistical analysis .....	94
4.9.5	Correlation analysis .....	95
4.9.6	Logistic regression analysis.....	96
4.9.7	Two independent-samples t-test.....	98
4.9.8	Cohen's D – statistic.....	98
<b>4.10</b>	<b>CONCLUSION .....</b>	<b>99</b>
<b>CHAPTER 5 ANALYSIS AND INTERPRETATION OF EMPIRICAL FINDINGS .....</b>		<b>100</b>
<b>5.1</b>	<b>INTRODUCTION .....</b>	<b>100</b>
<b>5.2</b>	<b>PILOT TEST RESULTS .....</b>	<b>100</b>
<b>5.3</b>	<b>DATA GATHERING PROCESS.....</b>	<b>101</b>

<b>5.4</b>	<b>PRELIMINARY DATA ANALYSIS .....</b>	<b>101</b>
5.4.1	Coding .....	102
5.4.2	Tabulation of variables.....	103
<b>5.5</b>	<b>DEMOGRAPHIC AND ENTREPRENEURIAL INTEREST ANALYSIS.....</b>	<b>106</b>
5.5.1	Total sample description .....	106
5.5.2	Sample SA description .....	108
5.5.3	Sample NL description.....	112
<b>5.6</b>	<b>EXPLORATORY PRINCIPAL COMPONENTS ANALYSIS .....</b>	<b>116</b>
<b>5.7</b>	<b>RELIABILITY AND VALIDITY ANALYSIS OF MAIN SURVEY.....</b>	<b>120</b>
<b>5.8</b>	<b>DESCRIPTIVE STATISTICS .....</b>	<b>121</b>
5.8.1	Total sample descriptive statistics.....	121
5.8.2	Sample SA descriptive statistics .....	122
5.8.3	Sample NL descriptives .....	124
<b>5.9</b>	<b>CORRELATION ANALYSIS .....</b>	<b>125</b>
<b>5.10</b>	<b>HYPOTHESES TESTING.....</b>	<b>127</b>
5.10.1	Logistic regression analysis .....	129
5.10.2	Two independent-samples t-test.....	133
<b>5.11</b>	<b>CONCLUSION .....</b>	<b>136</b>
	<b>CHAPTER 6 CONCLUSION AND RECOMMENDATIONS.....</b>	<b>138</b>
<b>6.1</b>	<b>INTRODUCTION .....</b>	<b>138</b>
<b>6.2</b>	<b>OVERVIEW OF THE STUDY .....</b>	<b>139</b>
<b>6.3</b>	<b>MAIN FINDINGS OF THE STUDY .....</b>	<b>142</b>
<b>6.4</b>	<b>CONTRIBUTION OF THE STUDY .....</b>	<b>146</b>
<b>6.5</b>	<b>RECOMMENDATIONS .....</b>	<b>147</b>
6.5.1	Stimulate female entrepreneurship .....	147
6.5.2	Embrace entrepreneurship in emerging economies .....	148

6.5.3	Role of education in fostering female entrepreneurship .....	149
6.5.4	Role of the South African government in fostering female entrepreneurship ..	152
6.5.5	A caveat .....	154
<b>6.6</b>	<b>LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES .....</b>	<b>154</b>
<b>6.7</b>	<b>CONCLUSION .....</b>	<b>155</b>
	<b>BIBLIOGRAPHY .....</b>	<b>157</b>
	<b>APPENDIX A QUESTIONNAIRE .....</b>	<b>194</b>

## LIST OF TABLES

---

Table 3.1	Sample of theory of planned behaviour studies.....	55
Table 3.2	Sample of entrepreneurial studies using the theory of planned behaviour .....	57
Table 4.1	Determinants of an individuals' inclination towards entrepreneurship.....	84
Table 5.1	Coding information.....	102
Table 5.2	Frequency table of responses .....	103
Table 5.3	Exploratory principal component analysis results .....	117
Table 5.4	Reliability and validity of main survey – total sample .....	120
Table 5.5	Descriptive statistics per factor – total sample.....	121
Table 5.6	Descriptive statistics per factor – Sample SA.....	123
Table 5.7	Descriptive statistics per factor – Sample NL .....	124
Table 5.8	Correlation matrix.....	126
Table 5.9	Logistic regression determinants of entrepreneurial inclination .....	131
Table 5.10	Country difference on determinants of entrepreneurial inclination ....	134

## LIST OF FIGURES

Figure 2.1	Common themes in definitions of entrepreneurship .....	21
Figure 2.2	The entrepreneurial process .....	31
Figure 3.1	Shapero-Krueger's model .....	52
Figure 3.2	Theory of planned behaviour.....	54
Figure 3.3	The process of entrepreneurial motivation .....	61
Figure 3.4	Proposed model of entrepreneurial intention.....	69
Figure 4.1	Sampling techniques.....	76
Figure 5.1	Country profile – total sample.....	106
Figure 5.2	Higher education institutions – total sample .....	107
Figure 5.3	Interest in entrepreneurship – total sample .....	108
Figure 5.4	Higher education institutions – Sample SA.....	109
Figure 5.5	Participants' age distribution – Sample SA.....	109
Figure 5.6	Current year of study – Sample SA .....	110
Figure 5.7	Major subjects – Sample SA .....	110
Figure 5.8	Mother tongue language – Sample SA.....	111
Figure 5.9	Interest in entrepreneurship – Sample SA.....	112
Figure 5.10	Higher education institution – Sample NL.....	113
Figure 5.11	Participants' age distribution – Sample NL .....	113
Figure 5.12	Current year of study – Sample NL .....	114
Figure 5.13	Major subjects – Sample NL .....	114
Figure 5.14	Mother tongue language – Sample NL.....	115
Figure 5.15	Interest in entrepreneurship – Sample NL.....	116
Figure 5.16	Proposed model of determinants of entrepreneurial inclination for this study.....	130

Figure 6.1	Determinants of Generation Y female students' inclination towards entrepreneurship ..... 145
------------	---

# CHAPTER 1

## INTRODUCTION AND PROBLEM STATEMENT

---

### 1.1 INTRODUCTION

Worldwide entrepreneurship is recognised as the mind-set and the process needed to create and develop economic activity through merging risk-taking, creativity and innovation with sound management (Gallant *et al.*, 2010:219). Ultimately, economic development may be facilitated through more individuals considering self-employment and new venture creation as a career choice as opposed to seeking employment (Zerihun, 2014:17). Entrepreneurship is considered as a vital driving force for stimulating economic growth, economic competitiveness and creating employment opportunities (Davey *et al.*, 2011:335; Keat *et al.*, 2011:206). Furthermore, small-, micro- and medium-sized enterprises (SMMEs) are considered the backbone of any economy in that they contribute to employment and social and political stability and, therefore, are viewed as the basis for economic innovation and competitive power (Sandhu *et al.*, 2011:429). Consequently, the creation of new ventures and the growth of existing entrepreneurial businesses are vital contributing factors to a robust economy (Zerihun, 2014:17).

Female entrepreneurship, in particular, is a phenomenon that is viewed as a driving force in the economy because it has a significant effect on employment growth and the global business environment (Brush *et al.*, 2009:10). More specifically, female entrepreneurs are perceived as important agents of social and economic change, significantly contributing to the world economic development in terms of employment generation, innovation and wealth (Osman *et al.*, 2011:5974). Encouragingly, the number of women becoming entrepreneurs has increased by 19.8 percent between 1997 and 2002 (Lowry, 2006:9). Evidence in the literature indicates that female entrepreneurs in developed countries are further ahead than their counterparts are in emerging economies (Ramaswamy, 2013:164). Conversely, there is a slow growth in the number of female entrepreneurs in many emerging and underdeveloped countries (Osman *et al.*, 2011:5975). Possible reasons for this include a lack of entrepreneurial competencies (Singh & Belwal, 2008:120), education and training (Agholor *et al.*, 2015:44) and access to capital and technology (Ramaswamy, 2013:164).

South Africa is characterised as an emerging economy (Petzer & Meyer, 2013:382) and with an unemployment rate of 25.2 percent in 2014 (Statistics South Africa, 2014), has one of the highest unemployment rates recorded internationally (Luiz & Mariotti,



2011:47). As such, the proliferation of entrepreneurship is encouraged and is considered imperative to economic welfare and development (Deakins & Freel, 2003:29). The 2014 GEM report indicates that South Africa's entrepreneurial activity is very low with a rate of 7 percent and resulted in an entrepreneurial activity drop of 34 percent. Specifically, female unemployment, which stands at 32 percent, has been consistently higher than that of males during the period 2001 to 2011. In order to address these imbalances, the South African government is focusing on development efforts through building an entrepreneurial focus and promoting entrepreneurship, which is evident by the number of supporting mechanisms and policies that exist for entrepreneurs, including funding, physical infrastructure and business advisory services programmes (Nelson, 2007:11). Evidence of these development efforts is manifested in the White Paper on the Development of Small Business in South Africa in 1995 and subsequent amendments. It includes support initiatives for entrepreneurs such as the Youth Development Agency, Small Enterprise Development Agency (SEDA), South African Micro Apex Fund (SAMAF), the National Empowerment Fund (NEF), the Khula Enterprise Fund and the Industrial Development Corporation (Department of Trade and Industry, 2015). Further evidence includes the development of the Small Enterprise Development Agency (SEDA), which focuses on the development of business incubators in South Africa. This focus on business incubators is because incubators are recognised as important instruments for promoting entrepreneurial activity (Mutambi, 2010:192) and reducing the failure rate of SMMEs worldwide (Raheem & Akhuemonkhan, 2014:68). In 2015, there were 43 business incubators in operation in South Africa under the support of the SEDA programme (SEDA Annual Review, 2013-2014).

In the Netherlands, entrepreneurship, innovation and internationalisation are recognised as key drivers behind the economic prosperity of the country (Landheer & Waasdorp, 2014:34). Through continuous innovation and an open mind-set to internationalisation, Dutch entrepreneurs have succeeded in making the Netherlands one of the most productive and competitive economies in the world. After a period of economic turmoil between 2008 and 2013, the Netherlands is now slowly seeing signs of recovery (European Economic Forecast, 2014:84). Dutch entrepreneurs are expected to play a crucial role in regaining higher structural growth in the country (Kritikos, 2014:4). Typically, entrepreneurs seek out and exploit business opportunities, both existing and new (Ellis, 2011:99). It is through entrepreneurs that innovations are brought to the market, raising productivity, creating jobs and improving living standards. The Netherlands offers a promising environment for entrepreneurs. The country is one of the 20 largest economies in the world and has one of the highest levels of labour productivity

(Landheer & Waasdorp, 2014:5). Consequently, the Netherlands consistently is ranked amongst the top ten of the world's most competitive economies. According to 2014 GEM report, the Netherlands shows a steady increase of entrepreneurial activity and indicates a total entrepreneurial activity of 9.5 percent. The Netherlands has several key strengths that have allowed for this, including enabling conditions such as an outstanding physical and information and communication technology (ICT) infrastructure, sophisticated business organisations with an international orientation and an excellent educational system (Schwab, 2013:15). In terms of entrepreneurship, the Netherlands has become the most entrepreneurial economy of all the innovation-driven economies in the EU-28 over the last decade (Landheer & Waasdorp, 2014:34). The most favourable aspects of the Dutch entrepreneurial climate are the availability of financial capital, the positive attitude of young people to labour mobility, the access to physical infrastructure and the diminished barriers for entrepreneurship (Bosma *et al.*, 2002:11). The positive consequences of this strong entrepreneurial climate is that the country's unemployment rate stands at 7.2 percent (Trading Economics, 2015), and the female unemployment rate stands at 7.1 percent (YCharts, 2015).

The Netherlands is a nation with a rich history in entrepreneurship and innovation that dates back to the Dutch Golden Age in the seventeenth century. In modern times, the Netherlands is one of Europe's strongest economies, and most analysts categorise the Dutch economy as a free and open capitalist system (Ballanco, 2008:82). This economic system is favourable for entrepreneurs, as is demonstrated by the extremely high success rate of Dutch entrepreneurs. Close to 60 percent of Dutch entrepreneurs are still in business after five years of starting their business, one of the highest success rates in Europe (OECD, 1998:170). The government of the Netherlands has long recognised the importance of entrepreneurship (Acs & Szerb, 2011:5). This is reflected in its contemporary entrepreneurship policy, which was tabled in 1987 with the publication of the white paper, *Creating Room for Entrepreneurship*. At the crux of this white paper was the Dutch government's admission that in order to remain competitive, the Netherlands needed to take measures to produce more entrepreneurs (Bosma *et al.*, 2002:23). Perhaps the most significant paper concerning the shaping of the current entrepreneurship policy in the Netherlands was the 1999 paper titled *The Entrepreneurial Society*, which established a framework for many of the initiatives that have taken place in the Netherlands during the past decade (Bosma *et al.*, 2002:70).

With regards to financing, the Dutch government has instituted several programmes aimed directly at helping entrepreneurs fund their businesses, especially in the early

stages (OECD, 1998:182). To encourage informal investment, which is low in the Netherlands, the government has enacted what has been called an “Aunt Agatha” system (Williams, 2008:28). This provides those who invest in start-ups with significant tax advantages (for example, they are exempt from paying taxes on capital gains up to about €2,500 and may also credit about €25,000 of losses from an investment against their income tax (OECD, 1998:182). This tax break lasts for the first eight years of the investment. The Dutch government has also been trying to encourage banks to invest venture capital funds in start-ups in a programme known as the SME Credit Guarantees Decree, which guarantees a return to banks on loans they issue to start-up businesses that would normally not have enough collateral to be considered creditworthy (Ballanco, 2008:84). This programme has been deemed successful because it has led to hundreds of millions of Euros in loans, while the Dutch government has had to pay only a small fraction of its guarantees because of the high success rate of new businesses in the Netherlands (OECD, 1998:187).

In addition, the Dutch government has begun a programme that offers direct financial assistance to entrepreneurs. Entrepreneurs may now apply to receive financial packages from the Dutch government, with the amount given in the package dependent upon the government’s opinion on how much the proposed business will help the future of the Dutch economy (Van der Hoeven, 2009:10). However, entrepreneurs who do receive the package end up getting more than just capital. The package comes with assistance and advice from several different private agencies, organised through regional Entrepreneurs Forums. The government has been trying to make this assistance available through a digital portal on the Internet (OECD, 1998:115). The government has worked diligently to lessen the severity of repercussions faced by debtors who go bankrupt. After an extensive six-year process in the Dutch parliament, the first major bankruptcy reform bill since 1896 was passed in the Netherlands in 1998. This bill gave debtors the ability to start over again much more simply than did the old code by allowing debtors to be forgiven of their debts and by granting them the right to receive lines of credit again (Kilborn, 2006:93). Furthermore, the Dutch government modified the bankruptcy law again in 2006, providing even more protection to debtors, especially those involved in non-fraudulent bankruptcies (Ballanco, 2008:84). The Netherlands has also worked to rid its country of some of the burdensome regulations that have stymied entrepreneurship. The best example of this is the work the government has done with the Establishment Law, which has long been considered overly bureaucratic (OECD, 2009:19). In 1996, a major overhaul of the law reduced the number of required steps to start a new business from 88 to eight. This was done by eliminating much the paperwork that was deemed

unnecessary and combining many of the steps that were more-or-less redundant (Ballanco, 2008:84). This did not achieve the simplification the Dutch government had hoped for, so in 2007 the law was repealed altogether, thus further reducing the administrative burden in starting a new business (Voermans, 2008:128). One area of special concern in the Netherlands has been introducing entrepreneurship education into the schooling system (Ballanco, 2008:85).

Intentions relate to a person's readiness to perform a given behaviour (Ajzen, 2011) and can be a strong predictor of a specific behaviour (Ajzen, 1991:180). Entrepreneurial intentions, also referred to as entrepreneurial interest or inclination (Karhunen & Ledyeva, 2010:230; Begley *et al.*, 2005:38; Wang & Wong, 2004:164) are defined as an individual's conscious awareness and self-acknowledged conviction to set up a new business venture coupled with plans to do so in the future (Thompson, 2009:670). Karhunen and Ledyeva (2010:232) opine that entrepreneurial inclination are essential in the process of entrepreneurship as it is the starting point in a series of actions that lead to business start-up. Therefore, entrepreneurial ideas and inclinations are important underpinnings of new business development. As originally pointed out by Bird (1988:442), even though entrepreneurial ideas begin with inspiration, sustained attention and inclination are essential in order for these ideas to manifest.

From a review of entrepreneurial inclination literature, it is asserted that the determinants of entrepreneurial inclination include gender, family business background, education profile, prior entrepreneurial experience, personal attitude, perceived norms, motivations, obstacle and barriers, such as hard work and fear of failure (Sandhu, *et al.*, 2011; Dutse *et al.*, 2013; Fatoki, 2010; Karhunen & Ledyeva, 2010). According to Linan *et al.* (2011:196), attitude and perceived behavioural control are the two most relevant determinants of entrepreneurial intention. Zerihun (2014:6) using the theory of planned behaviour (TPB), highlights three determinants of entrepreneurial intent, namely perceived behavioural control, social norms and attitude. Subsequent studies found support for motivation (Fatoki, 2010), personal barriers (Sandhu *et al.*, 2011), business environmental barriers (Dioneo-Adetayo, 2012) and attitudes toward entrepreneurship (Venesaar *et al.*, 2006) being the most important determinants of individuals' inclination towards entrepreneurship. Motivation is an integral feeling that produces goal-driven behaviour. Viewed as an important psychological dimension in entrepreneurship, it often is referred to as the inner drive that ignites and sustains behaviour to satisfy needs (Ramaswamy, 2013:166). Various studies (Venesaar *et al.*, 2006; Fatoki, 2010, Zerhinun, 2014) have demonstrated the existence of a positive relationship between

motivation and entrepreneurial inclination. Another determinant of entrepreneurial inclination is barriers, more specifically personal barriers (Stamboulis & Barlas, 2014) and business environmental barriers (Gorji & Rahimian, 2011). Personal barriers are psychological factors that influence an entrepreneur's ability to act in an entrepreneurial manner and include factors such as aversion to risk, fear of failure, aversion to stress and hard work (Sandhu *et al.*, 2011:432). Business environmental barriers are factors in the entrepreneurial environment that play a role in influencing an individual's willingness to undertake entrepreneurial activities and include factors such as political factors, socio-cultural factors and economic factors (Donatus, 2011:27). Several studies (Fatoki, 2010; Sandhu *et al.*, 2011; Dioneo-Adetayo, 2012) found that barriers impede entrepreneurial inclination. In line with the findings of Ali *et al.* (2011), Kgagara (2011) and Johansen *et al.* (2012), found that attitudes towards entrepreneurship contributes significantly to an individual's entrepreneurial inclination. Attitudes are the products of individuals' beliefs and their evaluation of those beliefs (Ajzen & Fishbein, 1980). Attitude has been defined as a feeling or estimate reaction to an idea or situation. It shows how positive or negative, an individual feels towards that particular idea or situation in question (Dioneo-Adetayo, 2012:131).

Evidence suggests that in order to build a robust economy, it is essential to motivate future generations in becoming active participants in economic development (Davey *et al.*, 2011:335). In generational studies, the youth are currently classified as Generation Y and are known also as millennials, echo-boomers or the next generation (Comeau & Tung, 2013:259). Generation Y are those individuals born between 1986 and 2005 (Markert, 2004:21), which in 2015 puts them at 11 to 30 years of age. South Africa's population totalled around 54 002 000 in 2014, of which an estimated 38 percent formed part of the Generation Y cohort (Statistics South Africa, 2014). The size of South Africa's Generation Y cohort (Mzinyathi, 2012) makes them salient to industry professionals, including higher education institutions (HEIs) and those involved in entrepreneurial development, especially business incubators.

## **1.2 PROBLEM STATEMENT**

The importance of entrepreneurship in a rapidly changing world has attracted increasing attention, with the belief that individuals with entrepreneurial skills and abilities will create several benefits at different levels of society (Davey *et al.*, 2011:336). For this reason, research pertaining to female entrepreneurship in general, is relatively well documented in the literature, in particular focusing on critical success factors (Lee & Stearns, 2012), characteristics (Deng *et al.*, 2011) and challenges faced by female entrepreneurs

(Halkias *et al.*, 2011). From the literature, it is evident that several studies have been conducted in the international markets regarding entrepreneurial perception, intention, inclination and attitude towards entrepreneurship of students (Karhunen & Ledyeva, 2010; Fatoki, 2010; Venesaar *et al.*, 2006; Luiz & Mariotti, 2008; Yusof *et al.*, 2008). However, limited studies concentrated on the Generation Y female student cohort specifically (Gallant *et al.*, 2010). In particular, an extensive search of the literature unveiled only one scholarly study pertaining to entrepreneurial inclination, conducted with international students as the target population. Davey *et al.* (2011) explored the entrepreneurial intentions, attitudes, role models and experience of university students from developed European nations and emerging African nations. However, this study mainly focused on identifying the differences between African and European students with regard to their entrepreneurial intentions, attitudes towards entrepreneurship, role models and entrepreneurial experience. It also aimed to set the scene for future comparative research between emerging and developed countries in the area of entrepreneurship.

It is apparent that entrepreneurship has an important role to play in the future of the global economy and subsequent growth of entrepreneurship activity nationally and internationally may provide increased opportunities for economic activity (Kritikos, 2014). Comparing entrepreneurial inclinations between students from developed and emerging countries will be of great importance in determining entrepreneurial perception differences (Davey *et al.*, 2011:335). Nevertheless, little effort has been conducted to present comprehensive support in measuring determinants of entrepreneurial inclination differences amongst Generation Y female students from developed and emerging countries with regard to their entrepreneurial interest, motivations, perceived personal and business environment barriers, as well as attitudes towards entrepreneurship. This sets the scene for comparative research between emerging and developed economies in the area of undergraduate students and entrepreneurship. Considering that higher education has an important influence on potential entrepreneurs, research into the female perspective of entrepreneurial intention is needed to gain greater insight into the entrepreneurial inclinations of Generation Y female students (Lorz, 2011:10).

Through better understanding possible differences in the determinants of female university students' entrepreneurial inclination amongst developed and emerging nations, the results of this study may aid in creating awareness of certain shortfalls in female South African Generation Y students' inclination towards entrepreneurship. This, in turn, will aid HEIs and industry professionals such as business incubator managers, in

gauging effective ways to market the concept of entrepreneurship to Generation Y female students and convey entrepreneurship knowledge and skills to this target market in becoming future entrepreneurs. This is likely to benefit the nation as a whole. Therefore, the problem addressed in this study is the difference between the determinant factors contributing to entrepreneurial inclination amongst the Generation Y student population within the South African and the Netherlands context.

### **1.3 OBJECTIVES OF THE STUDY**

The following objectives were formulated for the study:

#### **1.3.1 Primary objective**

The primary objective of this study was to determine and compare undergraduate university female Generation Y students' inclination towards entrepreneurship in the South African and the Netherlands context in order to facilitate the creation of a strong entrepreneurial climate amongst South African female Generation Y students.

#### **1.3.2 Theoretical objectives**

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- Review the literature on defining entrepreneurship and entrepreneur
- Review a literature study on the importance of entrepreneurship
- Review the literature regarding the important role HEIs can play in developing female entrepreneurs.
- Review the literature regarding the Generation Y cohort, with reference to the characteristics of its members and the impact entrepreneurship has had on this generation.
- Review the literature of entrepreneurial inclination.
- Review the literature pertaining to different models on entrepreneurial inclination

#### **1.3.3 Empirical objectives**

In accordance with the primary objective of the study, the following empirical objectives were formulated:

- Determine female Generation Y students' entrepreneurial interest.

- Determine female Generation Y students' entrepreneurial motivation.
- Determine female Generation Y students' perceived personal barriers to entrepreneurship.
- Determine female Generation Y students' perceived business environment barriers to entrepreneurship.
- Determine female Generation Y students' entrepreneurial attitude.
- Empirically test a proposed logistic regression model of the determinants of female Generation Y students' inclination towards entrepreneurship.
- Determine whether female Generation Y students registered at South African HEIs differ from those registered at HEIs in the Netherlands in terms of their entrepreneurial motivation, perceived personal barriers, perceived business environment barriers and entrepreneurial attitude.

#### **1.4 HYPOTHESES**

A hypothesis refers to a statement that stipulates how two or more variables, which are measurable, are related. When hypotheses are stated, the characteristics of the population involved are explored. The information obtained is then compared against the supposition in the hypotheses, which will, in turn, be accepted or rejected according to the probability that it is true (Churchill, 1995:109).

The following hypotheses were formulated in Chapter 5 of this study, following a literature review and the analysis of the reliability of the proposed determinants of female Generation Y students' inclination towards entrepreneurship:

H<sub>0</sub>1: Independence motives do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>1: Independence motives do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>2: Extrinsic motives do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>2: Extrinsic motives do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.



H<sub>0</sub>3: Intrinsic motives do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>3: Intrinsic motives do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>4: Personal motivational barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>4: Personal motivational barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>5: Personal competence barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>5: Personal competence barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>6: Organisational barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>6: Organisational barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>7: Economic and financial barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>7: Economic and financial barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>8: Entry barriers do not have a significant influence on Dutch Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>8: Entry barriers do have a significant influence on Dutch Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>9: Positive attitudes do not have a significant influence on South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>9: Positive attitudes do have a significant influence on South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>10: Negative attitudes do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>10: Negative attitudes do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>0</sub>11: There is no significant difference between Dutch and South African Generation Y female students' independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes, negative attitudes towards entrepreneurship.

H<sub>a</sub>11: There is a significant difference between Dutch and South African Generation Y female students' independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes, negative attitudes towards entrepreneurship.

The following section describes the research design and methodology used within the study.

## **1.5 RESEARCH DESIGN AND METHODOLOGY**

The study comprised a literature review and an empirical study. Quantitative research, using the survey method, was used for the empirical portion of the study. Given that, the study focused on predicting female students' inclination, a positivist approach was adopted for the study. A descriptive research design was followed for the empirical portion of the study.

### **1.5.1 Literature review**

In order to support the empirical portion of this study, a review of the South African and international literature was used, including relevant textbooks, journal articles, business articles, academic journals, newspaper articles and online academic databases.

### **1.5.2 Empirical study**

The empirical portion of this study comprised the following methodology dimensions:

### **1.5.2.1 Target population**

The target population relevant to this study were female full-time Generation Y undergraduate students, aged between 18 and 24, registered at South African and Netherlands public HEIs in 2013. The target population was defined as follows:

- Element: Female full-time Generation Y undergraduate students aged between 18 and 24 years
- Sampling unit: Two South African and two Netherlands registered public HEIs
- Extent: Gauteng of South Africa and the North-easternmost province of the Netherlands
- Time: 2013

### **1.5.2.2 Sampling frame**

For the purpose of this study, two samples were conveniently selected, namely Sample South Africa (SA) and Sample Netherlands (NL). The sampling frame for sample SA comprised 26 registered South African public HEIs, as listed by Higher Education South Africa, of which there are 11 traditional universities, 6 comprehensive universities and 9 universities of technology (Universities South Africa, 2015). From the sampling frame, a judgement sample of two HEI campuses, one a traditional university and the other a university of technology, located in the Gauteng province, were selected. The two HEIs were selected due to their close geographic proximity, which reduces cost and time and made the research more manageable.

For Sample NL, the sample frame consisted of the 56 registered public HEIs situated in the Netherlands as indicated by the Central Registration of Higher Education Programmes, comprising 13 research universities and 43 universities of applied sciences (Central Registration of Higher Education Programmes, 2015). Once again, a judgement sample of two HEI campuses, one a research university and the other a university of applied science, situated in the North-easternmost province, was selected. The reason these two campuses were chosen for this study was due to their close geographic proximity, which reduces cost and time, and makes the research more manageable.

### **1.5.2.3 Sample method**

For the study, two samples were selected conveniently from the sampling frames. A non-probability, convenience sample of 400 South African Generation Y female students

(Sample SA) and 400 Generation Y female students from the Netherlands (Sample NL) were drawn in order to conduct this study. In both the South African and Netherlands samples, the questionnaires were divided equally between the two HEIs sampled per country.

#### **1.5.2.4 Sample size**

The sample size selected for this study was 400 full-time undergraduate female South African students for Sample SA and 400 full-time undergraduate female students for Sample NL. The size of these two samples is in line with previous studies done of a similar nature such as Karhunen and Ledyeva (2010) (sample size of 600), Venesaar *et al.* (2006) (sample size of 443) and Carayannis *et al.* (2003) (sample size of 500) and, therefore, was deemed sufficiently large.

#### **1.5.2.5 Measuring instrument and data collection method**

A structured self-administered questionnaire was utilised to gather the required data for this study. In order to measure undergraduate Generation Y female students' inclination towards entrepreneurship, Karhunen and Ledyeva's (2010), determinants of entrepreneurial interest scale, comprising entrepreneurial motivations, personal barriers, business environmental barriers and entrepreneurial attitudinal factors as potential determinants of entrepreneurial interest was adapted and utilised for the empirical portion of this study. These researchers adapted this scale from Tkachev and Kolvereid (1999). For the purpose of this study, the determinants of entrepreneurship inclination scale comprise four determinants, including entrepreneurial motivations, personal barriers, business environmental barriers and attitudes towards entrepreneurship.

The participants were requested to complete a questionnaire consisting of two sections. The first section (Section A) gathered the participants' demographic data and entrepreneurial interest. The second section (Section B) included the 41-item scale pertaining to the determinants of the participants' inclination towards becoming entrepreneurs, namely entrepreneurial motivation, personal barriers, business environment barriers and entrepreneurial attitudes. Section B requested the participants to indicate their perceptions and attitudes on a five-point Likert scale ranging from disagree (1) to agree (5). The questionnaire included a cover letter explaining the nature of the study as well as providing relevant contact details and an assurance of confidentiality concerning the participants' information.

The questionnaire was piloted on a convenience sample of 49 South African students not included in the sample frame and these results were coded and tabulated. A structured format was applied for the main study, whereby permission from the two South African HEI campuses was obtained by means of an informal memorandum of understanding, and from the two HEI campuses in the Netherlands permission was obtained in writing. Thereafter, lecturers at each of the four HEI campuses were contacted and asked if they would allow the questionnaire to be distributed to their students during class time.

For Sample SA, permission to conduct the research at the two universities was obtained through an informal memorandum of understanding between the two universities. The relevant academic staff members responsible for the full-time undergraduate students were contacted telephonically as well as by email in order to gain permission to distribute the self-administered questionnaire to the participating students. After permission was granted, the non-probability convenience sample of 400 Generation Y full-time undergraduate female students was applied (200 per HEI campus). The questionnaires were hand-delivered to the academic staff members. The completion of the questionnaire, under the supervision of the academic staff member, took less than 15 minutes and, therefore, one class period was sufficient. The lecturers were requested to inform their students that participation in the study was voluntary. After two weeks, the questionnaires were collected from the relevant lecturers.

With regard to Sample NL, permission to conduct the research at the two universities was obtained in writing from the two participating universities. The relevant academic staff members responsible for the full-time undergraduate students were emailed to gain permission to distribute the self-administered questionnaire to the participating students. After permission was granted, the non-probability convenience sample of 400 Generation Y full-time undergraduate female students was applied (200 per HEI). The questionnaire was distributed personally to the participating students during one class period. The questionnaires were collected directly after completion by the researcher.

### **1.5.3 Statistical analysis**

The captured data were analysed using the statistical package IBM SPSS, Version 22. The following statistical methods were used on the empirical data sets:

- Exploratory factor analysis
- Reliability and validity analysis

- Descriptive statistical analysis
- Correlation analysis
- Logistic regression analysis
- Two independent-samples t-test

## **1.6 ETHICAL CONSIDERATIONS**

The research study complied with the ethical standards of academic research, which entailed the protection of the identities and interest of the participants. All the information and responses were analysed in an aggregate format. The necessary approval was obtained to conduct the surveys at the different institutions. The information provided by participants was handled confidentially and participation in the surveys was voluntary.

The questionnaire, accompanied by the outlined research methodology followed in this study, were viewed by the North-West University's Ethics Committee to ensure that any persons who could be classified as being vulnerable were excluded from the target population and sampling frame used for the purpose of drawing the sample of participants for this study. The questionnaire exceeded the committee's standards, whereby the following ethical clearance number was issued: **Econit-Econ-2014-018**.

## **1.7 DEMARCATION OF THE STUDY**

The particular study concerns undergraduate Generation Y female students between 18 and 24 years of age registered at a South African HEI and Netherland HEI in 2013. This study made use of four HEI campuses two located within Gauteng province of South Africa, one traditional university and one university of technology (Sample SA) and two located within the North easternmost province of the Netherlands, one academic university and one university of applied sciences (Sample NL).

## **1.8 CONTRIBUTION OF THE STUDY**

The findings of this study may contribute to the literature available on comparative studies between emerging and developed economies focusing on Generation Y female students' inclination towards entrepreneurship. It is proposed that independence motivation, intrinsic motives and personal competence barriers influence entrepreneurial inclination. These factors can be used as valuable tools for predicting the Generation Y female student cohort's entrepreneurial inclination in the South African and the Netherlands context. The model proposed may add value to business incubator

managers, academics and incubator managers to tailor marketing strategies designed to stimulate interest in entrepreneurship as well as tailor entrepreneurship programmes towards the female generation cohort in South Africa and the Netherlands.

## **1.9 CHAPTER CLASSIFICATION**

In accordance with the limited literature available, relating to Generation Y undergraduate female students inclination towards entrepreneurship in South Africa and the Netherlands, one primary objective, eight theoretical objectives and seven empirical objectives were formulated in this chapter, Chapter 1. In order to address these objectives, the remainder of this thesis incorporates the following chapters:

### **Chapter 2: Entrepreneurship**

In this chapter, a detailed literature review on entrepreneurship is discussed. The main aim of this chapter was to give a general introduction of the term entrepreneurship, entrepreneur and female entrepreneurship. In addition, a detailed literature review on the Generation Y cohort was conducted. An overview of entrepreneurial education is given.

### **Chapter 3: Entrepreneurial inclination**

The chapter begins with a literature review on important issues regarding entrepreneurial interest and discusses the determinants factors for entrepreneurial inclination, such as motivation factors, personal barriers to entrepreneurship, business environmental factors to entrepreneurship and attitude to entrepreneurship. The chapter also give a background of models scholars used to determine entrepreneurial intention. At the end of the chapter, a model of entrepreneurial intentions is proposed.

### **Chapter 4: Research design and methodology**

The focus of Chapter 4 is on the theoretical background of the research methodology employed in collecting and analysing the data captured in the study. The chapter begins with a discussion of the marketing research process. This is followed by a discussion on the questionnaire design, sampling procedure, data collection process and the statistical techniques used to analyse the data in the study.

## **Chapter 5: Results and findings**

Chapter 5 includes the results from the pilot test and the main survey. Moreover, the chapter reports on the results of the empirical study. Within this chapter, the samples together with the results of the statistical analysis procedures that are applied to conduct the analysis on the set of data are reported on. Furthermore, the results of the logistic regression model are reported on.

## **Chapter 6: Conclusions and recommendations**

This chapter reviews the entire study and provides conclusions to the study. Recommendations originating from the study are made in accordance with the empirical objectives set out for the study. The limitations of the study and guidelines for further research are made upon completion of conclusion on the study.

### **1.10 GENERAL**

- Annexures are located at the end of the thesis
- Tables and figures are positioned on the appropriate pages in the thesis
- The researchers own work is signified where no reference sources are provided for figures and tables
- Page numbers are not indicated in the text for Internet sources.
- The Harvard Style from the 2012 version of NWU referencing guide is used for the referencing base.

### **1.11 CONCLUSION**

Chapter 1 introduced the study context and the background of the study. This chapter provided a brief overview of entrepreneurship and highlighted that entrepreneurs have a very specific function in the economy to create employment and productivity growth. The benefits associated with entrepreneurship were highlighted. In particular, the importance of female entrepreneurs being perceived as important agents of social and economic change, significantly contributing to the world economic development in terms of employment generation, innovation and wealth were emphasised. Therefore, governments and academics concentrate on encouraging entrepreneurship as this can drive innovation that contributes to the economy through job creation. It was stated that there is a slow growth in the number of female entrepreneurs in many emerging and



underdeveloped countries. The proliferation of entrepreneurship in South Africa and the Netherlands were highlighted, with specific emphasis on female entrepreneurship.

It was stated that entrepreneurial intentions are also referred to as entrepreneurial interest or inclination and is an individual's conscious awareness to set up a new business venture. While entrepreneurial ideas begin with inspiration, entrepreneurial inclination is essential in order for these ideas to manifest. Therefore, the determinants of entrepreneurial inclination are essential and include motivation, business environmental barriers and attitudes towards entrepreneurship. It was stated that in order to build a robust economy, it is essential to motivate the youth in becoming active participants in economic development. As such, the Generation Y cohort is an attractive market segment to industry professionals, including higher education institutions (HEIs) and those involved in entrepreneurial development, especially business incubators.

The following chapter, Chapter 2, discusses the background literature to entrepreneurship. Important issues regarding entrepreneurship, such as the entrepreneur, types of entrepreneurs, female entrepreneurship, gender differences in entrepreneurship and the Generation Y cohort are discussed.

## **CHAPTER 2**

### **ENTREPRENEURSHIP**

---

#### **2.1 INTRODUCTION**

In accordance with the first four theoretical objectives formulated in Chapter 1, this chapter provides an overview of entrepreneurship. The purpose of this chapter is to establish the theoretical underpinnings of entrepreneurship. Entrepreneurship has emerged as the strongest economic force the world has ever experienced (Ali *et al.*, 2011:12). Hence, entrepreneurs are major contributors to economic growth and development, and are responsible for a large share of technological innovations in products and the production processes, driving economic transformation and international trade. Entrepreneurs establish new forms of organisat

ions and employ new types of business methods. Therefore, economic theory must keep up with these critical developments by understanding the fundamental contributions made by entrepreneurs (Spulber, 2008:2).

As stipulated in Chapter 1, the purpose of this study was to determine and compare undergraduate Generation Y female students' inclination towards entrepreneurship. The purpose of this chapter is to explain entrepreneurship. As such, Section 2.2 defines entrepreneurship, which leads the discussion to the importance of entrepreneurship (Section 2.3) and the entrepreneur (Section 2.4). Thereafter, entrepreneurial education in the context of South Africa and the Netherlands are discussed in Section 2.5. In Section 2.6, the entrepreneurial process is discussed and in Section 2.7 female entrepreneurship. The chapter concludes with an overview of the Generation Y cohort (Section 2.8).

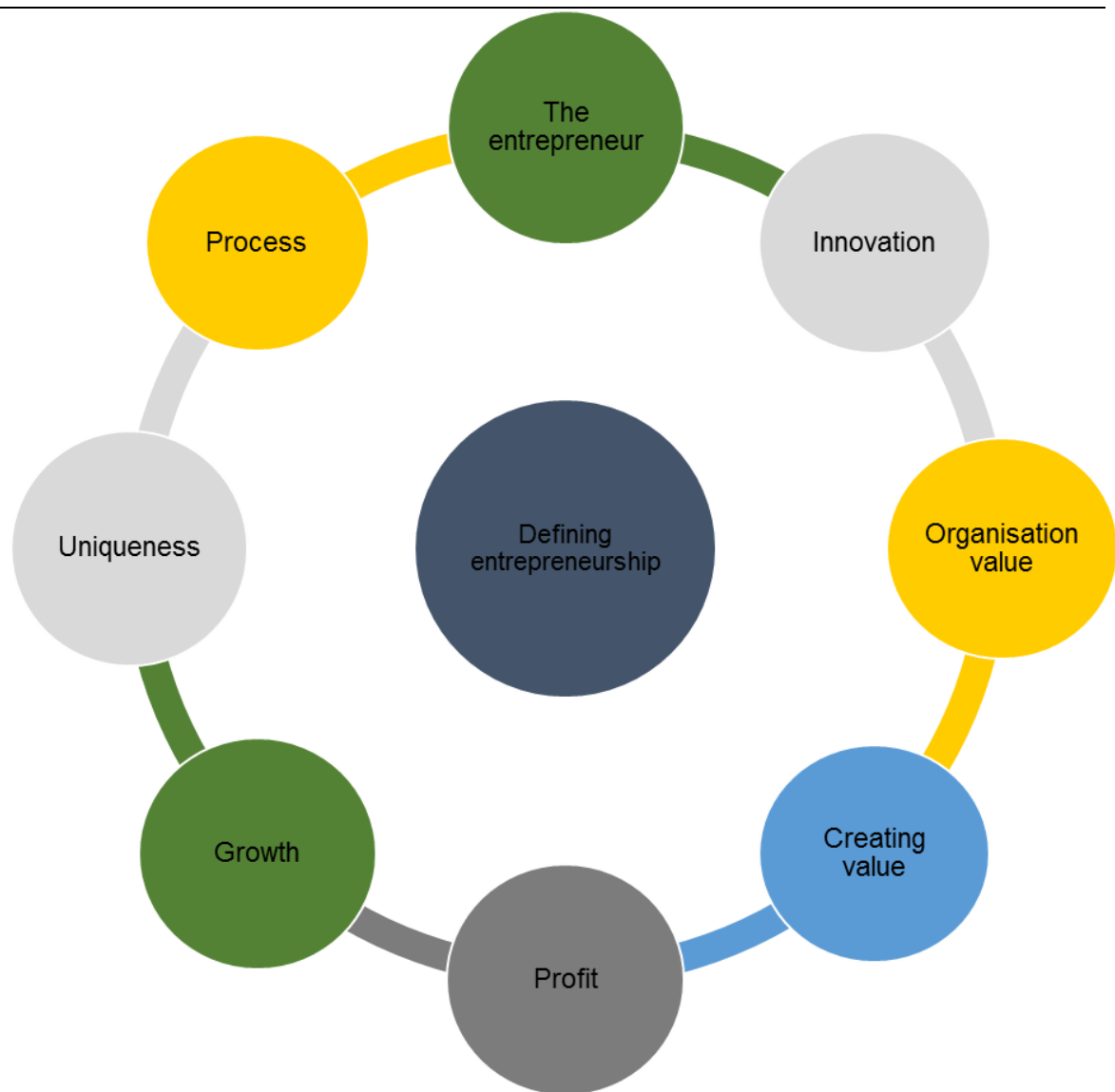
#### **2.2 ENTREPRENEURSHIP DEFINED**

Often, the term entrepreneurship is necessary to describe the concept of an entrepreneur (Kgarara, 2011:21). The term entrepreneurship is derived from the French word *entreprendre*, meaning to begin or to undertake (Bouwer, 2015:32). Many researchers view entrepreneurship as an economic driving force within society (Yeong, 2012:1; Lashley, 2010:59; Fayolle & Gailly, 2008:569). The concept of entrepreneurship was established first in the 1700s, and the meaning has evolved ever since (Pandey, 2011:5). According to Botha and Musengi (2012:24), entrepreneurship is recognised as an important driver of economic growth, productivity, innovation and employment, and it

is widely accepted as a key aspect of economic dynamism – the birth and death of firms and their growth and downsizing. Acs and Virgill (2009:3) state that entrepreneurship is a relatively new field of study in many developing countries.

According to Botha and Musengi (2012:24), defining entrepreneurship is not clear-cut, given that researchers have developed several different definitions of what the concept entails. Risker (2012:28) confirms Botha's and Musengi's (2012:24) statement, stating that a number of factors have contributed to a lack of a crisp definition of entrepreneurship. Risker (2012:28) adds that one of the factors that have contributed to this lack of a set definition for entrepreneurship is that trait-based literature has failed to develop a set of common traits applicable to entrepreneurs across empirical studies. In addition, Gartner (1989:47) highlights there is no clear distinction between what constitutes an entrepreneur and what constitutes entrepreneurship, leading to entrepreneurs being defined as entrepreneurship and vice versa. Hosworth *et al.* (2005:29) indicate that entrepreneurship is a dynamic concept and, therefore, definitions thereof should be based on what entrepreneurs do.

Even though some researchers state that there is no clear definition of entrepreneurship, there are still several definitions of entrepreneurship in the literature. Erasmus *et al.* (2013:43) state that entrepreneurship is about being an entrepreneur and that the focus of definitions of entrepreneurship is dependent on the views and interests of the researchers providing them. Hewitt and van der Bank (2011:4) simply associate entrepreneurship with starting one's own business. However, according to Nieman and Nieuwenhuizen. (2014:9), most economists believe it entails more than that, with some suggesting that it involves a willingness to bear the risk of a new venture in exchange for a significant chance of profit. Sandström (2010:1) views entrepreneurship as a force of "creative destruction" – established ways of doing business that are destroyed by the creation of new and better ways to do business. Kuratko (2013:3) developed the concept of entrepreneurship as an integrated concept that pervades businesses from an innovative perspective. Regardless of how entrepreneurship is defined, as illustrated in Figure 2.1 numerous topics are evident in most definitions of entrepreneurship, such as an entrepreneur, innovation, creation of a business, creating something of value, making a profit, growth and uniqueness (Coulter, 2003:4).



**Figure 2.1 Common themes in definitions of entrepreneurship (Coulter, 2003:4)**

The above section discussed the problems associated with defining entrepreneurship as well as several definitions of entrepreneurship. For the purpose of this study, entrepreneurship is viewed as an important driver of economic growth, productivity, innovation and employment. It is about an entrepreneur taking risks and recognising opportunities by creating wealth through developing, organising and managing a business. The next section discusses the importance of entrepreneurship in the context of South Africa and the Netherlands

### **2.3 IMPORTANCE OF ENTREPRENEURSHIP**

Worldwide entrepreneurship is critical to all sectors of the economy and all types of organisations; however, entrepreneurship is particularly important within small

businesses for economic growth, productivity gains and job creation (Davey *et al.*, 2011:335). Entrepreneurship plays an important role in fostering economic growth in terms of creating innovations and enhancing competitive rivalry (Davey *et al.*, 2011:335). Coulter (2003:11) points out, that entrepreneurship is prominent in three areas, namely innovation, the number of new start-ups and job creation. First, innovation allows entrepreneurial firms to act as representatives of change by providing a necessary source of new and unique ideas that would otherwise go unnoticed (De Mel *et al.*, 2009:2). Secondly, the number of new start-ups is important to economic development (Kritikos, 2014:1). Thirdly, the job creation role played by entrepreneurship is important to the overall long-term economic health of countries (Venter *et al.*, 2008:21). According to Co *et al.* (2007:6), entrepreneurship can be highly beneficial to a nation, in terms of the change it brings to an entire nation, to a community and/or to individual people.

In the South African economy, entrepreneurs are seen as the primary producers and drivers of new businesses and, therefore, they are clearly recognised as economic actors (Luiz & Mariotti, 2011:47). In an emerging economy, such as that of the South African economy, entrepreneurship plays an important role in the survival and growth of the economy in that it contributes to assuaging low economic growth, high unemployment and unsatisfactory levels of poverty (Nieman & Nieuwenhuizen, 2014:24). As such, there are four main reasons why entrepreneurship is important. First, entrepreneurship is important for a nation because it helps build a strong economy (Davey *et al.*, 2011:335). Secondly, entrepreneurship provides employment opportunities (Acs & Amoros., 2008:121). Thirdly, entrepreneurship offers innovative products to customers (Okpara, 2007:86). Fourthly, the delivery of innovative products opens up new markets for goods (Kritikos, 2014:2). Van Stel *et al.* (2005:311) explain that most economists agree that entrepreneurship is a necessary ingredient for stimulating economic growth and employment opportunities in all societies. Balaraman *et al.* (2014:1) state that because entrepreneurship is crucial to economic growth and development it is necessary to understand what role government can play in supporting successful entrepreneurs, who are the primary engines of job creation, income growth, and poverty reduction. While academic studies have long recognised the importance of entrepreneurship to economic growth and development, policy makers have only recently recognised this (Schmiemann, 2012:9). Entrepreneurship has always been seen as an external factor in government policies; meaning that policies have been directed towards the large number of small organisations instead of aiming at developing entrepreneurs who are able to introduce new products, processes or organisational forms in order to exploit new markets (Jerinabi & Santhi, 2012:532).

When considering entrepreneurship in South Africa, the promotion of entrepreneurship remains an important concern for the South African Government (Mbedzi, 2011:1). In 2014, 25.2 percent of South Africans were unemployed and underemployed (Statistics South Africa, 2014), which suggests that the Government has to pay urgent attention to building an entrepreneurial culture in the country. Globally, entrepreneurship is playing an important role in absorbing labour, entering new markets and generally expanding economies in innovative ways (Carree & Thurik, 2010:558). Chalera (2007:1) is of the view that if the appropriate environment is enabled, entrepreneurship in South Africa can follow these examples and make an indelible mark on the economy. Therefore, Chalera (2007:1) indicates that the stimulation of entrepreneurship must be seen as part of an integrated strategy to take the economy of South Africa onto a higher road – one in which the economy is diversified, productivity is enhanced, investment is stimulated and entrepreneurship flourishes.

In the Netherlands, promoting entrepreneurship has been high on the list of priorities of the Ministry of Economic Affairs for a number of years (Snijders & van der Laag, 2002:5). This is a logical aspiration, given that entrepreneurship is one of the engines that drive the dynamic and innovative economy of the Netherlands (Landheer & Waasdorp, 2014:5). During the last 20 years, the appreciation of entrepreneurship has increased considerably in Europe. In the Netherlands, attention to entrepreneurship emerged strongly in the 2000s. This relates not only to the quantity of entrepreneurship but also to the quality of entrepreneurship (Gibcus *et al.*, 2006:6). The Dutch viewed 2014 as the best year for business start-up as more than half a billion euros were made available for business start-ups in the Netherlands (Van Otterloo, 2014). The quality of entrepreneurship is more difficult to measure; nevertheless, considerable policy attention has been given to innovative entrepreneurship in the Netherlands (Snijders, 2005:10).

As such, while entrepreneurship lacks any conclusive definition, it is acknowledged as playing a major role in a country's economic growth and development (Szirmai *et al.*, 2011:4). Entrepreneurship extends beyond the point of simply establishing an organisation, even though the importance of entrepreneurship focuses on this principle (Venter *et al.*, 2008:5). Instead, entrepreneurship also involves entrepreneurs who seek innovative opportunities and take unsecured risks. Therefore, the simplest theoretical framework for studying entrepreneurship is to consider the entrepreneurs who initiate entrepreneurship (Kuratko & Hodgetts, 2007:4) and, therefore, the definition of an entrepreneur needs to be highlighted. The following section describes the important aspects pertaining to an entrepreneur.

## 2.4 AN ENTREPRENEUR

Without an entrepreneur, entrepreneurship will cease to exist. Hence, the entrepreneur forms a crucial element of entrepreneurship (Spulber, 2008:1). Similarly with the term entrepreneurship, the term entrepreneur may be difficult to define and there is little consensus on a general definition of the term (Deakins & Freel, 2003:3). Yeong (2012) and Gartner (1989) state that many researchers interpret entrepreneurs to mean business owners who start and run their own businesses. According to Kuratko and Hodgetts (2007:5), entrepreneurs are critical contributors to economic growth through their leadership, management, innovation, research and development effectiveness, job creation, competitiveness, productivity and formation of new industries.

The entrepreneur forms a vital element of entrepreneurship, as without an entrepreneur there would be no entrepreneurship (Coulter, 2003:4). Successful entrepreneurs differ in terms of their ages, income levels, genders and race, as well as in their education and experience (Nieman & Nieuwenhuizen, 2014:27). However, research indicates that most successful entrepreneurs share certain personal characteristics that include creativity, dedication, need for achievement, locus of control, passion for business and risk propensity (Co *et al.*, 2007:46; Nieuwenhuizen, 2004:9.).

Creativity is the spark that drives the development of new products or services or new ways to do business (Venter *et al.*, 2008:58). Nieuwenhuizen (2004:9) state that an entrepreneur is a person who sees an opportunity in the market, gathers resources, creates and grows a business venture to meet these needs, bears the risk of the venture and will be rewarded with profit if that venture succeeds.

It can be said that dedication is what motivates the entrepreneur to work hard to get the endeavour off the ground. Dedication ensures that planning and ideas are joined by hard work to succeed (Co *et al.*, 2007:46). Dedication relates to a sense of determination. Determination is the extremely strong desire to achieve success. It includes persistence and a sense of resilience, even during trying times (Botha & Musengi, 2012:24).

Drucker (1985) states that a true entrepreneur is an individual who starts a business in order to gain a feeling of achievement; that is, they are motivated by a need for achievement rather than merely for monetary rewards. According to Benzing *et al.* (2009:62), the motivation to start a business is driven by a desire for independence. Nieuwenhuizen (2004:29) emphasise that entrepreneurs are individuals that want to be in control. Due to this locus of control entrepreneurs are considered risk-takers as they face

the risk of losing time with family and the risk of failure in the business (Co *et al.*, 2007:46). Bates *et al.* (2005:44) established that passion is what gets entrepreneurs started and keeps them in business. According to Nieman and Nieuwenhuizen (2014:28), if an individual has passion, and does what he or she loves, these individuals will be able to become an entrepreneur by starting a business. Furthermore, passion goes hand in hand with self-confidence, which reduces uncertainty and the level of risk.

Entrepreneurs are viewed as the future of South Africa (Luiz & Mariottii, 2008:2). It is believed also that potential entrepreneurs are those who perceive good business opportunities and believe that they have entrepreneurial capabilities (Fatoki & Oni, 2014:585). The Global Entrepreneurship Monitor report (GEM) conducts an annual study of entrepreneurial activities in countries using the Total Entrepreneurial Activity (TEA) index as its main measure. According to the GEM report of 2012, South Africa's rate of perceived opportunities is 36 percent, which is below the average for efficiency-driven economies of 41 percent. Furthermore, the country's rate for perceived capabilities, standing at 40 percent, is also below the average for efficiency-driven economies of 52 percent. The report further revealed that the pool of potential entrepreneurs in South Africa is 19 percent of the adult population. This supports the suggestion by Co *et al.* (2007:28) that efforts should be built to strengthen an entrepreneurial society in South Africa.

In the Netherlands, entrepreneurs are seen as agents of change with the ability to respond to new opportunities, which determines how well an economy performs (Snijders & Van der Laag, 2002:9). Interest in being an entrepreneur has increased significantly since 2003 in the Netherlands. A growing number of people take on a positive attitude towards being an entrepreneur (Bosma & Wennekers, 2004:9). Van Gelderen *et al.* (2005:370) have estimated that in 2003, 2.4 percent of the total Dutch population between the ages of 18 and 65 were starting a business of their own.

According to the GEM of 2014, almost one out of ten adults between the ages of 18 and 64 years in Europe was in 2013 participating in entrepreneurial activity (Lans *et al.*, 2015:4). However, in the Netherlands the percentage of adults between the ages of 18 and 64 years who are interested or actively involved in starting a new business decreased from 10.3 percent in 2012 to 9.3 percent in 2013 (Stel *et al.*, 2014:5). As a result, studies about the relationship between entrepreneurs and business success have become increasingly important for the Dutch (Driessen & Zwart, 2010:1).



Given the information discussed above, one can establish that an entrepreneur is essential for the economy of any country. While researchers' views and perspectives on entrepreneurs are different, they include the same opinions, such as newness, creating and risk taking. In short, in addition to creating wealth from their entrepreneurial businesses, entrepreneurs also create jobs and the conditions for a prosperous society. In light of these various perspectives, this study views entrepreneurs as individuals, who take risks and recognise opportunities to start, manage and build a business by creating something of value.

Owing to entrepreneurship being considered one of the most important factors contributing to economic development and having numerous benefits for society, nations are considering entrepreneurship education as being instrumental in prompting entrepreneurship (Buli & Yesuf, 2015:891).

## **2.5 ENTREPRENEURSHIP EDUCATION**

The purpose of education is for educators to assist students to develop certain knowledge, skills and qualities (Sinkovec, 2013:2; Yero, 2002:4). While there are various aspects pertaining to entrepreneurial education, for the purpose of this study, focus is directed at providing an overview of the definition, role and the importance of entrepreneurship education. Given that this study is a comparative study between South African and the Netherlands, it is essential to give an overview of entrepreneurship education in South Africa and the Netherlands. Therefore, this section briefly describes these entrepreneurial education areas respectively.

Evidence from the literature indicates that entrepreneurship is a discipline and a process that, like any other discipline, can be learned (Drucker, 1985:24; Morrisette & Schraeder, 2007:15;). Entrepreneurship education can be defined as the involvement of educators in the life of the students, informing them of skills and entrepreneurial qualities, to be successful in entrepreneurial activity (Isaacs *et al.*, 2007:614). In addition to knowledge and skills in a business, entrepreneurship education is also concerned with developing certain beliefs, values and attitudes, with the main aim to motivate individuals to consider entrepreneurship as a career path (Raposo & do Paco, 2011:456). Sinkovec (2013:6) concurs, stating that while entrepreneurial education aims to promote self-employment the focus is also to kindle entrepreneurial creativity and innovation in learners. Competiveness, innovation and growth of a country's economy rely on developing future leaders with the right skills and attitudes to be entrepreneurs (Horvath, 2012:437).

Mainly, it is believed that entrepreneurship education can enhance and develop traits that are associated with entrepreneurial success and provide skills and competencies that entrepreneurs will subsequently need (Raposo & do Paco, 2011:454). Owing to entrepreneurship being driven by an opportunity that involves thinking, reasoning and acting (Morrisette & Scraeder, 2007:15), entrepreneurship education is a mechanism for equipping students with the necessary analytical, social, leadership and innovative skills that entrepreneurs rely on to achieve success in a rapidly globalising market (Elmuti, *et al.*, 2012:84). In addition, Iacobucci and Micozzi (2012:674), point out that entrepreneurship education is an essential tool to develop a spirit of entrepreneurship. According to Fayolle and Gailly (2008:574), entrepreneurial education is essential for developing students' minds as well as raising awareness of entrepreneurship. Pixie and Sani (2009:345) add that students feel more confident about setting up their own business if they had exposure to entrepreneurial education.

The importance of entrepreneurial programmes and modules is extremely significant as they offer students the tools to think creatively, be effective problem solvers, analyse business ideas objectively, communicate effectively, network, lead and evaluate any given project (European Commission, 2008). Co and Mitchell (2006:350) believe that HEIs play different roles in entrepreneurship education. Co *et al.* (2007:49) further emphasises that education provides entrepreneurs with skills on how to handle problems related to finance, marketing, human resources and general management of the business. HEIs also play a role in developing entrepreneurial traits among students and providing them with the necessary support (Ray & Arokiasamy, 2011:521). Therefore, HEIs have a valuable role as they educate students to be employers rather than employees (Niewenhuizen, 2004:12). Solesvik *et al.* (2013:748) add that HEIs provide entrepreneurship-specific education that motivates students to have entrepreneurial mind-sets.

Governments believe that entrepreneurship has a positive impact on economic and political infrastructure of a country and, therefore, entrepreneurial education is considered important (Matlay, 2008:382). Dickson *et al.* (2008:251) adds that the higher the education levels in a country the higher the rates of individuals selecting entrepreneurship. Karimi *et al.* (2010:35) view that due to the indispensable role entrepreneurship education plays in economic growth and development, it has triggered a tremendous increase in entrepreneurial education worldwide. Ray and Arokiasamy (2011:522) states that entrepreneurial education is acknowledged worldwide as a critical

factor in assisting economic growth, which is important to address unemployment in a country.

Chimucheka (2014:408) highlights that there are different advantages of entrepreneurial education. It plays a vital role in awareness of the concept of entrepreneurship and indicates the importance of entrepreneurship to economic development (Kennedy, 2013:36). Entrepreneurship education also contributes to assuring an entrepreneurship culture in a country (Lee *et al.*, 2005:41). Furthermore, a fundamental advantage is that entrepreneurship education provides graduates with numerous skills and knowledge in order to be successful entrepreneurs locally and globally (Ray & Arokiasamy, 2011:521). Moreover, students who are involved in entrepreneurship programmes are more likely to start their own business than other students are (Peprah *et al.*, 2015:4). Entrepreneurship should be proficiency for all, which helps young people to be more creative and self-confident in whatever they embark on (Zhao, 2012:81). Nicolaides (2011:1045) states that entrepreneurship education should be encouraged as far back as the primary school level as learners' self-confidence in their ability to start a business later in life, to a large degree, is built on such education.

Therefore, in general, entrepreneurship education improves the awareness of entrepreneurship, increases an individuals' self-efficacy and intentions, influences individuals to identify opportunities and reduces the fear of failure (Iacobucci & Micozzi, 2012:677). It is important for the purpose of the study to provide an overview of entrepreneurial education in South Africa and the Netherlands.

### **2.5.1 Entrepreneurial education in South Africa**

While entrepreneurship education in South Africa has become part of curriculums in both primary and secondary schools and forms part of academic offerings at several higher education institutions (Venter *et al.*, 2008:22), it is still at a developmental stage (Co & Mitchell, 2006:357). Van Zyl (2006:17) concurs, indicating that while school managers, educators, parents and learners of many primary schools in South Africa are eager participants in initiatives such as market or entrepreneur days, the enthusiasm and commitment to such events does not exist in the majority of secondary schools. Nicolaides (2011:1045) opines that entrepreneurship is common in higher education in South Africa; but it is the behaviour to engage in the business creation process that is important and South African entrepreneurship programmes are lacking this matter (Ndebi, 2009:468). The majority of South Africans grew up with little or no experience in entrepreneurship and these individuals do not view themselves as entrepreneurs (Isaacs

*et al.*, 2007:613). The 2013 GEM report indicates that South Africans have a low level of entrepreneurial activity compared to other countries; the early entrepreneurial activity declined from 9.1 percent to 7.3 percent. The state of the South African economy is a concern for most young adults as they are confronted with problems such as crime, corruption and unemployment (Co & Mitchell, 2006:348). Improving entrepreneurial education may assist in solving these problems, especially unemployment and low economic growth (Chimucheka, 2014:403). North (2002:24) emphasises that young people urgently need to be trained and educated in the field of entrepreneurship in South Africa. Chimucheka (2014:405) opines that the future of entrepreneurial activities and the volume thereof will depend on how well the country is going to equip the population to start their own businesses and to encourage individuals not to start businesses just for themselves but to create jobs for others. The following section highlights entrepreneurial education in the Netherlands.

### **2.5.2 Entrepreneurial education in the Netherlands**

For the Netherlands, entrepreneurship is considered to be of utmost importance to the development of economic growth and employment (Nooteboom & Stam, 2008:161). The educational level of individuals in the Netherlands is an important input for entrepreneurial performance and for innovation and economic growth (Landheer & Waasdorp, 2014:5). In the Netherlands, entrepreneurial education is developed with universities offering educational courses on undergraduate level as well as various educational initiatives (De Faiote *et al.*, 2004:442).

As indicated by Oosterbeek *et al.* (2008:1), the Netherlands has implemented a Junior Achievement Young Enterprise student mini-company (SMC) programme. This involves taking responsibility as a group, for a small, short-time business, from starting the business (usually at the beginning of the educational year) to its liquidation (usually at the end of the educational year). The objective of the program is to teach students to apply theory into practice and to understand what entrepreneurship is about. At tertiary level, universities and universities of applied sciences offer entrepreneurial education programs and during the students' year of study they will attend lectures, seminars, networking and coaching offerings on entrepreneurship (Karali, 2013:16).

According to Waasdorp (2002:27), 7 percent of Dutch students want to start their own business within three years of graduating. It further stated that a report revealed that exposure to entrepreneurship education has a positive effect. When considering other business school alumni and entrepreneurship graduates, are three times more likely to

start new businesses, they are also three times more likely to be self-employed and have annual incomes that are 27 percent higher.

Acs (2006:97) opines that South Africa and the Netherlands understand that entrepreneurship is of utmost importance for economic growth and development for their countries. It is clear that the support system for entrepreneurial education in the Netherlands is strong and they can continue building on their solid foundation (Hofer & Potter, 2010). South Africa, on the other hand, is still encountering challenges and the government needs to overcome these challenges and determine an action plan for the development of entrepreneurial education in South Africa.

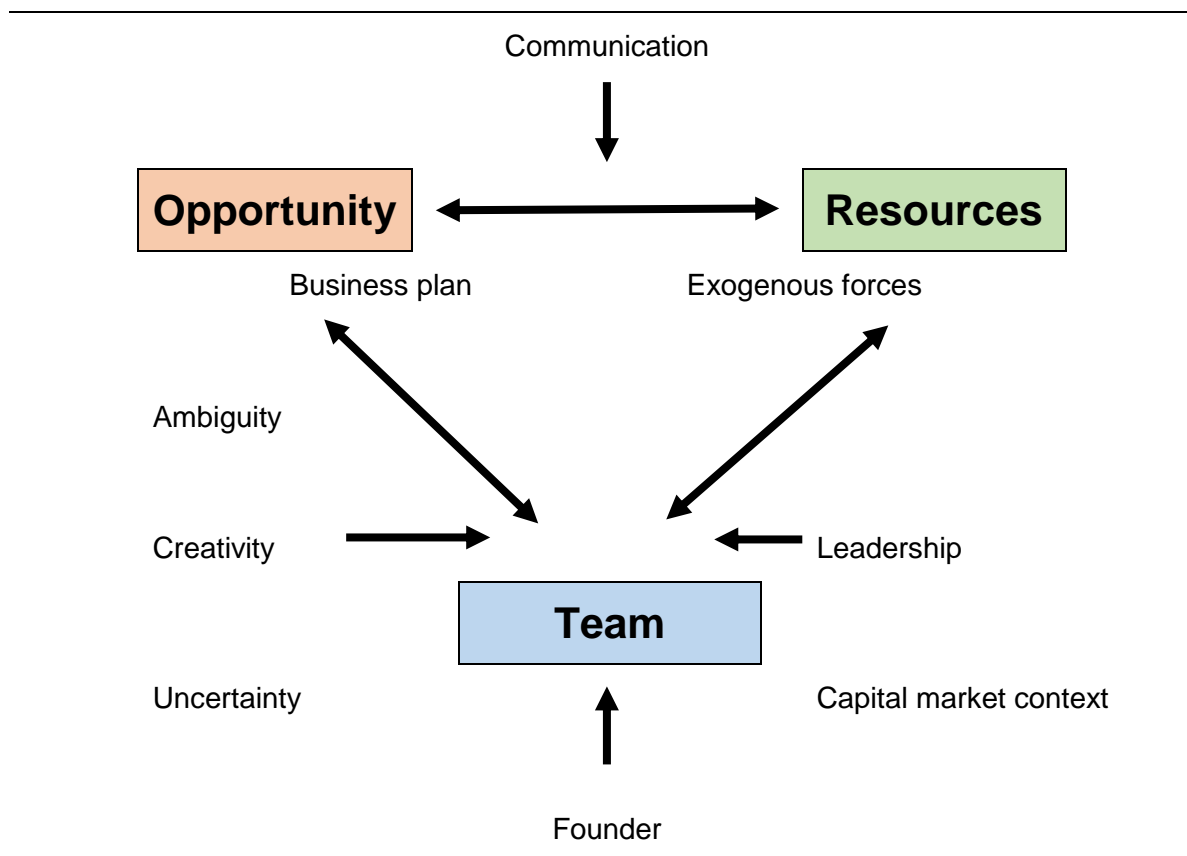
Owing to the entrepreneurial process being an indispensable component of starting a new business successfully (Nassif *et al.*, 2010:216), the entrepreneurial process is outlined in the following section.

## **2.6 THE ENTREPRENEURIAL PROCESS**

Entrepreneurship is a process (Wiklund *et al.*, 2011:7) comprising a set of decisions that entrepreneurs make while developing their businesses (Coulter, 2003:14). Nieman and Nieuwenhuizen (2014:15) concur, stating that the entrepreneurial process involves the steps in starting a business, including an overview of the entrepreneurs' responsibilities. As the process of starting a new business is embodied in the entrepreneurial process, it is essential for the entrepreneur to have a clear understanding of this process (De Coulon & Baltar, 2013:322). However, Deakins and Freel (2003:55) caution that the entrepreneurial process is time consuming and may be challenging, as the process is an interaction of a complex, multidimensional and dynamic set of factors and circumstances before actual business start-up.

The entrepreneurial process comprises four phases or steps, including finding and evaluating new business ideas, developing a business plan, determining the required resources, and finally, starting and managing the enterprise (Nieman & Nieuwenhuizen, 2014:15; Venter *et al.*, 2008:17; Hisrich *et al.*, 2005:38; Nieuwenhuizen, 2004:20).

Timmons and Spinelli (2009:110) developed the Timmons model to illustrate the entrepreneurial process as shown in Figure 2.2 below.



**Figure 2.2 The entrepreneurial process (Timmons & Spinelli 2009:110)**

The following sections briefly discuss the entrepreneurial process in order to provide a framework for understanding the determinants of entrepreneurial inclination.

### **2.6.1 Identify and evaluate the opportunity**

The entrepreneurial process starts with an individual(s) recognising an opportunity. However, opportunity identification is a challenging task, with sound business opportunities only resulting from an entrepreneur's vigilance to potential opportunities (Nieman & Nieuwenhuizen, 2014:15). Strydom *et al.* (2007:48) concur, stating that the identification and development of a business opportunity is a creative process that requires skills. Van Aard (2011:30) opines that creativity allows the entrepreneur to identify an opportunity that has the potential of generating economic value should it be viewed as desirable in the market. Venter *et al.* (2008:132) indicate that this process of forming ideas into business concepts, often referred to as opportunity recognition, includes three processes, namely identifying market needs, recognising a match between market needs and creating a new match between previously separate needs and resources in the form of a business concept. Strydom *et al.* (2007:74) accentuate

that entrepreneurs should concentrate on searching for new ideas that can be transformed into opportunities.

Timmons and Spinelli (2009:111) caution that while opportunities are based on an idea, not all ideas are viable opportunities. As such, entrepreneurs require the necessary skills to identify which opportunities are feasible ideas that may be converted into a successful business, in terms of being profitable. While creative thinking is essential in the successful evaluation of ideas, it is only part of the process. The emerging entrepreneur's past experience, training, education and skills development influences the formation of business ideas and are, therefore, important for evaluating ideas successfully (Nieman & Nieuwenhuizen, 2014:15).

## **2.6.2            Developing the business plan**

A business plan is a written document that describes a business opportunity, including how the entrepreneur is planning to exploit the opportunity identified. The business plan consists of various components, encompassing elements such as the new venture's mission statement, objectives, target markets and financial needs. Hence, it is a valuable tool for entrepreneurs, as it provides business direction for managing the business successfully (Erasmus *et al.*, 2013:88). Strydom *et al.* (2007:101) accentuate that a business plan forms an important part of the entrepreneurial process because it serves as a platform for potential investors to review the business for possible investing. Ideally, the entrepreneur should personally prepare the business plan as this may provide meaningful insight into possible complexities of the new business (Venter *et al.*, 2008:150). Dollinger (1995:201) concurs, stating that through this process of business plan development the entrepreneur can mitigate possible risks by identifying and confronting them before actual start-up.

Apart from the above-mentioned objectives, a business plan provides entrepreneurs with other benefits. According to Lancaster (2008:162), a business plan gives the entrepreneur the opportunity to evaluate the new venture's chances of success in the market, systematically and realistically. Furthermore, a business plan is an important tool for obtaining financial resources, such as a loan from banks and investors (Schiraldi & Silva, 2012:7). Dyck and Neubert (2009:179) concur, stating that the most important benefit of a business plan is that it is a valuable tool for gaining support from stakeholders, such as investors, employees, suppliers and customers. However, developing the business plan is complex, requiring the entrepreneur to have experience (Venter *et al.*, 2008:163) and sound planning skills (Lancaster, 2008:169).

Although business plans vary depending on the type of enterprise and industry sector in which it operates (Bates *et al.*, 2005:78), there are a number of standard elements and plans that need to be included in a business plan (Nieman and Nieuwenhuizen, 2009:104). Erasmus *et al.* (2013:92) points out that the value of the business plan lies in emphasising the specific strengths of the new venture. The sections of the business plan are outlined as follows:

- **Title page and table of contents:** The title page is the cover page of the business plan that gives the first impression of the business. Hence, in order to gain the target audience's interest in the business, it is important that the appearance of the title page is professional (Lancaster, 2008:162). The title page presents the name of the business, names of the owners or people supporting the business, street and postal address, contact details and the date on which the business plan was compiled (Hisrich *et al.*, 2005:197). On the second page of the business plan, the content page should be presented. This enables the reader to locate different sections easily (Bates *et al.*, 2005:78). Hormozi *et al.* (2002:756) warn that if investors cannot find important sections easily, the business may not receive adequate attention as investors are often besieged with business plans.
- **Executive summary:** The executive summary provides an overview of the total business plan, highlighting the significant elements of the plan and not exceeding two or three pages (Erasmus, *et al.* 2013:94). Although the summary is written only after the entire business plan has been completed, it should be the first section of the plan, ideally, to create enough excitement to motivate the reader to read further (Struwig, 2004:91). Strydom (2011:385) advises that the executive summary should include the business concept, the industry in which it will operate, the business itself, the market opportunities and the uniqueness of the products or services. Lancaster (2008:166) concurs and adds that the executive summary should also provide a description of the business strengths, weaknesses, opportunities and threats.
- **Products or services plan:** The products or services plan should give a detailed discussion of the products or services. The entrepreneur needs to describe the unique qualities of the products (Strydom, 2011:387), including the primary and secondary uses, possible limitations and shortcomings, competitive advantages and possible opportunities for product expansion (Nieman & Nieuwenhuizen, 2014:121).
- **Marketing plan:** The marketing plan should include a detailed description of the target market and the type of competition the business envisages (Bates *et al.*, 2005:79). The entrepreneur has to provide a clear explanation of who their



customers are, what their needs are and how the business will fulfil those needs (Lancaster, 2008:167). According to Hisrich *et al.* (2005:198), the marketing strategy should be outlined in the marketing plan. In order to ensure that the available resources of the business are utilised effectively, the strategy needs to comprise the planned pricing-, distribution-, promotion- and product strategies. Erasmus *et al.* (2013:94) states that from the marketing strategy, it should be clear what would give the business a competitive advantage.

- **Operational plan:** The actual processes involved in the manufacturing or provision of the products or services are outlined in the operational plan (Strydom, 2011:388). Essentially, the focus of the operational plan is on describing the physical facilities, labour requirements, raw materials, organisational structure and manufacturing or service processes of the business (Erasmus *et al.*, 2013:94; Bates *et al.*, 2005:79). The importance of the operational plan is that it should indicate the quality control methods that will be implemented (Ehmke & Akridge, 2007:7) in order to ensure quality products or services (Nieman & Nieuwenhuizen, 2014:122).
- **Management plan:** Erasmus *et al.* (2013:94) opine that a management plan is an essential component of the business plan as it cites the expertise and skills of all the major role players in the business. The management plan identifies the key players of the business, such as the active investors, advisors, the management team and the directors of the business (Lancaster, 2008:168). Therefore, the management plan should describe the organisational structure of the business, as well as the major role players' experiences and competencies (Nieman & Nieuwenhuizen, 2014:122). Lancaster (2008:168) points out that investors will look for evidence of an experienced team with integrity, in the management plan.
- **Financial plan:** The management of resources is essential to the success of any business. As such, the financial plan should demonstrate the potential viability of the business including the expected costs and demand (Struwig, 2004:93). Essentially, the financial plan must include projections of planned start-up costs as well as how funding will be obtained (Strydom, 2011:388). According to Lancaster (2008:169), a financial plan should include revenues, costs and profits forecasts of the business. Therefore, the three basic financial statements that must be included in a financial plan are the pro forma balance sheet, the income statement and the cash flow statement (Bates *et al.*, 2005:79).
- **Appendix section:** The appendix section of the business plan should include all essential documents, such as charts, maps and tables that provide evidence of the

viability of the business (Nieman & Nieuwenhuizen, 2014:125). These documents also are referred to as supporting materials and are placed at the end of the business plan (Bates *et al.*, 2005:79). These supporting materials often include documents, such as references, curriculum vitae and letters from potential suppliers and customers (Lancaster, 2008:169). Strydom (2011:391) adds that photographs, contracts and legal documentation may also be included in the appendix section of the business plan.

From the above discussion, it can be seen that the business plan is an essential tool for the entrepreneur, comprising various important elements. Nieman and Nieuwenhuizen (2014:128) caution that the business plan should not be disregarded once funding was obtained and the business was started, as the plan provides business direction for managing the business successfully. Coulter (2003:148) advises that the business plan should be a workable document that serves as a road map for current decisions, be revised and updated as needed and used for future decisions.

### **2.6.3 Determine the required resources**

The entrepreneur needs to ascertain what resources will be needed to exploit the opportunity identified. As is often the case with business start-up, entrepreneurs have limited resources that need to be managed carefully. Therefore, during this step of the entrepreneurial process, the entrepreneur must determine what resources are required to reach the targeted goals and strategies (Nieman & Nieuwenhuizen, 2009:126). This process starts with the entrepreneur assessing the current resources, followed by acquiring the needed resources in a timely manner, but giving up as little control as possible. However, as the business grows and more finance needed, the more ownership may need to be relinquished (Nieman & Nieuwenhuizen, 2014:16).

According to Co *et al.* (2007:72) and Timmons and Spinelli (2009:377), it is essential for the entrepreneur to understand specifically all the resources required for starting a business, such as financial-, human-, assets- and intangible resources. According to Struwig (2004:112), financial resources pertain to monetary or other resources that can be transferred into money. Strydom (2011:8) defines human resources, also referred to as labour, as the employees who execute specific activities for the organisation. Human resources are the personnel working with the entrepreneur or for the business and often include a management team, lawyers, accountants and consultants (Bates *et al.* 2005:212). Physical resources, also called tangible assets, are the material assets of the organisation, for example the buildings, vehicles, machinery and other equipment (Bates

*et al.* 2005:212). Intangible resources refer to all trademarks and patents that require capital (Nieman & Nieuwenhuizen, 2009:23). After the required resources have been obtained, the entrepreneur must employ these resources through implementing the business plan (Timmons & Spinelli, 2009:112).

#### **2.6.4 Launching a new business**

The success of a new business start-up relies on the entrepreneur's skills and the utilisation of a sound developed business plan. The process of starting the business is based on general management through the tasks of planning, organising, leading and controlling (Nieman & Nieuwenhuizen, 2009:155). Often a business is at its most vulnerable during business start-up due to the lack of the same knowledge and information as their competitors. Therefore, entrepreneurs should use the knowledge they obtained during business plan development to identify possible opportunities, markets and products, to make decisions pertaining to business expansion and to calculate business risks (Van Aard 2011& Naidoo, 2011:325).

The entrepreneurial process discussed, provides a framework for understanding the steps that are important for an entrepreneur in starting a new business. Various authors (Popescu, 2012:1; Malach-Pines *et al.*, 2010:186; Verheul *et al.*, 2004:3; Levent *et al.*, 2006:173) suggest that males and females have different perspectives to entrepreneurship. Given that this study is concerned with females' inclination towards entrepreneurship, it is essential to give an overview of female entrepreneurship. Hence, the proceeding section provides a discussion on female entrepreneurship.

### **2.7 FEMALE ENTREPRENEURSHIP**

Given that this study focuses on female students, a background on female entrepreneurship is essential. Furthermore, this study is a comparative study between female students in South African and the Netherlands; therefore, a brief summary of female entrepreneurship in South Africa and the Netherlands is important. As such, this section briefly discusses these female entrepreneurship areas respectively. It is worth noting that female entrepreneurship is recognised as a salient component of country's economy (Female Entrepreneurship Index Report, 2015). While there are various aspects concerning female entrepreneurship, for the purpose of this study this section focuses on the importance of female entrepreneurs to a nation's economy, the different types of female entrepreneurs, and the difference between male and female entrepreneurs, as well as barriers that face female entrepreneurs.

Worldwide, female entrepreneurs are viewed as a key contributor to economic growth with entrepreneurship becoming an increasingly important source of employment for females across all nations (Allen *et al.*, 2008:10). Niethammer (2013:31) indicates that female entrepreneurship is characterised by innovation, job creation and economic growth in the developing world. Female entrepreneurship is increasing globally (Estrin & Mickiewicz, 2011:397) and female entrepreneurship represents a key component of the business sector worldwide. For example, in 2012 more than 187 million of the 400 million entrepreneurs were females (GEM, 2013).

Evidence from the literature suggests that there are four types of female entrepreneurs and that they engage in different businesses and face challenges in entrepreneurship differently. These types include conventional, innovative, domestic and radical female entrepreneurs (Nieman & Nieuwenhuizen, 2014; Reeves, 2010; Nieman & Nieuwenhuizen, 2009; van der Merwe, 2004). The conventional female business owner is denoted as being highly committed to entrepreneurial ideals and accepting of conventional concepts about gender roles (Co *et al.*, 2007:306). These females are most likely married, may have children and are older with a moderate income, which draws from their experience in the household for their businesses (van der Merwe, 2004:35). The innovative female business owner is committed to entrepreneurial ideas but is not accepting of traditional gender roles (Nieman & Nieuwenhuizen, 2009:38). These females are less likely to be married or to have children and are highly committed to achieving success (Co, *et al.*, 2007:306). According to Reeves (2010:227), the domestic female business owner has a low attachment to entrepreneurial ideas and a high acceptance for traditional gender roles. These females are more likely to be married and to have children. The final type is the radical female business owners, who have a low commitment to entrepreneurial ideas and less accepting of conventional gender roles. They are more likely to be young and single and to strive for the upliftment of female entrepreneurship rather than merely seeking self-advancement or profit-making (Co *et al.*, 2007:306).

While evidence from the literature suggests an increase of female entrepreneurs, entrepreneurial activity from their male counterparts is still higher (Verheul *et al.*, 2004:4). Gender differences are well documented in the literature. While several studies indicate no or few gender differences (Cahoon *et al.*, 2010:3; Kepler & Shane, 2007:1) others observed significant differences between male and female entrepreneurs (Lee & Stearns, 2012:3; Malach-Pines *et al.*, 2010:18). Earlier studies (Costa *et al.*, 2001; Sexton & Bowman-Upton, 1990) concentrated on psychological and sociological

characteristics and found limited differences between males and females. However, more recent studies (Ding *et al.*, 2012; Brush *et al.*, 2009; Baycan-Levent *et al.*, 2006) argue that gender-based differences in entrepreneurship should be viewed from an integrated perspective that is rooted in psychological and sociological theories. These studies found that females see their business as an interconnected system from their relationships to family and friends.

Female entrepreneurs differ from their male counterparts in terms of their motivation, business skills and professional backgrounds (Nieman & Nieuwenhuizen, 2009:39). According to van der Merwe (2004:37), males and females differ in their approach to starting a business, especially in terms of accessing funding and in terms of the nature of the business that they gravitate towards. Yordanova and Davidkov (2009:573) indicate that male and female entrepreneurs also differ in terms of their education. Although males and females are both exposed to education, females lack entrepreneurial education and prior entrepreneurial experience. These differences include different sources of funding (Kwong *et al.*, 2012; Malach-Pines *et al.*, 2010:186), identifying business opportunities (Gonzalez-Alvarez & Solis-Rodriguez, 2011; Kepler & Shane, 2007), appropriate entrepreneurial characteristics and values (Malach-Pines & Schwartz, 2007), entrepreneurial knowledge and skills (Tsyganova & Shirokova, 2010) and overcoming barriers to entrepreneurship (Gorji & Rahiman, 2011).

Hisrich *et al.* (2005:69) opine that female entrepreneurs differ from male entrepreneurs in terms of motivation, business experience and work-related backgrounds. As for motivation, males are motivated to control their own destinies, whereas females often are motivated more by the need of achievement (Alecchi & Radovic-Markovic, 2013:9). Irwin and Scott (2010:250) argue that males have more funding options available to them compared to females. Concerning work-related backgrounds, males typically are perceived to have greater experience in the field of manufacturing, finance and technical areas and females in the service and administrative fields (van der Merwe, 2004:37).

In addition, females face several barriers when entering the business world (Gandhi & Sharma, 2014:545; Nieman & Nieuwenhuizen, 2014:43), as highlighted below:

- Financial barriers: Male entrepreneurs are more likely to receive funding from financial institutions (Adema *et al.*, 2014:15). Female entrepreneurs lack prior business experience and this has a negative impact on their ability to obtain the necessary funding (Niethammer, 2013:34). Therefore, many financial institutions perceive prospective females entrepreneurs as being less credit worthy and less able

to cover their debt (Gandhi & Sharma, 2014:545). It is also worth noting that some female entrepreneurs are hesitant to take on the burden of debt and, as such, often rather focus on businesses that require less start-up capital (Kwong *et al.*, 2012:78).

- Gender inequality: Cultural and societal factors play a significant role in terms of the acceptability of female entrepreneurs. For example, in many societies, the traditional role of a female is that of a wife and mother, with their potential economic role not being valued (Van der Merwe, 2004:34). Furthermore, given the great variety of gender-based divisions of labour in the world, it is clear that perceptions of what are suitable economic activities for females differ greatly from one society to the next (Co *et al.*, 2007:305). Female entrepreneurs in some societies tend to concentrate on starting businesses in the smaller informal business sectors, such as small retail services, whereas their male entrepreneurs tend to focus their efforts on the more main stream business sectors, such as manufacturing (Niethammer, 2013:33).
- Education and training: In many countries, gender stereotypes limit females' access to entrepreneurial education and training (Bekh, 2013:1). In contrast, according to Itani *et al.* (2011:411), in certain countries, females have a higher education rate than their male counterparts, but females still lack the necessary entrepreneurial skills and experience. Vossenbergh (2013:4) opines that females in emerging countries are perceived to lack the necessary entrepreneurial skills and experience due to a lack of necessary guidance and entrepreneurial support.
- Networking: For female entrepreneurs, networking is noted as a major barrier. This is often due to household and family responsibilities, resulting in them being more isolated than males (Piperopoulos, 2012:195; Hession, 2009:34). According to Kwong *et al.* (2012:81), females often struggle to enter the male-dominated business world due to this isolation. Therefore, building networks to obtain financing with prospective investors or financial institutions represents a challenge for females (Bodolica & Spraggon, 2015:985).
- Family responsibility: In some developing countries such as South Asia and sub-Saharan Africa, the females main responsibility is to care for children and the household (Gandhi & Sharma, 2014:545). This total involvement in household duties does not afford the opportunity for any form of entrepreneurial engagement (Hampel-Milagrosa *et al.*, 2010:12; Verheul, *et al.* 2004:11).

While the traditional role of females as homemakers was prevalent in South Africa, there has been a marked increase in the economic role of female entrepreneurs in the country

(Nieman & Nieuwenhuizen, 2014:43). According to the 2012 GEM report, 52 percent of females across regions of sub-Saharan Africa plan on starting their own business in the near future. Problematically, South African females still are affected by gender inequality barriers and struggle to gain equal rights and access to economic opportunities (Mandipaka, 2014:127). In South Africa, female-owned entrepreneurial businesses tend to be prevalent in the rural economy (Matlala, 2012:14), which hinders their ability to obtain finance for their business and expand their business (Kumah, 2014:5). Female entrepreneurs in South Africa face numerous barriers and government has now paid heed to these challenges (Mandipaka, 2014:128). The South African Department of Trade and Industry is constantly implementing new initiatives to encourage females to take part in entrepreneurial activities (Department of Trade and Industry, 2015). These initiatives include SAWEN (Women Entrepreneur's network), Isivande Women's Fund (IWF) and TWIB (Technology for Women in Business) (Mandipaka, 2014:129). SAWEN was established to offer support to female entrepreneurs who are faced with numerous challenges in establishing a business within the South Africa small, medium and micro enterprise (SMME) sector (Department of Trade and Industry, 2015). IWF was developed as an initiative to offer loans ranging from R30 000 to R2-million because research indicated that female entrepreneurs struggle to obtain access to finance (Mandipaka, 2014:129). Another initiative introduced was TWIB, a national programme that provides females with access to technology. The purpose of the programme is to enhance business growth through education, training, mentoring and partnerships (South Africa info, 2015).

In both South Africa and the Netherlands, female entrepreneurship is viewed as extremely important (Verheul *et al.*, 2004:3). However, the Netherlands is more innovative driven (World Economic Forum, 2014) compared to South Africa that is more efficiency driven (Luiz & Mariotti, 2011:50) when it comes to female entrepreneurship. This difference may be due to the distinct economical difference between South Africa and the Netherlands. Even though South Africa and the Netherlands are not on the same economy levels, it is still possible to establish the importance of female entrepreneurship in both of these countries and deduce that female entrepreneurship will have a significant impact on both these countries' economic development and growth.

Another important driver of female entrepreneurship is the increased attention being paid to the concept in the media (Radu & Redien-Collot, 2008; Hindle & Klyver, 2007). Media's representation of female entrepreneurs helps change the perception of female entrepreneurship in society and, hence, attitudes towards female entrepreneurship

(Eikhof, 2013:549). This increased media focus has helped females become aware of potential entrepreneurial opportunities, as well as their rights and possible strengths in the work place (Gandhi & Sharma, 2014:544).

This suggests that females have an important role to play in the field of entrepreneurship and have the capability of positively influencing economic growth and generating employment. This section addressed the importance of female entrepreneurship, distinguished between male and female entrepreneurs, identified the barriers female entrepreneurs face and presented an overview of female entrepreneurship in South Africa and the Netherlands. The following section focuses on the target market for this research study, which is the Generation Y cohort.

## **2.8 GENERATION Y**

The largest generation to date are the individuals of the Generation Y cohort (Fry, 2015:1). Members of the Generation Y cohort are the future leaders of the world. While there are numerous attributes to the Generation Y cohort, for the purpose of this study, the role that Generation Y cohort plays in entrepreneurship will be identified and an overview of Generation Y in South Africa and the Netherlands will be given.

### **2.8.1 Generation Y cohort defined**

Mannheim (1972), as cited in Lub *et al.* (2011:555), defined a generation as a group of individuals in a similar social environment experiencing similar social events. A generation cohort refers to an “identifiable group of individuals that share birth years, age location, and significant life events at critical developmental stages”. Furthermore, a generation forms value sets in a formative phase early in life, which remain with the individual from that generation for the rest of their lives (Lub *et al.*, 2011:555; Kupperschmidt, 2000:66). According to Howe and Strauss (2000:41), three elements identify the nature of a generation. These elements include perceived membership, common beliefs and common location. The first element, perceived membership, is the self-perception of membership within a generation that begins during youth and merges during young adulthood (Bessant, 2014:107). The second element, common beliefs and behaviours, are the attitudes towards family, career, personal life and behaviours, the choices made concerning jobs, marriage, children, health, crime, sex, drugs that characterise a generation (Reeves & Oh, 2008:297). The last element, common location in history, is the significant event that occurred during a generation’s young adulthood (Spector *et al.*, 2008:297). Therefore, individuals from a particular generation can be



distinguished from members of other generations, not only by collective birth years, but also by the exceptional social and historical experiences of the members' youths that enduringly influence their characteristics (Sullivan *et al.*, 2009:286). Glass (2007:100) argues that major influences in the environment cause differences between generations within which early human socialisation occurs. These influences have an impact on the development of personality, values, beliefs and expectations into adulthood.

The newest generation group to enter the business world is known as Generation Y (Glass, 2007:99). Markert (2004:21) identifies Generation Y as individuals born between 1986 and 2005 and characterises Generation Y to be a techno-savvy generation. This generation, also known as the next big generation, are extremely powerful and will transform every life stage (Howe & Strauss, 2000:4). This generation achieve on structure, family, safety and security. They prefer making their own choices, are self-confident and thrive on the adrenaline rush of new challenges and opportunities (Martin, 2005:39). Generation Y is different from past generations and show their difference with respect to the way they network and how they embrace new technologies (Deal, *et al.* 2010:192). Anantamula and Shrivastav (2012:11) agree and indicate that the differences between older generations and the Generation Y cohort is affected by behaviours, communication approaches and viewpoints as Generation Y members are exposed to a vast array of media and a global environment. A large portion of the Generation Y cohort comprise university students, which are amongst the most desirable market segments of this cohort due to the size of the segment (Kinley *et al.*, 2010:563) as well as the potential for high future earnings (Bevan-Dye *et al.*, 2009:174).

Researchers have identified different characteristics of Generation Y (Myers & Sadaghiani, 2010; Meier *et al.*, 2010; Howe & Strauss, 2003). Jonas-Dwyer and Pospisil (2004:195) indicate that Generation Y is sociable, optimistic, talented, well educated, collaborative, open-minded, influential, and achievement orientated. Myers and Sadaghiani (2010:225) identified several positive qualities of this generation, namely they work well in teams, are motivated and open to communication and technology. Tolbize (2008:4) characterises this generation as having a strong need for independence and indicates that these individuals show an entrepreneurial spirit (Tolbize, 2008:4). Howe and Strauss (2003:2) emphasise that Generation Y has seven core characteristics, namely special, sheltered, confident, team-orientated, conventional, pressured and achieving. Members of the Generation Y cohort are highly protected as children and their parents tell them they are special and winners (Eckleberry-Hunt & Tucciarone, 2011:458). This cohort is motivated, goal-orientated and confident (Meier *et*

*al.*, 2010:69). Members of this generation are categorised as loyal workers, highly dedicated, averse to risk and strongly committed towards teamwork and collaboration (Tolbize, 2008:2). Generation Y is conventionally motivated and respectful; the members of this generation may be compliant to university advisors and can also seek their knowledge, guidance and support (Elam, *et al.*, 2007:24). Generation Y is characterised by being pressured. As children, they are used to having their days filled with structured activity, and are pushed to achieve and take advantage of every opportunity that comes their way (Howe & Strauss, 2003:2). Achievement is high on Generation Y's priority list, as they have been pushed in their childhood to achieve they want to be successful in every task they encounter; they are also referred to as the trophy generation (Meier *et al.*, 2010:69). There are many stereotyped characterisations of Generation Y, including tech-savvy, multi-taskers, team players, autonomous, self-centred, ambitious, informal, and they like to enjoy work that has meaning (Kilber, *et al.*, 2014:81). This generation also has negative attributes, such as being selfish, impatient, and hedonistic (Black *et al.*, 2012:4). According to Mackey *et al.* (2008:857), Generation Y members are high maintenance employees and expect acknowledgement, but are willing to work in teams and deal with failure.

The most essential point of understanding the characteristics of Generation Y sometimes gets lost in the discussion of the more complex surrounding cultural and societal dynamics (Howe & Strauss, 2003:4). The point is simply that Generation Y students are different from previous generations (Williams & Page, 2011:38). Recent research by Ozcelik (2015:102) identified that Generation Y is more confident, independent and team-orientated. Businesses need to be adjusted to fulfil Generation Y needs (Kilber *et al.*, 2014:83). The major issue facing Generation Y is high levels of unemployment when entering the business world (Lowrey, 2013:1).

### **2.8.2 Generation Y and entrepreneurship**

More than half of Generation Y individuals have the desire to start their own businesses, but fewer create businesses than previous generations (Steinberg, 2014:1). In the contemporary, unreliable economic climate, global research has shown that emerging adults, also known as Generation Y, are adapting to these environmental conditions by pursuing unconventional forms of employment through entrepreneurial activities (Ozcelik, 2015:102). Today's Generation Y is faced with a bombardment of unique challenges when entering the work environment that are typical to their generation. According to the World Economic Situation and Prospects (2012), if poor global economic conditions continue, the result will be an escalation of mass unemployed youths. The promotion of

entrepreneurship amongst Generation Y students is important, as the awareness of entrepreneurship will help to insure a decrease in the unemployment rate amongst Generation Y students (Nkechi *et al.*, 2012:93). The more aware Generation Y is of entrepreneurship, the more employment and growth there will be in the economy as the promotion of entrepreneurship ensures high sustainable economic growth and employment as well as ensuring the sustainability of financial stability, which will lead to the contribution of the development of the world economy (Steinberg, 2014:2). Generation Y recognise that success lies in higher education (Kilber *et al.*, 2014:82). It is believed that the promotion of entrepreneurship will best be done through entrepreneurial education and business incubators (Khalil & Olafsen, 2010:1).

### **2.8.3 Generation Y in South Africa**

South Africa is a country with over 54-million inhabitants in 2015 (Statistics South Africa, 2015) from different cultures, languages and beliefs (South Africa Info, 2015). In 2015, the Generation Y cohort comprised of approximately 38 percent of the total population (Statistics South Africa, 2015).

Generation Y perceive unemployment as the greatest challenge to be faced by society over the next 20 years. Therefore, Generation Y believes that the main purpose for business start-ups in the country is to generate a profit (Deloitte Millennial Innovation Survey, 2013). Currently in South Africa, there is strain between Generation Y and previous generations as Generation Y members are integrated into the workplace (Homecoming revolution South Africa, 2015). Generation Y seek fast career growth, the best technology and good fringe benefits, and choose to be employed by businesses that best project their hopes and dreams. However, Generation Y in South Africa is unwilling to take risks when making decisions (Deloitte Millennial Innovation Survey, 2013). Burrows (2013) states that members of the Generation Y cohort in South Africa are constantly seeking new challenges as these young individuals lose interest rapidly.

According to a report by Fry (2015:1), the female segment of the Generation Y cohort are showing a new element of talent, as the females are more educated and entering the labour force in larger quantities than previous generations. The more experience the Generation Y female has, the more likely she is to be the main breadwinner of the family as only 19 percent of the female Generation Y members are enthusiastic to leave their current employers to start a family and spend time at home (Huckabay, 2015).

#### **2.8.4 Generation Y in the Netherlands**

The Netherlands is a country with more than 16-million individuals (Netherlands Demographic Profile, 2014). Guitjens (2014) indicates that the Generation Y cohort in the Netherlands makes up 16 percent of the total population.

Generation Y in the Netherlands were born into a country with a good working environment and these individuals have high expectations of the employers in the country as the employers are perceived to embark on Generation Y individuals career paths (Cullens, 2013). As identified by Guitjens (2014), 78 percent of Generation Y individuals in the Netherlands have the desire to take part in businesses. As shown by the Deloitte Millennial Innovation Survey (2013), 38 percent of Generation Y individuals in the country are confident that business start-ups are necessary to improve the society. The Dutch Generation Y members are likely to contribute to society through individual initiatives, such as participating in the community and voting during elections (Nielsen, 2014). In particular, female Generation Y members are more confident in fostering a career, compared to females from previous generations (Fry, 2015).

The section focused on the target market for this research study, which is the Generation Y cohort. Generation Y students are important to a country's economy and the awareness of entrepreneurship will help to insure a decrease in the challenges these students face, such as unemployment (Nkechi, *et al.* 2012:93).

#### **2.9 CONCLUSION**

The aim of this chapter was to give a literature review of the first five theoretical objectives. For decades, many researchers have argued that an entrepreneur is different from the rest of the population. Research clearly points out that there are many variables involved in the decision to become an entrepreneur. Even though there is still no clear definition for entrepreneurship, the importance of entrepreneurship can still be established. Entrepreneurship is important for any country, as it is the foundation of job creation and the development of a country's economy.

Major growth in the number of females employed outside the home has started a new field of research that is concerned with whether female entrepreneurs are different from male entrepreneurs. As research indicated, several researchers argue that there are differences between female entrepreneurs and male entrepreneurs; whereas other researchers deem there to be no difference between genders. However, female entrepreneurs can be further examined and investigated as they play an important role in

the economy of a country and they have a bright future in entrepreneurship; they have enormous potential for the future.

Furthermore, in general it was discussed that entrepreneurship education improves the awareness of entrepreneurship, increases individuals' self-efficacy and intentions, and influences individuals to identify opportunities and reduce the fear of failure. Generation Y is important to a nation as this generation is perceived as the upcoming leaders of the future.

The next chapter, Chapter 3, is concerned with entrepreneurial intention and the determinants that influence an individual to be inclined towards entrepreneurship. The chapter includes entrepreneurial intention models of previous research.

## **CHAPTER 3**

### **ENTREPRENEURIAL INCLINATION**

---

#### **3.1 INTRODUCTION**

In Chapter 2, the underlying concepts and importance of entrepreneurship for a nation's economic growth and development, including entrepreneurial education, the entrepreneurial process, female entrepreneurship and the Generation Y cohort were discussed. This is in accordance with the seventh and eighth theoretical objectives formulated in Chapter 1.

Chapter 2 revealed that certain factors influence certain individuals to be more entrepreneurially inclined than others. As such, the purpose of this chapter is to review the literature pertaining to the factors that influence entrepreneurial inclination in order to propose a model of the determinants of entrepreneurial inclination amongst Generation Y female students in South Africa and the Netherlands. This chapter comprise five sections. The chapter begins with a definition of entrepreneurial intention in Section 3.2. Section 3.3 describes the different entrepreneurial intention models. The possible determinants of entrepreneurial inclination, discussed in Section 3.4, include a description of the motivational factors affecting the decision to become an entrepreneur, the personal and environmental business barriers that may hinder an individual from becoming an entrepreneur, as well as entrepreneurial attitudes towards entrepreneurship. Section 3.5 illustrates the proposed entrepreneurial inclination model of the study.

#### **3.2 ENTREPRENEURIAL INTENTION**

Central to understanding entrepreneurship is entrepreneurial intentions, as the desire to become an entrepreneur is the first step in the entrepreneurial process (Ngugi *et al.*, 2012:125) of discovering, creating and exploiting opportunities (Kumar & Ali, 2010:457). Entrepreneurial intentions refer to the interest that individuals show in starting and operating their own business (Karhunen & Ledyeva, 2010:232; Krueger *et al.*, 2000:413; Tkachev and Kolvereid, 1999:269; Bird, 1988:442; Shapero & Sokol, 1982:83; Shapero, 1975:84). Clearly, individuals with little or no interest in owning their own business are unlikely to become entrepreneurs. Krueger *et al.* (2000:414) explains that entrepreneurial intention includes the intention to start a new venture, together with the entrepreneurial conviction that they will succeed in that venture. Although entrepreneurial

ideas begin with inspiration, an entrepreneurial intention is required in order to translate that idea into an actual business venture (Bird, 1988). Venter *et al.* (2008:126) concur and state that starting a new business requires an entrepreneur who is motivated to make things happen and who takes the time to think out the business idea carefully and plan how best to execute that idea. This makes entrepreneurship a deliberate and planned behaviour; that is, intentional behaviour (Bird, 1988:443). Such behavioural intentions have been identified as being the immediate predictor of actual behaviour (Fishbein & Ajzen, 1975; Ajzen, 1991). Ferreira *et al.* (2012:428) also indicate that intentions are the paramount predictor of planned behaviour. Therefore, entrepreneurial intention is important as it explains and predicts the likelihood of an individual becoming an entrepreneur.

Since the seminal studies by Shapero (1975), Shapero and Sokol (1982), Bird (1988), as well as Katz and Gartner (1988), there has been an ever increasing number of studies devoted to researching the concept of entrepreneurial intentions (Mohamad *et al.*, 2015; Molaei *et al.*, 2014; Sweida & Reichard, 2013). Evidence from the literature suggests that entrepreneurship intention has two main psychological perspectives, namely the trait perspective and the cognitive perspective (Sivarajah & Achchuthan, 2013:172).

Early studies on entrepreneurship focused on how individuals' personality traits influenced their entrepreneurial intentions, and this is referred to as the trait approach. According to this approach, an entrepreneur has a specific personality type with a particular set of traits (Gartner, 1989:48). The trait approach involves identifying particular enduring personality characteristics that distinguish individuals that are more entrepreneurially inclined than others are. Central traits in this regard include the need for achievement, creativity and innovation, an extrovert personality, an internal locus of control and a high-risk propensity (Xie, 2014:26).

The relevance of using the trait theory as a means of identifying potential entrepreneurs has since been debated and the literature provides contradictory evidence. Several studies (Linan *et al.*, 2011; Veciana *et al.*, 2005; Low & MacMillan, 1988) found the trait approach to be ineffective in determining entrepreneurial behaviour. As such, the focus moved to the cognitive approach of planned behaviour; that is, an individual's intention to engage in entrepreneurial behaviour (Krueger *et al.*, 2000:419). This cognitive approach gained in popularity as researchers found that entrepreneurs are individuals who recognise opportunities and whose behaviour is intentionally planned (Sivarajah & Achchuthan, 2013:173). This implies that entrepreneurship is more of a cognitive process of planned behaviour.

The cognitive approach is concerned with how entrepreneurs think and behave (Mitchell *et al.*, 2002:95). According to Mungai (2013:33), entrepreneurial intention is a cognitive style that refers to an individual's determination to perform a certain behaviour. Ajzen (1991:191) states that entrepreneurial intention involves a cognitive theory perspective that ranges from an individual's belief to their values, cognitive styles and mental processes. Garba *et al.* (2014:435) opine that cognitive theory perspectives pertain to an individual's mental orientation such as personal aspirations and confidence that influence an individuals' decision to follow the entrepreneurship route (Garba *et al.*, 2014:435). Owing to entrepreneurship being an intentional behaviour, the use of planned behaviour models is applicable for studying the likelihood of individuals becoming entrepreneurs (Krueger, 1993). Several intention models have been proposed in entrepreneurship literature that explain the formation of entrepreneurial intention (Krueger *et al.*, 2000:413) and have proven valuable in understanding business creation (Fini *et al.*, 2009:18). These models are discussed in the next section.

### **3.3 ENTREPRENEURIAL INTENTION MODELS**

In order to have insight into the possible determinants of entrepreneurial inclination, a discussion on the different entrepreneurial intention models is essential. Researchers have investigated the entrepreneurship phenomenon using various intention models, which were developed during the 1980s and 1990s (Guerrero *et al.*, 2008:36). The dearth of grounded theory in the field of entrepreneurship resulted in the development of entrepreneurial intention models as they can predict the entrepreneurial behaviour of individuals, given that intentions are influenced by different factors (Guzmán-Alfonso & Guzmán-Cuevas, 2012:722). From the literature, seven theory-driven models for investigating entrepreneurial intentions are identified, including the entrepreneurial event model, the entrepreneurial attitude orientation model, the theory of planned behaviour, the entrepreneurial intentions model, the intentional basic model, the entrepreneurial potential model and the Davidsson model. These models give directions to educators and industry professionals to tailor entrepreneurship programmes; hence, a discussion on these models follows.

The entrepreneurial event model, proposed by Shapero and Sokol (1982), was the first intention based model tested in the area of entrepreneurship (Schlaegel & Koenig, 2014:293; Krueger *et al.*, 2000:412). It was the first model that considered the start of a business as an event rationalised with the interaction between initiatives, abilities, management, relative autonomy and risk (Guerrero *et al.*, 2008:37). Shapero and Sokol's (1982) theory states that two factors, namely perceived desirability and perceived



feasibility, determine an individuals' intent to start a business. These researchers aimed at developing a model that focuses on the cultural and social factors influencing entrepreneurial intentions (Venter *et al.*, 2008:129). According to Linan *et al.* (2011:198), the entrepreneurial event theory considered business creation as the result of the interaction among background factors, which act through its influence of the individual's perceptions. Shapero and Sokol (1982:83) focused on factors such as entrepreneurial events that involve an event of business creation.

Following this model nine years later, Robinson *et al.* (1991) defined the three-part entrepreneurial attitude orientation model, proposing that an individual's reaction, such as cognition (thought), affect (feeling) and conation (behavioural intentions) are vital components for predicting attitudes towards achievement, self-esteem, personal control and innovation (Iberkleid, 2010:26). At the same time, the theory of planned

behaviour was generated by Ajzen (1991:179), which proposes that behaviour requires planning that may be predicted by the intention to adopt that behaviour. Krueger (1993:5) used Shapero's (1982) model and proposed that a third variable propensity to act should be included. Krueger (1993:5) explained that perceived credibility, perceived desirability, and propensity to act influence an individuals' intention towards entrepreneurship, with feasibility explaining the most. The entrepreneurial intentions model (Krueger *et al.*, 2000:419), also known as the Shapero-Krueger model (Krueger & Casrud, 1993:319) was proposed. Krueger and Brazeal (1994:94) viewed situational competence or potential as a critical variable for intentions and suggested that self-efficacy should be added to the proposed model.

In 1993, Krueger and Carsrud developed the intentional basic model, which assesses the relationship between entrepreneurial intentions and attitudes by analysing exogenous influences, attitudes and intentions (Guerrero *et al.*, 2008:37). Krueger and Casrud (1993:315) suggest that planned behaviour is best predicted by intentions towards certain behaviour and is not predicted by demographics, personality attitudes and beliefs. Krueger and Casrud (1993) were the first researchers to apply the theory of planned behaviour to the field of entrepreneurship, in an attempt to make the theory of planned behaviour, developed by Ajzen (1991), more companionable with other theoretical frameworks (Fayolle & Klandt, 2006:79). The researchers identified three antecedents of entrepreneurial intention, namely perceived attractiveness, social norms and self-efficacy of entrepreneurial behaviour (Krueger & Casrud, 1993:323). Furthermore, this model indicates that business creation is an intentional process that is influenced by an individual's attitudes and behaviour (Guerrero *et al.*, 2008:37).

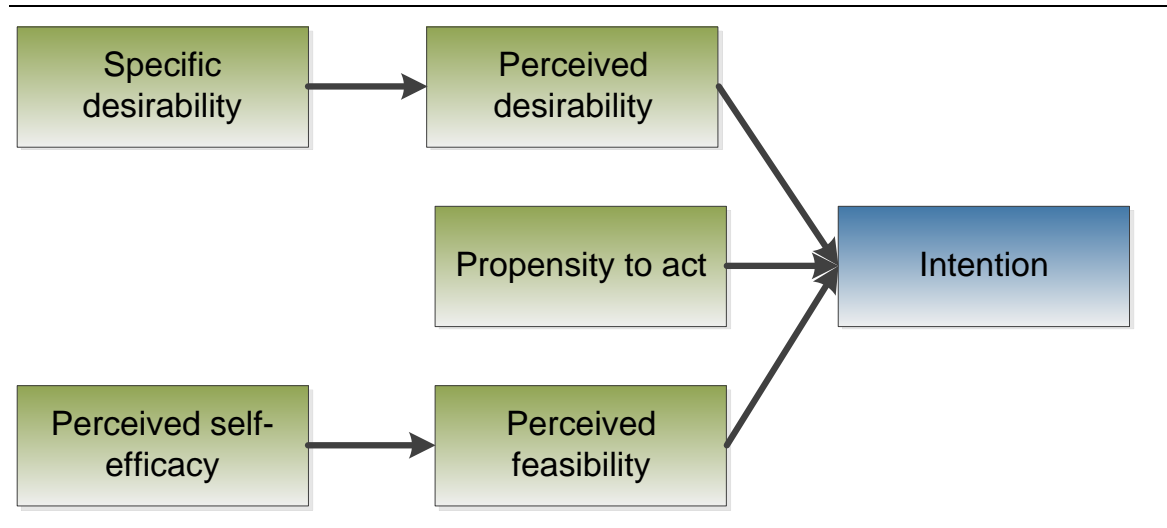
In 1994, Krueger and Brazeal (1994:91) developed the entrepreneurial potential model based on the models of Shapero and Sokol (1982:83) and Ajzen (1991:182). Krueger and Brazeal (1994:91) argued that an individual's needs are noticeable intentions towards starting a business. Krueger and Brazeal (1994:91) opine that before entrepreneurship can take place there must be entrepreneurial potential. While this model is centred on the entrepreneurial event model and the theory of planned behaviour, it disputes that the beliefs and attitudes of entrepreneurs are motivated by perceptions. Instead, this model suggests that three constructs are vital for entrepreneurial intention, namely perceived desirability and perceive feasibility and the individual's propensity to act (Krueger & Brazeal, 1994:95).

The last model to take into consideration to determine entrepreneurial behaviour based on entrepreneurial intention is the Davidsson model. Davidsson developed an entrepreneurial intention model in 1995, based on economic psychological factors that influenced entrepreneurial intentions (Davidsson, 1995a; 1995b). According to Davidsson (1995a:1), two main determinants influence an individual's intention to start a business, namely attitudes and the current situation. It is vital to highlight an individual's current situation such as employment status - the situational influence may affect an individual's entrepreneurial decision (Davidsson, 1995b:6). Attitudes include both general attitudes and domain attitudes. General attitudes refer to an individual's willingness to change, their money-orientation, competitiveness and need for achievement and autonomy, whereas domain attitudes pertain to specific attitudes, personal background and situational variables (Siegel *et al.*, 2014:1084). Stankiewicz and Wasilczuk (2012:39) identified domain attitudes as the domain connected to entrepreneurship, referring to how the individual perceives opportunities for starting the business, the knowledge required by the individual to execute business start-up and the risks associated by the individual when entering business start-up.

Of these entrepreneurial intention models, various authors recognise the entrepreneurial intentions model (Bayon *et al.*, 2015:7; Krueger *et al.* 2000:412) and the theory of planned behaviour (Tsordia & Papadimitriou, 2015:23; Karhunen & Ledyeva, 2010:236) as prominent models for measuring entrepreneurial intentions. For the purpose of this study, which is to measure undergraduate Generation Y female students' inclination towards entrepreneurship, these two entrepreneurial intention models are integrated and, therefore, elaborated on in the following two sections.

### 3.3.1 Shapero-Krueger entrepreneurial intentions model

According to the Shapero-Krueger model, entrepreneurial intentions are influenced by an individual's perceptions of personal desirability, self-efficacy and the control of performing an entrepreneurial act, as diagrammatically depicted in Figure 3.1.



**Figure 3.1 Shapero-Krueger's model (Krueger 2000:418)**

The basic principle theorised in the Shapero-Krueger's model is that an individuals' interaction between their personal characteristics, perceptions, values, beliefs, background, and their environment or situation, influence their intentions, which in turn predict their behaviour (Krueger & Brazeal, 1994). As illustrated in Figure 3.1, there are two types of perceptions in the entrepreneurial intentions model, namely desirability and self-efficacy. Desirability is triggered by a specific event and converts entrepreneurial intent into an actual behaviour. This behaviour represents the way that an individual feels interested in becoming an entrepreneur (Zerihun, 2014:15). Self-efficacy indicates whether the individuals consider themselves personally able to carry out a certain behaviour (Gongxeka, 2012:42). In their model of entrepreneurial intention, the Shapero-Krueger model (1993) theorises that an individual's intention to start a new business is determined by three components, namely perceived desirability, perceived feasibility and a propensity to act. Various researchers concur with this theory being the most vital factor influencing an individual's intention to start a business (Garba *et al.*, 2014:437; Schlaegel & Koenig, 2014:294; Zerihun, 2014:14; Ali *et al.*, 2011:13; Veciana *et al.*, 2005).

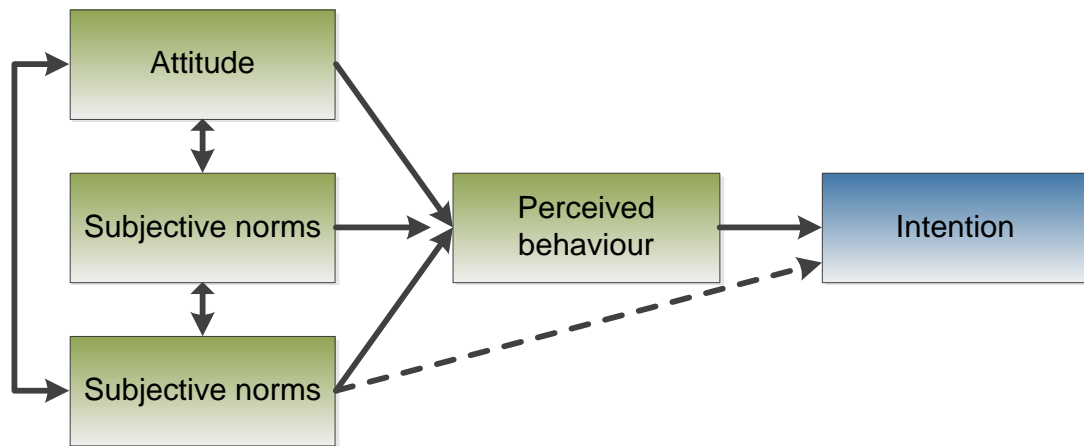
In this model, perceived desirability refers to the extent to which an individual's perceptions of their desirability and capability to successfully start a business is affected

by personal attitudes, values and feelings (Linan, 2008:258). Krueger *et al.* (2000:420) denote that personal attitudes of starting a business include intrapersonal and extra-personal impacts. As viewed by Mungai (2013:39), intrapersonal and extra-personal impacts are the extent to which an individual is motivated to start a business. According to Dehkordi *et al.* (2012:288), intrapersonal impact is how well individuals know themselves, their own desires, fears and capabilities, whereas extra-personal impacts are derived from an individuals' memory (Olsen & Fazio, 2004:653).

Perceived feasibility is the intensity to which an individual feels personally capable of starting a business or taking part in an entrepreneurial behaviour (Garba *et al.*, 2014:439, Giagtzis, 2013:13). Schlaegel and Koenig (2013:300) opine that perceived desirability refers to the individual's motivation to change a favourable attitude into entrepreneurial intention. Furthermore, the Shapero-Krueger (1993) model states that entrepreneurial attractiveness should include propensity to take action on new business opportunities (Acs & Audretsch, 2006:127). Propensity to act represents the extent to which entrepreneurial intention of an individual is transformed into entrepreneurial action (Byabashaija, *et al.*, 2011:132). In accordance with Shapero (1982:83) and Shapero-Krueger (1993:319), another well-known model is that of Ajzen (1991), which is a more detailed psychological model of planned behaviour.

### **3.3.2 Theory of planned behaviour**

A certain behaviour executed by an individual is perceived as a planned action (Zerihun, 2014:15). Ajzen (1991) developed a model of planned behaviour and this model proves to be a good predictor of behaviour patterns in numerous studies (Schlaegel & Koenig, 2014:291; Engle *et al.*, 2008:36). Karhunen and Ledyeva (2010:236) confirmed that the model also predicts and explains human behaviour, which is focused on the intention of an individual to perform a given behaviour. Figure 3.2 diagrammatically illustrates the theory of planned behaviour model by Ajzen, depicting the determinants of intention, and as a result thereof, behaviour.



**Figure 3.2 Theory of planned behaviour (Ajzen, 1991:182)**

The theory of planned behaviour proposes three independent determinant factors that influence intention and predict behavioural intention (Ajzen, 1991:182) as illustrated in Figure 3.2. The theory shows that intentions depend on attitudes, subjective norms and perceived behaviour control (Linan *et al*, 2011:199). Attitude indicates the perception or the desirability by the individual; what the individual likes or deems attractive (Nieuwenhuizen & Swanepoel, 2015:3). Therefore, Cameron *et al.* (2012:3) state an attitude predicts an intention. Subjective norms are a noticeable social context factor impacting on an individual's behaviour and refer to the perceived social pressures that influence individual behaviour (Lu *et al.*, 2010:921). Contrary, perceived behavioural control denotes to an individuals' subjective evaluation of the simplicity or difficulty of performing a task and the control thereof (Nieuwenhuizen & Swanepoel, 2015:3), which relates to perceived self-efficacy, such as having the necessary skills and competence (Linan & Chen, 2007; Karhunen & Ledyeva, 2010:243). As illustrated by Figure 3.2, Ajzen (1991:185) identified that performance of behaviour is a combined function of intentions and perceived behavioural control.

It can be summarised that the theory of planned behaviour indicates how an intention toward entrepreneurial behaviour is determined by three factors. Therefore, it is the intention that some factors, in turn, moderately determine the future of entrepreneurial behaviour (Gongxeka, 2012:42). Krueger *et al.* (2000:413) noted that the majority of what individuals consider as an entrepreneurial activity is perceived as intentionally planned behaviour. This explains the popularity of applying the theory of planned behaviour in studies of entrepreneurial intention. However, Bagozzi (1992:180) warns that the theory of planned behaviour does not include a motivational component,

therefore, it lacks in describing the motivational process and how these determinants influence entrepreneurial intention.

The theory of planned behaviour and the entrepreneurial intention model are similar, as both models consist of three determinants of entrepreneurial intention (Garba *et al.*, 2014:437; Linan, *et al.*, 2011:200). However, the theory of planned behaviour focused on social norms that are more supportive of an entrepreneurial activity than other factors (Elfving *et al.*, 2009:25). The theory of planned behaviour proved its use in a wide variety of studies to determine behaviour patterns of students, entrepreneurs and consumers (Warmerdam *et al.*, 2015; van Gelderen *et al.*, 2008; King & Dennis, 2006).

Table 3.1 outlines a selection of studies conducted on multiple dimensions of the theory of planned behaviour model and the findings thereof.

**Table 3.1 Sample of theory of planned behaviour studies**

Author/s	Dimensions	Sample	Purpose/main findings
Jalilvand and Samiei (2012)	Attitudes Subjective norms Perceived behavioural control Behavioural intention	Tourists	This studied focused on investigating the impact of electronic word of mouth on a tourism destination. Findings signifies that electronic word of mouth have a significant impact on attitudes towards visiting the tourism destination, subjective norms, perceived behavioural control, and intention to travel.
Lee (2009)	Attitude Perceive usefulness Perceive ease of use Flow experience Perceived enjoyment Intention	Consumers	The aim of this paper was to investigate whether flow, experience, perceive enjoyment, influence an individuals' behavioural intention to play online games. The findings showed that the theory of planned behaviour provides a good fit for explanatory power.

**Table 3.1      Sample of theory of planned behaviour studies (continued ...)**

Author/s	Dimensions	Sample	Purpose/main findings
Knabe (2012)	Subjective norms  Attitude towards the act  Perceived behavioural control	Teachers	The main aim of the study was to test the theory of planned behaviour by applying it to public relations faculty intentions to teach online. The findings of the study indicated that all four predictor variables were statistically significant in predicting intent to teach public relations online.
Giles <i>et al.</i> (2004)	Self-efficacy	Students	The study focused on self-efficacy in the framework of blood donation as defined within the theory of planned behaviour. The findings showed that self-efficacy highlighted its importance within the theory of planned behaviour.

Source: Own work

As indicated in Table 3.1, the entrepreneurial intention model is a diverse intention measurement tool. As such, it did not take long before scholars began using the intention models to predict intention of entrepreneurship. Table 3.2 outlines a sample of entrepreneurial studies that applied the theory of planned behaviour model.

**Table 3.2 Sample of entrepreneurial studies using the theory of planned behaviour**

Author/s	Dimensions	Sample	Purpose/main findings
Tsordia and Papadimitriou (2015)	Attitude Social norm Perceived behavioural control Entrepreneurial curriculum content	Students	The purpose of the study was to determine first and fourth year business students entrepreneurial intention. The findings of the study indicated that three of the components of the theory of planned behaviour shown to have an influence on entrepreneurial intention, whereas social norm proves to be insignificant.
Heuer and Kolvereid (2014)	Attitude Subjective norm Perceived behavioural control	Students	This study aimed to investigate the relationship between education in entrepreneurship and entrepreneurial behaviour. The study found that none of the dimensions were supportive. However, a strong relationship between the participation in entrepreneurial educational programmes and entrepreneurial intention were indicated.
Engle <i>et al.</i> (2008)	Attitude towards the behaviour Social norms Perceived self-efficacy	Students	The purpose of the study was to test the ability of the theory of planned behaviour to foresee entrepreneurial intention in 12 countries. The model components differ by country. Social norms were the only component to be significant.



**Table 3.2 Sample of entrepreneurial studies using the theory of planned behaviour (continued...)**

Author/s	Dimensions	Sample	Purpose/main findings
Van Gelderen <i>et al.</i> (2008)	Attitude (wealth, financial security, work load avoidance)  Subjective norm (perseverance, entrepreneurial alertness, self-efficacy, creativity)  Perceived behavioural control	Students	The focus of this study was to investigate entrepreneurial intention of business students. The findings prove that the two vital variables explaining entrepreneurial intention are entrepreneurial alertness and financial security.

Source: Own work

The theory of planned behaviour not only provides a good foundation upon which to conduct entrepreneurial behaviour research but it also allows for other independent variables to be added into the theoretical model, as shown in Table 3.2. When assessing the entrepreneurial intentions of students, a researcher should identify the factors that both drive and hinder those intentions (Zerhinun, 2014:14). The literature suggests that variables such as motivation (Fatoki & Patswawori, 2012:134; Tanveer *et al.* 2011:74), barriers (Tanveer *et al.* 2011:75; Benzing *et al.*, 2009:64) and attitudes (Tsordia & Papadimitriou, 2015:24; Ali, *et al.*, 2011:13) play a salient role in predicting entrepreneurial inclination.

The discussions on the various entrepreneurial intention models laid the foundation for the determinants that influence entrepreneurial intent. The following section explains the different variables thought to predict entrepreneurial inclination.

### **3.4 DETERMINANTS OF ENTREPRENEURIAL INCLINATION**

As highlighted in Chapter 2, female entrepreneurs are important for economic development of a country and entrepreneurial awareness should be fostered amongst females. Understanding the determinant factors of entrepreneurial inclination can assist educators and industry professionals in identifying possible strategies to market the concept of entrepreneurship to females. Different studies have proposed and tested different factors thought to influence entrepreneurial intentions, including motivation (Malebane, 2014; Sivarajah & Achchuthan, 2013; Solesvik 2013), barriers (Karhunen & Ledyeva, 2010; Benzing *et al.*, 2009; Hatlala 2008) and attitudes (Ali *et al.*, 2011; Roudaki 2009; Karhunen & Ledyeva, 2010). This section reviews the literature pertaining to these possible determinant factors of entrepreneurial inclination.

#### **3.4.1 Entrepreneurial motivation**

The word motivation means to move, and originates from the Latin word *movere* (Steers *et al.* 2004:379). In order for educators and industry professionals to influence entrepreneurial intention, it is important to understand what moves or motivates individuals (Kroth, 2007:7). Therefore, this section presents a background on entrepreneurial motivation, whereby motivation is defined, the entrepreneurial motivation process is presented and the important factors pertaining to entrepreneurial motivation, discussed.

##### **3.4.1.1 Defining entrepreneurial motivation**

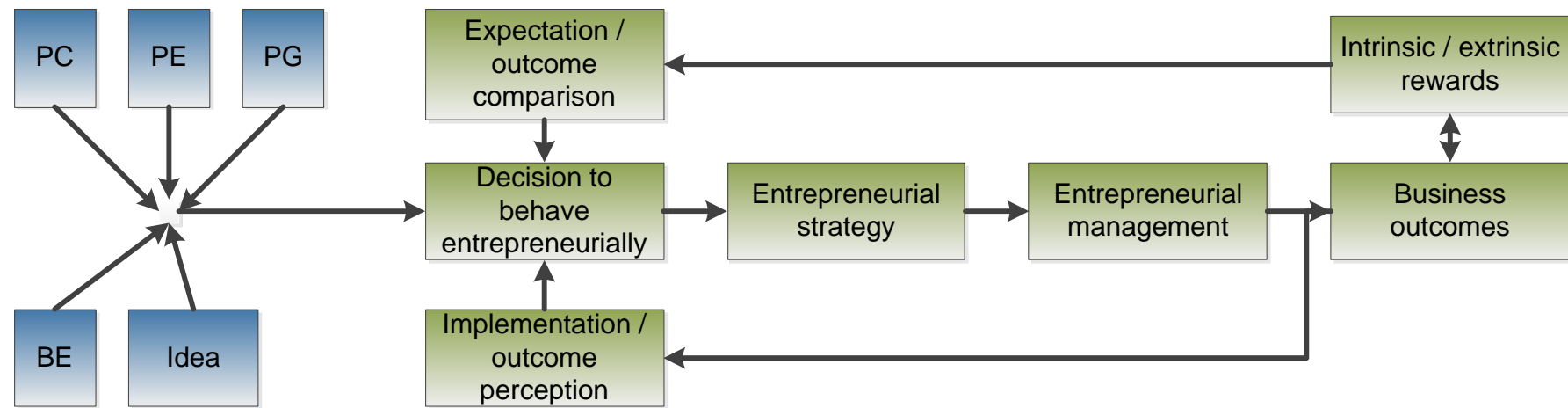
In order to understand entrepreneurial motivation, it is important to understand what motivation is (Sinha, 2015:1). For centuries, philosophers have been challenged in determining the reasons and motivations for people's actions. In the literature, different views about motivation have emerged over time. The Greek philosopher, Aristotle (384-322BC) stated that motivation is a movement that starts at envisioning the real or apparent good in humans; therefore, inspiring people to move towards the positive and avoid the negative (Botha *et al.*, 2013:35). Vijaya and Kamalanabhan (1998:186) define motivation as an individual's willingness to apply high levels of effort to achieve desired goals. Sharing the same view is Dyck and Neubert (2009:445), who reported that motivation, is an internal energy that converts into a drive to act in a certain way. Therefore, motivation is the innate drive that induces entrepreneurial behaviour and is of significant value to understanding entrepreneurial intention (Sanchez & Sahuquillo,

2012:132). Therefore, a discussion of the entrepreneurial motivation process model follows.

#### **3.4.1.2 Entrepreneurial motivation process**

According to Naffziger *et al.* (1994), the performance of an individual is influenced by an individuals' intrinsic nature, a replication of an individuals' needs, attitudes and values. Naffziger *et al.* (1994) further stated that an individuals' intrinsic nature is influenced by the world they live in, the individuals' abilities and their personality. Different factors such as education, the environment and family, therefore, influence the behaviour of an individual to become an entrepreneur (Sanchez & Sanuquillo, 2012:133).

The entrepreneurial motivation process describes the way in which entrepreneurs behave and relates to the factors causing the specific behaviour of entrepreneurs in starting and growing a business (Kuratko, 2013; Kuratko & Hodgetts, 2007, Chell, 2001). The entrepreneurial motivation process model portrays the steps entrepreneurs experience in becoming motivated to behave entrepreneurially (Naffziger *et al.*, 1994:35). Figure 3.3 illustrates the motivation process of an entrepreneur.



PC = Personal characteristics  
PE = Personal environment  
PG = Personal goals  
BE = Business environment

**Figure 3.3** The process of entrepreneurial motivation (Kuratko & Hodgetts, 2007:132)

As illustrated in Figure 3.3, the entrepreneurial motivation process starts with an internal or external influence, which forms the basis of the process. Internal influences include an individual's personal characteristics, personal environment and personal goals, whereas external influences refer to the business environment and having a business idea (Chell, 2001:143). Kuratko and Hodgetts (2007:132) explain that the process of entrepreneurial motivation pertains to an individual comparing his or her envisioned outcome with their perceived expectations; thereafter, the individual views the relationship between their planned entrepreneurial behaviour and the expected outcomes. In order to determine if the individuals' expectations are met, the envisioned outcomes need to be evaluated. Future entrepreneurial behaviour is based on the results of these comparisons. Therefore, if the envisioned outcomes meet their perceived expectations, the individual is motivated to continue to be entrepreneurial. However, if the envisioned outcomes do not meet their perceived expectations the individual is negative and may decide not act entrepreneurially (Kuratko, 2013:56; Kuratko & Hodgetts, 2007:132).

Various factors influence motivation, which play a critical role in entrepreneurial motivation and are important to understand, as entrepreneurial motivation is central to this study.

#### **3.4.1.3 Important factors in entrepreneurial motivation**

People differ in their motivation to pursue opportunities to be an entrepreneur (Shane & Venkataraman, 2000:217). Prior theoretical and empirical research has identified several factors that influence entrepreneurial motivation; however, independence, extrinsic rewards and intrinsic rewards have been considered strong determinants affecting entrepreneurial intentions. Several past studies utilised independence (Kirkwood 2009; Wagner & Ziltener, 2008; Venesaar, 2006), extrinsic rewards (Malebane, 2014; Sivarajah & Achchuthan, 2013; Fatoki, 2010) and intrinsic rewards (Jordaan, 2014; Malebane, 2014; Sivarajah and Achchuthan, 2013) in entrepreneurial intention models as core determinants of entrepreneurial intentions, and ultimately, entrepreneurial behaviour (Farouk *et al.*, 2014:53).

Independence pertains to the freedom afforded by being an entrepreneur and is one of the most cited motivations for starting a business (Kirkwood, 2009, 348; Wagner & Ziltener, 2008:12). Shapero and Sokol (1982:83) indicated that an individual's motivation for being entrepreneurial is derived from a need for independence and the desire to be self-employed. Several researchers (Nieman and Nieuwenhuizen, 2014:39; Segal *et al.*, 2005:50; Coulter, 2003:25) confirmed these findings of Shapero and Sokol (1982),

indicating that independence relates to an individuals' need for control and autonomy. Kalkan and Kaygusuz (2012:14) opine that independence is the individuals' freedom to make their own decisions but also take responsibility for their actions. Instead of following the presumption of others, entrepreneurship enables a person to work independently through applying their own knowledge and skills (Nguyen, 2013:25).

Motivations to perform activities for known external rewards associated with being an entrepreneur are referred to as extrinsic motives (Lai, 2011:9). Extrinsic motivation is defined as a behaviour that takes place when an individual is being influenced by external factors such as financial rewards, power and status (Casrud & Brannback, 2011:15; La Pira, 2010:1). According to Acar (2014:14), external encouragement or rewards are the main motivator for performing an activity rather than the enjoyment of an activity. However, Kirkwood (2009:348) found that while financial reward is not the primary motive to become an entrepreneur, it is perceived as a significant motive for prospective entrepreneurs to start a business. According to Lai (2011:9), individuals who are extrinsically motivated, are driven by external rewards such as financial gains, fame and recognition from others (Lai, 2011:9). Benzing, *et al.* (2009:61) state that extrinsic motives denote the financial reasons individuals become entrepreneurs.

Intrinsic motivation is the innate drive to achieve success for known personal fulfilment associated with being an entrepreneur (La Pira, 2010:1). An intrinsically motivated individual is driven by an interest or enjoyment in the task itself as opposed to the external drivers of extrinsic motivation, such as monetary rewards (Oudeyer & Kaplan, 2008:93). Benzing, *et al.* (2009:61) concur and state that intrinsic motives are related to self-fulfilment and personal growth. Intrinsic motivation starts when an individual feels self-determined and competent in their work (Quigley & Walter, 2006:527) and are personally interested in being entrepreneurial (Casrud & Brannback, 2011:15). Cardon *et al.* (2009:524) opine that entrepreneurs, who are intrinsically motivated, are likely to be more committed to achieving set goals, as opposed to entrepreneurs being extrinsically motivated.

This section defined motivation and illustrated the entrepreneurial motivation process, concerning the action taken by entrepreneurs in becoming motivated to behave entrepreneurially. Three important factors, influencing entrepreneurial motivation, were provided to conclude the section. For the purpose of this study, based on the literature, motivation is viewed as a determinant factor that may have an influence on an individuals' entrepreneurial inclination. Closely interlinked, motivations and barriers are determinants of intention, which, in turn, is a determinant of behaviour (Remeikiene *et*

*al.*, 2013:301). The next section presents a background on entrepreneurial barriers, thus providing insight into what barriers may determine entrepreneurial inclination.

### **3.4.2 Barriers towards entrepreneurship**

In order for educators and industry professionals to influence entrepreneurial intention, it is important to understand what hinders individuals in becoming entrepreneurs (Samuel *et al.*, 2013:48). Therefore, this section presents a background on barriers towards entrepreneurship, namely defining entrepreneurial barriers and the important factors pertaining to entrepreneurial barriers.

#### **3.4.2.1 Defining entrepreneurial barriers**

The Oxford English Dictionary defines the term barrier as an obstacle that prevents movement or access (Waite, 2013:66). Webster's Online Dictionary (2015) defines a barrier as a problem that makes something difficult or impossible. When an individual decides to be entrepreneurial, the individual should be aware of barriers in the entrepreneurial process (Baba, 2013:54). Prior to considering entrepreneurship, an individual should be comfortable with change and insecurity (Kanchana *et al.*, 2013:72; Coulter, 2003:2).

Prior theoretical and empirical research identified several barriers to entrepreneurial entry; however, personal barriers and business environment barriers have been considered strong determinants influencing entrepreneurial intentions. Several past studies utilised personal barriers (Stamboulis & Barlas, 2014; Sandhu *et al.*, 2011; Taormina & Lao, 2007) and business environment barriers (Kanchana *et al.*, 2013; Donatus, 2011; Rahimian, 2011) in entrepreneurial intention models as core determinants of entrepreneurial intentions, and ultimately, entrepreneurial behaviour (Iskandarini, 2014:173).

#### **3.4.2.2 Important factors in entrepreneurial barriers**

According to Kanchana, *et al.* (2013:72) and Sandhu *et al.* (2011), entrepreneurs' face numerous barriers on the road to success, which may have a significant influence on the entrepreneur's motivation to engage in entrepreneurship. These barriers are summarised into two categories (Singh & Gupta, 2015:247) namely, personal barriers (Stamboulis & Barlas, 2014) and business environment barriers (Gorji & Rahimian, 2011).

Psychological factors or personal characteristics of the entrepreneur are related to motivation, achievement and perseverance. Owing to the behaviour and skills of an entrepreneur having a significant impact on the entrepreneurs' achieving success, personal characteristics are essential (Stamboulis & Barlas, 2014:3). Therefore, entrepreneurs are confronted with different personal barriers when engaging in entrepreneurial activity (Taormina & Lao, 2007:201), which may influence their decision to start a business (Sandhu *et al.*, 2011:432). According to Sandhu *et al.* (2011:428), the personal barriers that influence individuals to engage in entrepreneurship include aversion to risk, fear of failure, aversion to stress and hard work. Uddin and Bose (2013:149) point out that, specifically during business start-up, entrepreneurs are confronted with overcoming personal barriers, such as lacking a viable business idea, a shortfall of professional skills and competencies and significant loss of free time (Uddin & Bose, 2013:149). Gorji *et al.* (2012:99) found education and training to be the most significant constraint on inspiring an individual to be an entrepreneur.

Business environmental barriers pertain to factors in the entrepreneurial environment that play a role in influencing an individual's willingness to undertake entrepreneurial activities (Stamboulis & Barlas, 2014:41; Donatus, 2011:27). According to Kanchana, *et al.* (2013:72), entrepreneurs face numerous business environmental barriers on the road to success, such as organisational barriers, economic and financial barriers, as well as entry barriers. Organisational barriers are associated with the obstacles entrepreneurs' face that impede on business operations and growth, such as registering the business, obtaining business licenses and approvals, copyright and patent regulations (Dzisi, 2014:9). Kakarika (2013:31) adds that hiring the right people is another barrier faced by entrepreneurs in business start-up.

Economic and financial barriers pertain to the processes and limitations within the business environment often associated with entrepreneurial start-up firms, such as sufficient funding to start the business and a shortage of production material and services (Gorji & Rahimian, 2011:32). Sandhu *et al.* (2011:433) found that raising capital for starting a business is a significant barrier faced by entrepreneurs. Gill and Biger (2012:657) explain that investors often prefer investing in well-established businesses as opposed to investing in small business start-ups, due to higher risks involved. Furthermore, owing to the strict credit scoring criteria, applying for funding from financial institutions is considered a significant barrier for individuals considering entrepreneurship (Uddin *et al.*, 2015:41).



Entry barriers are the challenges faced by entrepreneurs when entering a given market, such as finding the right business location (Mars library, 2013). According to Kanchana *et al.* (2013:78), entrepreneurs may face strong competition when entering a market and this may prevent potential entrepreneurs from starting a business. Klapper *et al.* (2006:622) found policies and procedures involved in business start-up to be significant contributing factors in an individual's decision to be entrepreneurial. However, Avmicelech *et al.* (2013:237) found this was not the case in emerging economies, where policies and procedures for starting a business were perceived as less strenuous compared to those in developed economies. Tambunan (2011:77) points out that individuals in emerging countries often lack the necessary skills and access to sufficient capital to start a business.

This section indicated the important factors that hinder an individual from becoming an entrepreneur. The following section discusses the vital role that an individuals' attitude plays in being entrepreneurial.

### **3.4.3 Attitude towards entrepreneurship behaviour**

Attitude towards entrepreneurship has a significant influence on an individual's intention to become an entrepreneur (Tshikovhi & Shambare, 2015:152). Therefore, this section describes the concept of entrepreneurial attitude and different possible attitudes towards entrepreneurship.

#### **3.4.3.1 Defining entrepreneurial attitude**

Various researchers attempted to understand the influence of an individual's attitude on behaviour (Schwarz & Bohner 2001; Culbertson 1968; Alport, 1935). Attitude is defined as a learned predisposition of an individual to react to a situation, object or person (Tamizharasi & Panchanatham, 2010:354; Alport, 1935:810). Pickens (2005:44) and Culbertson (1968:79) simplified Alport's (1935) definition and state that attitude is a mind-set or a propensity to act in a particular way due to both an individual's experience and personal nature. According to Jowell (2005:1), attitudes are a psychological tendency to act in a certain way towards an object, which can either be in a positive or negative manner. Modest research confirms this statement as these researchers view attitude as the intention to have a positive or negative evaluation and these factors affect an individuals' intention to perform certain behaviours (Xie, 2014:28; Koe *et al.*, 2012:200).

Attitudes play a vital role in the life of a successful entrepreneur (Segumpan & Zahari, 2012:62). Lashley, (2010:60) emphasises that an individuals' attitude towards entrepreneurship is the core determinant towards their intention to be entrepreneurial. Entrepreneurial attitudes indicate attitudes towards entrepreneurial activity (Kgagara, 2011:38). The Global Entrepreneurship Monitor (GEM) report, 2013 states that entrepreneurial attitude is the degree to which an individual thinks there are sound opportunities for starting a business. Therefore, entrepreneurial attitudes influence an individual's decision to become an entrepreneur and hence play a crucial role in shaping innovativeness and entrepreneurial behaviour (Kgagara, 2011:39).

#### **3.4.3.2 Different attitudes towards entrepreneurship**

A positive attitude is defined as a favourable evaluation of behaviour in question. In the context of entrepreneurship, it is viewed as the degree to which an individual holds a positive evaluation towards entrepreneurial activity (Tshikovhi & Shambare, 2015:153). Kritikos (2014:1) identified different positive evaluations of entrepreneurs, these evaluations include that entrepreneurs are important for economic growth and in creating employment opportunities. Moreover, if the attitude of individuals in a population is positive towards entrepreneurship it will generate cultural support, help providing financial resources and networking benefits to individuals who are already entrepreneurs or individuals who want to start a business (Kgagara, 2011:39). Several researchers (Iakovleva *et al.*, 2013:318; Tang, 2008:128) opine that the government has a significant role to play in supporting entrepreneurs, as it will contribute to positive attitudes towards entrepreneurial activity.

A negative attitude is defined as an unfavourable behaviour or belief towards an activity (Tshikovhi & Shambare, 2015:153). Khuong and An (2015:107) opine that individuals may have a negative attitude towards entrepreneurship because they associate starting a business with various impediments, such as a loss of free time and financial constraints. Vadavadagi and Joshi (2013:87) found that negative attitudes towards entrepreneurship may be derived from an individual perceiving entrepreneurs as being dishonest, only wanting to get rich on other individuals work and mainly interested in pursuing self-interest.

As seen from the literature motivation, barriers and attitude play an important role in an individual's entrepreneurial interest. The next section will illustrate the proposed model for this study.

The literature reviewed in Chapter 2 and Chapter 3 provided a useful basis for examining determinants of entrepreneurial inclination for female undergraduate students. The purpose of this section is to propose a model of determinants influencing entrepreneurial inclination. Based on the preceding literature review, this proposed model indicates the factors that influence entrepreneurial inclination. In addition, the preceding literature review describes existing theories, models and empirical studies that may aid in supporting the hypothesised model. The proposed model for this study is demonstrated in Figure 3.4 and hypothesises the various factors that serve as background for entrepreneurial inclination.

Within the entrepreneurial context, different factors act as determinants to entrepreneurial inclination and are indicated in the model below. As such, the proposed model seeks to measure if motivations, barriers and attitude are significant predictors of entrepreneurial inclination. The model used in this study was adapted from the theory of planned behaviour and the Shapero-Krueger entrepreneurial intentions model. These theories have been used extensively to predict the behavioural patterns of various facets of studies.



**Figure 3.4 Proposed model of entrepreneurial intention**

The proposed model illustrated in Figure 3.4 depicts the antecedents that influence undergraduate Generation Y female students' inclination, as per the literature. In order to determine the relevance of these factors in determining entrepreneurial inclination of female students, the hypothesised relationships insinuated by the research model in Figure 3.4 will be tested empirically, as reported on in Chapter 5.

This section identified the determinants of entrepreneurial intention. The following section will conclude the chapter.

### **3.6 CONCLUSION**

This chapter reviewed the literature on the possible determinant factors that may influence an individual's intention towards entrepreneurship. A discussion of entrepreneurial intention has been provided, where it is evident that an entrepreneurial process starts with the formation of entrepreneurial intentions. Included in the literature

review are the seven intention models used by researchers to investigate the entrepreneurship phenomenon. The two predominant models in intention literature are highlighted, namely the model for entrepreneurial event (Figure 3.1) and theory of planned behaviour (Figure 3.2). Entrepreneurs would not be entrepreneurs without motivational factors that motivate them to be entrepreneurs. A model of the entrepreneurial motivation process (Figure 3.3) is discussed. Further in this chapter, it was stated that an entrepreneur faces substantial risks to entrepreneurship and different barriers affect individuals to act entrepreneurially. Barriers are not the same to all individuals and females experience specific barriers that need to be overcome in order to give them the same opportunities as men. Young entrepreneurs also face specific barriers, due to their youth. Researchers defined attitude as a psychological tendency to perform certain behaviours towards an object that is either positive or negative. An individual attitude influences him or her to get involved in entrepreneurship.

Chapter 5 reports on the empirical testing of the proposed model using logistic regression analysis. The following chapter, Chapter 4, discusses the research methodology followed to test the factors, motivation, personal barriers, environment barriers and attitude that have an influence on student inclination towards entrepreneurship. Chapter 4 includes a description of the sampling procedure, the research instrument and the statistical analysis techniques utilised in this study.

## **CHAPTER 4**

### **RESEARCH DESIGN AND METHODOLOGY**

---

#### **4.1 INTRODUCTION**

Marketing research is the systematic and objective identification, collection, statistical analysis, diffusion and use of data, with the objective of improving decision-making pertaining to identifying and defining of marketing opportunities and threats in the market (Malhotra, 2010:39; Hair *et al.*, 2008:4). McDaniel and Gates (2013:4) emphasise that marketing research is the function linking the consumer, customer and public to the marketer through market information in order to identify opportunities and threats. Iacobucci and Churchill (2010:3) denote that marketing researchers transform raw data into useful information and quality input so that decision-makers can make more effective and informed decisions.

The purpose of this study was to investigate and compare undergraduate female Generation Y students' inclination towards entrepreneurship within two South African and two Netherland HEIs in order to facilitate the creation of a strong entrepreneurial climate amongst South African female Generation Y students. In agreement with the primary objective, in Chapter 2 and Chapter 3 a focused literature review was done, which included studies of a similar nature to this study. Chapter 2 specifically highlighted the literature on entrepreneurship, which laid the foundation for the development of the research instrument utilised in this study. In addition, Chapter 2 focused on defining the meaning of entrepreneurship, an entrepreneur and female entrepreneurship, including entrepreneurial education and types of entrepreneurs. The focus of Chapter 3 was on the literature of entrepreneurial inclination and the determinant factors that may influence that inclination. To this end, the chapter included a discussion of several different entrepreneurial intention models. Chapter 3 concluded with a proposed model of the determinants of female entrepreneurial intention, which is grounded in the literature reviewed in Chapters 2 and 3. The empirical testing of this model is described in Chapter 5.

The purpose of this chapter, Chapter 4, is to describe the research methodology followed in analysing the gathered data and empirically testing of the proposed model. The chapter describes the research design process and the research approach followed in this study, including the sampling strategy, questionnaire design and the data collection process. In this chapter, the statistical procedures used to analyse the collected data are

reviewed and include exploratory factor analysis, reliability and validity analysis, descriptive statistics, correlation analysis, logistic regression analysis and two independent-samples t-test.

The following section describes the design of the research, which was used to ensure that the study made use of reliable procedures and methods of enquiry.

## **4.2 RESEARCH DESIGN**

According to Iacobucci and Churchill (2010:59), a research design is the framework or plan to guide the execution of the marketing research project. Burns and Bush (2014:98) concur and explain that the research design stipulates the methods and procedures for collecting and analysing the required information. Malhotra (2010:102) states that the marketing research design process may be categorised into one of three classifications, namely exploratory (qualitative data), causal research and descriptive (quantitative data).

An exploratory research design is used in unstructured informal research, given that first, there are no formal set of objectives, sample plan or questionnaire employed and secondly, small non-representative samples are used (Burns & Bush, 2014:101). Exploratory research is undertaken to gain preliminary information and a better understanding of the nature of the research problem. This may include defining the research problem, establishing priorities for further research, collecting information about real-world problems, increasing understanding of the problem, as well as explaining key concepts relating to the research problem (Berndt & Petzer, 2011:32; Cant *et al.*, 2008:30).

Causal research is a research design that examines if one variable causes or determines the value of another variable (Hair *et al.*, 2008:33). McDaniel and Gates (2013:67) indicate that causal research attempts to establish linkages between variables. Wiid and Diggines, (2013:57) concur, stating that causal research reveals the cause and effect between the dependent and independent variables and may be conducted using different methods, such as laboratory or field experiments.

A descriptive research design is planned, structured and suitable to project research findings to a larger population (Burn & Bush, 2014:103). Descriptive research determines the frequency with which something occurs, or the relationship between two variables (Iacobucci & Churchill, 2010:58; Malhotra, 2010:102), such as describing population characteristics (Burn & Bush, 2013:103). Zikmund and Babin (2013:49) accentuate that a descriptive research design should be considered when the objective is to describe the

characteristics of objects, people, groups, organisations or environments. Likewise, Hair *et al.* (2008:104) suggest employing a descriptive research design to identify relationships between variables or explore differences between groups. This research design can be divided into two categories, namely a single cross-sectional design or a longitudinal design. In a single cross-sectional design, units from a single sample of the population are measured only once, while in a multiple cross-sectional design, units from two or more samples of the population are measured only once. In a longitudinal design, repeatedly measures are taken of the same sample units of a population over a period of time (Burns & Bush, 2014:105).

For the purpose of this study, a descriptive research design with a multiple cross-sectional approach was chosen, as this study sought to describe the characteristics of the participants through collecting data from two sample units of the population only once (Hair *et al.*, 2008:32). The study sought to determine the predictors of female entrepreneurial inclination across two countries and then to compare Dutch female entrepreneurial inclination with South African female entrepreneurial inclination. The first sample was taken from two universities in South Africa (Sample SA) and the second sample was taken from two universities in the Netherlands (Sample NL).

This section provided insights into the research design followed in this study. The subsequent section describes the research approach carried out in this study.

### **4.3 RESEARCH APPROACH**

Primary data typically is collected using a set of formal procedures, in which researchers question or observe individuals and record their findings. The research approach followed in collecting the data may involve qualitative and/or quantitative research (Hair *et al.*, 2008:80).

Quantitative and qualitative researches are the two basic research approaches that may be used in any research study. The findings emanating from qualitative research are not subject to quantification or quantitative analysis, whereas quantitative research analysis uses mathematical analysis (McDaniel & Gates, 2002:122). Berndt and Petzer (2011:45) state that quantitative research focuses on quantifying the research problem, whereas qualitative research attempts to uncover the underlying motivations and ideas of the participants. According to Zikmund and Babin (2013:81), quantitative research problems are specific, defined in detail and are most often used with descriptive and causal



research designs. Various quantitative research data gathering methods are available, including surveys, observations and experiments (Wiid & Diggines, 2013:111).

For the purpose of this study, a quantitative research approach was chosen, because this research lends itself to statistical analysis of large number of representative cases. The following section describes the sampling strategy used in this study.

#### **4.4 SAMPLING STRATEGY**

The sampling strategy refers to the plan followed to ensure that the sample used in the study represents the population from which the sample is drawn (Landreneau, 2004:1). Hair *et al.* (2008:128) posit that a sample is a selection of a set of elements or objects from a larger defined target group of elements or objects. Based on the information gathered from the sample, statistical inference regarding the target populations can be made. Cant *et al.* (2008:51) differentiate between a population, census and sample, indicating that a population includes the entire set of elements that constitute the target population. In the case of a census, all the elements within the population are sampled. The problem with collecting data from a census is that it is often not feasible (Burns & Bush, 2014:239) because it is often vastly expensive and time consuming (Iacobucci & Churchill, 2010:282). In contrast, a sample includes only a specific subgroup of the elements within the specified population that represent that entire population of participation in the research study (Burns & Bush, 2014:239). Therefore, a sampling plan is developed to ensure that the data collected are representative of the population (Hair *et al.*, 2008:139). The process of developing a sampling plan consists of defining the target population, identifying a sampling frame, selecting a sampling technique, determining the sample size and executing the sampling process (Cant *et al.*, 2008:163). This section outlines the sampling strategy utilised to select the two samples for the study, namely Sample SA and Sample NL.

##### **4.4.1 Target population**

A target population is a clearly identifiable group of elements or objects, such as individuals, households, organisations or any other units that share similar characteristics (Malhotra, 2010:372; Hair *et al.*, 2008:129). These elements or objects have the necessary information about which inferences are to be made to solve the research problem (Malhotra, 2010:372). As such, an understanding of the target population is essential for providing usable information, as an inaccurate definition can have a negative effect on solving the research problem (Zikmund & Babin, 2013:315).

The target population for this study consisted of female undergraduate students aged between 18 and 24 years who were enrolled full-time at South African HEIs (Sample SA) and Netherlands HEIs (Sample NL) in 2013.

#### **4.4.2 Sampling frame**

The sampling frame comprises a listing of all the suitable population units from which a sample is chosen (Berndt & Petzer, 2011:165). An example of such a listing is a list of certified public accountants, a list of automobile dealers, a telephone directory or even a list of shoppers who purchased at a specified store at a specific time (Burns & Bush, 2014:240). Zikmund and Babin (2013:317) as well as Burns and Bush (2014:240) warn that a sample frame error may occur resulting in certain sample elements not listed and, as such, the sample frame fails to represent the total population. Hair *et al.* (2008:129) opine that it is challenging and expensive to obtain accurate, representative and current sampling frames.

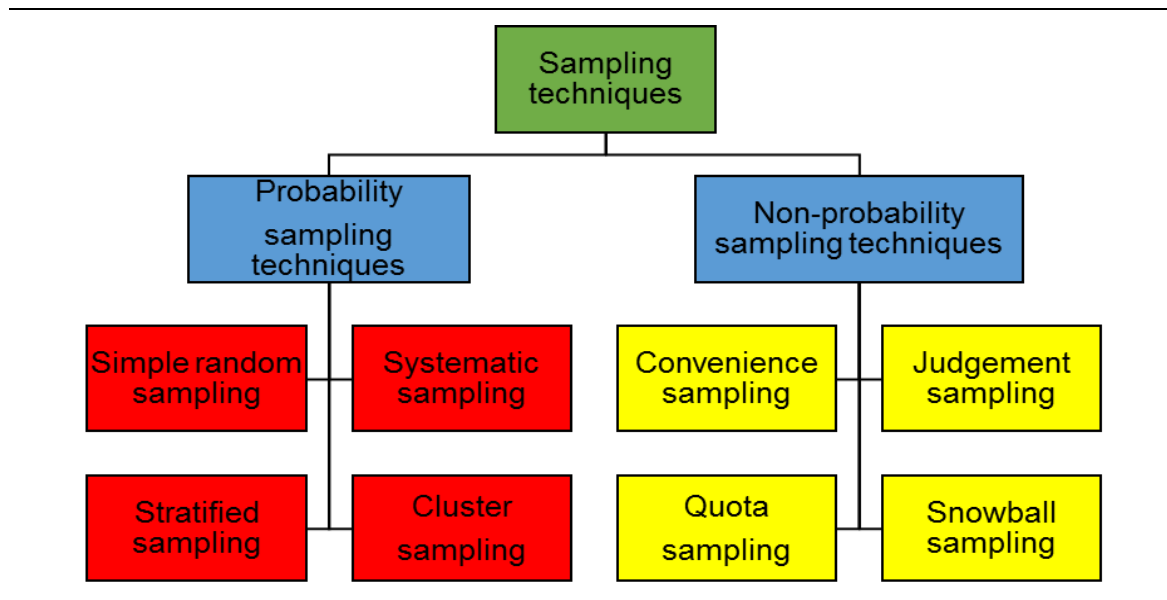
In this study, there were two samples, namely Sample South Africa (SA) and Sample Netherlands (NL). The sampling frame for sample SA comprised 25 registered South African public HEIs. Of the 25 registered HEIs, there are 13 universities, 6 comprehensive universities and 6 universities of technology (Higher Education in South Africa, 2015). The sampling frame for Sample SA was narrowed down using judgement sampling to include two HEIs in South Africa, of which one of the HEIs is a traditional university and the other HEI is a university of technology.

For sample NL, the sample frame consisted of the 56 registered public HEIs situated in the Netherlands, as indicated by Central Registration of Higher Education Programmes (2015). Of the registered HEIs, there are 13 research universities and 43 universities of applied sciences (Central Registration of Higher Education Programmes, 2015). The sampling frame for Sample NL was narrowed down using judgement sampling to include two HEIs in the Netherlands, of which one of the HEIs is a research university and the other HEI is a university of applied science.

#### **4.4.3 Sample method**

Sample methods can be classified into two categories, namely probability and non-probability sampling (Burns & Bush, 2014:242). In probability sampling, each population element has a known, nonzero chance (probability) of being selected as part of the sample (Iacobucci & Churchill, 2010:285). Conversely, in non-probability sampling every population element of the population has a recognised and equivalent chance

(probability) of being selected as part of the sample (Burns & Bush, 2014:242). Furthermore, in non-probability sampling the population elements are selected based on convenience (McDaniel & Gates, 2013:396) and there is no way of determining the probability of the population element being included or excluded in the sample (Burns & Bush, 2014:242). Probability and non-probability sampling comprise different techniques, as depicted in Figure 4.1.



**Figure 4.1 Sampling techniques (Berndt & Petzer, 2011:174)**

There are four different types of probability sampling techniques, namely simple random sampling, systematic sampling, stratified sampling and cluster sampling (Burns & Bush, 2014:243). Berndt and Petzer (2011:175) state that with simple random sampling, the population elements are selected independently and directly by means of a random process in order to ensure that each element of the population in the sample frame has the same chance of being selected into the sample. Systematic sampling ensures that each element in the population has an equal chance of being included in the sample (Zikmund & Babin, 2013:325), where a starting point is selected randomly for the first sample participant after which the sample elements are selected at predetermined intervals (Burns & Bush, 2014:243). According to Cant *et al.* (2008:172), stratified sampling involves two steps. First, the population is divided into subgroups and secondly the subsamples are then randomly selected from each subgroup. In comparison, rather than selecting sampling units individually, a cluster sample is drawn by first dividing the population into mutually exclusive and exhaustive subgroups, followed by selecting clusters based on a probability sampling technique, such as simple random sampling or systematic sampling (Hair *et al.*, 2008:135).

There are four different non-probability sampling techniques, which include convenience sampling, judgement sampling, quota sampling and snowball sampling (Cant *et al.*, 2008:165). Convenience sampling refers to a technique where the sample elements are conveniently available (Zikmund & Babin, 2013:323) in that they can be intercepted at a high-traffic location (Burns & Bush, 2014:255), such as mall intercepts (Malhotra, 2010:377). Similar to this technique, judgement sampling entails the deliberate and subjective selection of sample elements considered the most appropriate required for the sample (Berndt & Petzer, 2011:174). Hair *et al.* (2008:136) describe quota sampling as the selection of prospective participants according to a set of predetermined criteria, which may involve demographic characteristics, specific attitudes and/or behaviours. Cant *et al.* (2008:168) posit that with the snowball sampling technique, a group of sampling elements that match the predetermined criteria are selected and thereafter, those sampling elements are requested to identify additional participants, matching the specific characteristics, for possible participation in the research.

This study made use of two samples that were selected conveniently from sampling frames. In order to conduct this study, a non-probability convenience sample of 400 South African Generation Y female students (Sample SA) and 400 Generation Y female students from the Netherlands (Sample NL) were drawn from the sampling frame. In both the South African and Netherlands samples, the questionnaires were divided equally between the two HEIs sampled per country.

#### **4.4.4 Sample size**

A sample size is defined as the number of sample elements to be included in the research study (Malhotra, 2010:374). Various authors (Burns & Bush, 2014:267; Brace, *et al.*, 2012:6; Iacobucci & Churchill, 2010:212) agree that the determination of a sample size is complex. Therefore, when determining the sample size, important decisions, including the type of sample, consistency of the target population, the available resources such as time and research costs, should be considered carefully (Kolb, 2008:187). Struwig and Stead (2010:120) add that when employing a sample size comparable to similar studies, a comparison with other researchers' findings can be drawn.

The sample size selected for this study was 400 full-time undergraduate female South African students for Sample SA and 400 full-time undergraduate students for Sample NL. The sample size of these two samples is in line with previous studies done of a similar nature such as Karhunen and Ledyeva (2010) (sample size of 600), Venesaar *et al.*

(2006) (sample size of 443) and Carayannis *et al.* (2003) (sample size of 500) and, therefore, was deemed sufficiently large.

This section has given insights into the sampling procedure utilised within this study. The following section discusses the method utilised to collect the required data.

#### **4.5 DATA COLLECTION METHOD**

The data collection method refers to the method used to collect the required research data (Struwig & Stead, 2001:80). According to Hair *et al.* (2008:140), the choice of research method arises from the development of the problem statement, the research objectives and the data requirements. The survey method entails the gathering of information from a large number of participants by means of a structured questionnaire (Burns & Bush, 2014:172). According to Cant *et al.* (2008:89), the survey method is the ideal option when a researcher wants to identify the characteristics of a target market, study consumer attitudes or measure consumers' purchasing patterns. Furthermore, surveys offer fast, efficient and precise means for collecting the required information from a particular target population.

A questionnaire can be either self-administered or administered by an interviewer. With self-administered questionnaires, the participants complete the questionnaire on their own without the assistance of an interviewer (Cant *et al.*, 2008:100). Zikmund and Babin (2013:170) state that self-administered questionnaires necessitate the participant taking the responsibility for reading and answering the questions. Hair *et al.* (2008:110) point out several advantages for employing a self-administered questionnaire survey, such as cost effectiveness, participant control, no interviewer-participant bias and the fact that participants are more comfortable in providing honest responses because their identity is not revealed. However, the various disadvantages for using a self-administered questionnaire must be noted and include the type of data collected is limited to specific types of questions, the participant may not fully understand a question, low participation rate and on-time returning of the completed questionnaire, slow data acquisition and misunderstandings due to the absence of an interviewer.

The survey method can be administered through various methods, such as personal interviews, online interviews, telephone surveys as well as drop-off surveys (Kolb, 2008:29). In particular, the drop-off survey method constitutes dropping off the questionnaire at the participant's location after the participant has been contacted and the purpose of the study explained. The completed questionnaire is then collected at the

time agreed upon (Burns & Bush, 2014:193). Zikmund and Babin (2013:171) opine that compared to interviews where the interviewer takes responsibility for reading and capturing the answers, self-administered questionnaires involve the participants being in control of completing the questionnaire themselves. The group self-administered survey method entails administering a questionnaire to participants in groups, rather than individually. This method offers benefits such as being convenient and for gaining economics of scale (Burns & Bush, 2014:193).

The chosen data collection method for this study was the survey method. The needed data were obtained through a self-administered questionnaire using the drop-off survey method for the South African sample (Sample SA) and the group self-administered survey method for the Dutch sample (Sample NL). The reason for selecting the survey method was due to the advantages this method offers in screening potential participants (Hair *et al.*, 2003:266). In order to gather the required data, permission from the two South African HEIs campuses was obtained by means of an informal memorandum of understanding and from the two HEI campuses in the Netherlands had been obtained in writing. Thereafter, lecturers at each of the four HEI campuses were contacted and asked if they would allow the questionnaire to be distributed to their students during class time.

For Sample SA, after permission was granted telephonically as well as by email, the questionnaires used in this study were hand-delivered to the participating academic staff members. The participating lecturers then distributed the questionnaires to their students for completion during class. The structured questionnaire made it less complicated for the academic staff members to administer the distribution of the questionnaire. The students were informed that participation was strictly on a voluntary basis. After a two-week period, the relevant academic staff members were contacted telephonically, whereby arrangements were made for collecting the questionnaires.

With regard to Sample NL, permission from lecturers at each of the two Dutch HEIs to administer the questionnaires to their students during class time was solicited in writing. After permission was granted, the questionnaire was personally distributed to the participating students during one class period that was convenient for the participating lecturers of the two selected HEI campuses. As advised by Phellas *et al.* (2011:191), the possible language barrier were taken into account and as such in order to improve the quality of the data, the researcher was available to assist during the administration of the questionnaire. The research instrument used in this study, namely the questionnaire, is discussed in the next section.

#### **4.5.1 Questionnaire design**

A questionnaire is a structured data collection tool that consists of specific questions used to gather the necessary information from the participants in order to meet the objectives of the study (Zikmund & Babin, 2013:280; Cant, 2010:72; Malhotra, 2010:335). According to Hair *et al.* (2003:170), a questionnaire is a formal document comprising questions and scales to collect primary data.

Struwig and Stead, (2001:89) theorise that a good quality questionnaire should, provide clear instructions on how to answer the questions, are divided into logical sections, comprise easy questions placed in the beginning of the questionnaire and sensitive questions at the end, be clear of ambiguous terminology and not be excessively long in order to avoid participant' fatigue. Hair *et al.* (2008:174) state that a poor questionnaire design will result in either the collection of inadequate data or a failure to achieve the research objectives of the study. Furthermore, a self-administered questionnaire should include a cover letter stipulating the purpose of the study and providing instructions given that the researcher is absent during the data collection process (Berndt & Petzer, 2011:197). Malhotra (2010:353) adds that the length of the questionnaire, described as the average time required for a participant to complete the questionnaire, should be taken into consideration. The author adds that the participants may view a lengthy questionnaire as unappealing, which can negatively affect the response quality. McDaniel and Gates (2013:359) propose that the administering of questionnaires should not exceed 20 minutes, depending on the data collection method selected.

The questionnaire used for this study portrayed simple and brief objectives, as guided by the aforementioned recommendations. In order to help participants interpret the questions correctly, questions were phrased in a clear manner, using unambiguous and simple words. The questionnaire was accompanied by a cover letter explaining the aim of the research, as well as relevant contact details. The questionnaire used in this study could be completed within 15 minutes, which makes the length of the questionnaire acceptable. The questionnaire is presented in Annexure A.

#### **4.5.2 Questioning format**

The questionnaire was designed in accordance with achieving the empirical objectives of the research study. The questionnaire included items from the entrepreneurial interest scale. Karhunen and Ledyeva's (2010) entrepreneurial interest scale, comprising four determinant factors, namely entrepreneurship motivation (13 items), personal barriers to

entrepreneurship (17 items), business environment barriers to entrepreneurship (12 items) and attitude towards entrepreneurship (18 items), was used to determine and compare South African and Dutch Generation Y female students' inclination towards entrepreneurship. Karhunen and Ledyeva (2010) employed the entrepreneurial interest scale to conduct research on Russian university students' entrepreneurial interest. Owing to their scale corresponding with objectives two, three, four and five of this study, as formulated in Chapter 1 (Section 1.3.3), the scale was modified and employed in this study. The research instrument was modified, based on previous literature that relates to the various aspects of inclination towards entrepreneurship, as reviewed in Chapters 2 and 3. This is consistent with the primary objective of the study as formulated in Chapter 1.

There are two main types of question formats, namely structured or unstructured (Hair *et al.*, 2008:172). Questions that make up a structured questionnaire are pre-determined questions that require the participants to choose from a predetermined set of responses. In contrast, an unstructured questionnaire comprises open-ended questions that allow the participants to reply using their own words. Malhotra (2010:344) states that a structured questionnaire comprises multiple-choice questions, dichotomous questions or scaled questions. Multiple-choice questions consist of providing participants with a choice of answers, of which the participant is requested to select one or more options (Cant *et al.*, 2008:152). In contrast, dichotomous questions provide the participant with only two response alternatives to choose from, such as 'yes' or 'no' (Zikmund & Babin, 2013:285), whereas scaled questions are formulated to capture the participants' attitudes and perceptions (Kolb, 2008:202). In addition to the questionnaire format, questionnaires can be classified into two types, namely disguised or undisguised questions. A disguised questionnaire aims to hide the purpose of the study, whereas an undisguised questionnaire makes the purpose of the study evident in the questions asked (Iacobucci & Churchill, 2010:188).

Measurement refers to the procedure of collecting numerical values to characteristics of the object being measured (Burns & Bush, 2014:204). Iacobucci and Churchill (2010:234) explain that measurement entails measuring the characteristics of the object rather than the object itself, such as income, attitude, perceptions or preferences. In order to measure these characteristics a scale is employed in the measuring instrument (McDaniel & Gates, 2001:263). Proctor (2000:136) indicates that owing to the various measurements influencing the interpretation and analysis of the data produced it is



essential for the researcher to understand and apply the correct scaling technique in any research study.

According to Malhotra (2010:308), an itemised rating scale consists of brief descriptions of numerical values connected to each scale category and is typically employed to measure a person's attitude. The participants rate the object according to the perceived attitude or opinion by choosing the most appropriate category. The semantic differential scale, the Stapel scale and the Likert scale are the three most frequently applied itemised rating scales (Iacobucci & Churchill, 2010:239; Malhotra, 2010:308). The semantic differential scale contains a number of bipolar adjectival phrases or statements that are related to the object being measured and are placed at opposite ends of the scale (Proctor, 2000:143). The Stapel scale is a similar, yet modified version of the semantic differential scale, given that the descriptive phrases are measured separately. Participants are requested to identify how well a specific phrase, comprising one term, describes the subject at hand (Iacobucci & Churchill, 2010:242). This scale aims at measuring both the direction and intensity of the participants' attitudes towards the objects at the same time (McDaniel & Gates, 2001:272). However, the Stapel scale has been criticised for being confusing and difficult to apply and, therefore, it is not a commonly applied technique in the measurement of attitudes (Malhotra, 2010:311).

In contrast to the above-mentioned itemised rating scales, the Likert scale does not involve the development of opposing pairs of words or dichotomous adjectives, rather the scale contains a set of statements that expresses a favourable or unfavourable attitude towards the object being measured (McDaniel & Gates, 2013:315). Numerical numbers, ranging from agree to disagree, are attached to each statement, whereby participants are asked to rate their relative agreement or disagreement with the statements (Churchill, 1996:424). McDaniel and Gates, (2013:316) highlight that the Likert scale is widely used because it is easy to develop. Hair *et al.*, (2008:155) state that Likert scales are best applied in a self-administered survey.

The abovementioned techniques and effects were taken into consideration during question formulation for the measuring instrument used in this study. For the purpose of this study, an undisguised, structured, self-administered questionnaire was used. The questions that were used in obtaining the participants' demographic information consist of three dichotomous questions, where the participants had to indicate their gender, residing country and whether the idea of entrepreneurship is attractive to them. In addition, there were three multiple-choice questions where the participants had to indicate their year of birth, university and year of study, as well as two open-ended

questions, pertaining to the participants' major subjects and mother tongue language. The questions that relate directly to the topic of the study were configured in the form of multiple-item scale in Section B of the questionnaire of this study. A five-point Likert scale, ranging from disagree (1) to agree (5) was used to measure the participants' rate of agreement or disagreement with each specific item, which is consistent with other similar studies measuring the determinants of inclination towards entrepreneurship (Karhunen & Ledyeva, 2010; Roudaki, 2009; Venesaar, *et al.*, 2006).

#### **4.5.3 Questionnaire layout**

The layout of a questionnaire refers to the logic positioning of each section of the questionnaire (McDaniel & Gates, 2013:355). Questionnaire layout should make it easy for the participants to read and understand both the instructions and statements or questions of the questionnaire. Should the researcher fails to execute the layout of the questionnaire in a logical, interesting manner, such as placing easy questions first, it may impact the participants' willingness to complete the questionnaire negatively (Hair *et al.*, 2008:174). Iacobucci and Churchill, (2010:220) concur stating that the questionnaire should begin with questions that are easy for the participants to answer, and should be interesting to complete.

Various authors (Berndt & Petzer, 2011:197; Hair *et al.*, 2008:174) suggest that a questionnaire should start with an introduction, informing the participants about the research objectives and the reasons why they are requested to participate in the study. Following the introduction is the demographical questions and then the body, which are the questions directly relating to the research objectives of the study. Demographical questions relate to classification information, such as age, gender and the marital status of the participant and cannot change by any marketing efforts (Malhotra, 2010:350). However, there is confusion about whether demographical questions should be placed after the introduction of the questionnaire or after the body of the questionnaire. Kolb (2008:206) suggests that demographical questions generally are placed at the beginning of the questionnaire, as they are non-threatening and easy to answer.

The questionnaire used in this study (refer to Annexure A) included a cover letter explaining the aim of the research study. In addition, every participant was assured of confidentiality, and that the results would only be utilised for research purposes. The questionnaire used in this study comprised two sections. Section A (A1-A8) gathered the demographic data of the participants, including a question determining whether the participant considers the idea of entrepreneurship attractive, in order to determine their

inclination towards entrepreneurship. In order to ascertain that the participants meet the necessary gender and age requirement of the sample, two filter questions relating to demographic information was included in Section A. This requirement included the participants' gender and age to ensure that the participants are part of the defined target population of females, 18 to 24 years of age. The second part of the questionnaire was designed to gather information that relates to the topic and objectives of the research. Therefore, Section B (B1-B41) of the measuring instrument was employed to measure the determinant factors contributing to the participants' possible entrepreneurial inclination and comprised four determinant factors measuring the participants' motivations, personal barriers, barriers from the environment and their attitudes towards entrepreneurship, respectively. The entrepreneurial intention scale employed in this study was adapted from the measuring instrument of Karhunen and Ledyeva (2010).

The different items in the four determinants of entrepreneurial inclination address the different research objectives, as set out in the beginning of the study and presented in Section 1.3.3. Although these possible determinants of entrepreneurship inclination, as discussed in Chapter 3, were specifically adapted from Karhunen and Ledyeva (2010), numerous other authors have also researched these determinants. Table 4.1 presents the four possible determining factors in the measurement of inclination towards entrepreneurship.

**Table 4.1      Determinants of an individuals' inclination towards entrepreneurship**

Determinants	Authors
Motivations	Zerihun (2014), Fatoki & Patswawori (2012), Fatoki (2010), Karhunen & Ledyeva (2010), Benzing Chu & Kara (2009), Venesaar <i>et al.</i> (2006), Mitchell (2005), Watson & Wilson (1998)
Personal barriers	Zerihun (2014), Fatoki (2010), Karhunen & Ledyeva (2010), Sandhu <i>et al.</i> (2010), Benzing Chu & Kara (2009), Fini <i>et al.</i> (2009), Hatlala (2008)
Business environment barriers	Karhunen & Ledyeva (2010), Sandhu <i>et al.</i> (2010), Benzing Chu & Kara (2009), Fini <i>et al.</i> (2009), Hatlala (2008), Bird (1988)

**Table 4.1      Determinants of an individuals' inclination towards entrepreneurship  
(continued ...)**

Determinants	Authors
Attitudes	Dutse <i>et al.</i> (2013), Johansen <i>et al.</i> (2012), Ali, <i>et al.</i> (2011), Davey <i>et al.</i> (2011), Kgagara (2011), Karhunen & Ledyaeva (2010), Anderson & Mansour, (2009), Roudaki, (2009)

This section has given insights to the method utilised to collect the required data. A discussion relating to the methods used in the pre-testing of the questionnaire will follow.

#### **4.6                      PRE-TESTING OF THE QUESTIONNAIRE**

Malhotra (2010:354) defines pre-testing as the administering of the questionnaire on a small sample of participants who are not part of the final study, to identify and eliminate potential problems. Iacobucci and Churchill (2010:223) state that pre-testing is a vital stage in the development of a research instrument as the questionnaire is tested under real circumstances. According to Zikmund and Babin (2013:183), researchers employ various methods of pretesting, such as the debriefing pre-test and the pilot test. Pre-test debriefing involves a small number of participants completing the questionnaire, after which they are asked to explain how they interpreted each of the questions/items. The purpose of this method is to check that each question or item is decoded in the manner that the researcher intended (Malhotra, 2010:354; Hair, *et al.* 2008:89). Moreover, debriefing allows for valuable feedback before administering the questionnaire for pilot testing. Following debriefing, the questionnaire is then pilot tested, which relates to testing the questionnaire with an actual group of participants (Hair, *et al.* 2008:89). Berndtz and Petzer (2011:146) highlights that pilot testing is an important method for identifying possible questionnaire errors, before administering it to the main sample.

In this study, once the questionnaire was designed, pre-testing was conducted using the debriefing and pilot testing approaches. First, two experienced researchers in the field assessed the questionnaire to identify possible mistakes. Thereafter, two academic staff members and one assisting staff member were selected to participate in the debriefing approach to pre-testing the questionnaire. One of the participants was a first language English speaker, whereas the other two participants were second language English speakers. This was done to ensure that the participants that had English as their first-, second- or third language, would clearly understand the instructions and the questions.

The questionnaire took less than 15 minutes to complete, which is deemed sufficiently short according to McDaniel and Gates (2013:359). The feedback received from the pre-testing was used to refine the items in the questionnaire.

After all the applicable adjustments and refinements were made to the questionnaire, as noted in the pre-testing phase, the questionnaire was subjected to pilot testing. The questionnaire was piloted on a non-probability judgement sample of 49 full-time undergraduate male students on a South African HEI campus not forming part of the sampling frame, in order to test the reliability of the questionnaire. As indicated by Iacobucci and Churchill (2010:224), the pilot test provides the researcher with an opportunity to do a trial analysis on the coding and tabulating of the data. The results of the pilot study are analysed and reported on in Chapter 5. The shortcomings of the questionnaire identified after the pilot test were corrected. The final questionnaire, combined with a cover letter (refer to Annexure A), was distributed for the main survey.

This section shows the pre-testing of the questionnaire. The next section explains how the questionnaire of the study was administered.

#### **4.7 ADMINISTRATION OF THE QUESTIONNAIRE**

The administration of the questionnaire is carried out after a successful pre-test and pilot test were completed. For the purpose of this study, two samples were selected, namely 400 South African female Generation Y students and 400 Dutch female Generation Y students.

The main survey for the South African sample (Sample SA) was conducted in May 2013. Permission to conduct the research at the two universities was obtained through an informal memorandum of understanding between the two universities. The relevant academic staff members responsible for the full-time undergraduate students were contacted telephonically and by email in order to gain permission to distribute the self-administered questionnaire to the participating students. After permission was granted, the non-probability convenience sample of 400 female full-time Generation Y undergraduate students was applied. The questionnaires were hand-delivered to the academic staff members. The completion of the questionnaire, under the supervision of the relevant academic staff member, took less than 15 minutes and, therefore, one class period was sufficient. The lecturers were requested to inform their students that participation in the study was voluntary. After two weeks, the questionnaires were collected from the relevant lecturers.

Concerning sample NL, the main survey was conducted in November 2013. Permission to conduct the research at the two universities was obtained in writing from the two universities. The relevant academic staff members responsible for the full-time undergraduate students were contacted by email in order to gain permission to distribute the self-administered questionnaire to the participating students. After permission was granted, the non-probability convenience sample of 400 female full-time Generation Y undergraduate students was applied. The questionnaires were distributed personally to the participating students during one class period. The questionnaires were collected directly after completion by the researcher. Data collected from the study were tabulated and analysed for the purpose of drawing conclusions and formulating recommendations. The research findings are reported on in Chapter 5.

This section has given insights on how the administration of the study took place. A discussion pertaining to the preliminary data analysis of this study follows.

#### **4.8 PRELIMINARY DATA ANALYSIS**

Berndt and Petzer (2011:217) posit that a comprehensive data analysis plan is essential in ensuring a strong focus on the purpose of the study. According to Zikmund and Babin (2013:64), it is important for the researcher to do data preparation by examining the quality of data gathered during the fieldwork, because it will make the reasoning of the gathered data easier. The steps in the data preparation process and analysis include data validation, editing, coding, data entry, data tabulation, data analysis and interpretation (Hair *et al.*, 2008:222).

Cant *et al.* (2008:189) state that questionnaire editing involves inspecting the raw data for possible mistakes made by the interviewer and/or the participant and includes the physical inspection of each completed questionnaire. Coding represents the way a specific meaning is assigned to a response within previously edited data. Moreover, codes represent the meaning in the data by assigning a measurement symbol to the different categories of responses (Zikmund & Babin, 2013:363). Hair *et al.* (2008:233) highlight that tabulation is the process of counting the number of responses that are classified into certain categories.

This research study's questionnaire consisted of two sections. Section A (A1-A8) was designated at collecting demographic data from the participants, including a question determining the participant's entrepreneurial interest. Section B (B1-B41) included the 41-item scale pertaining to the determinants of the participants' inclination towards

entrepreneurship, including entrepreneurial motivations (B1-B9), personal barriers to entrepreneurship (B10-B19), business environmental barriers to entrepreneurship (B20-B31) and attitudes towards entrepreneurship (B32-B41).

This section provided insights to the preliminary data analysis. The next section consists of a discussion regarding the statistical analysis implemented in order to represent the data obtained from the survey.

## **4.9 STATISTICAL ANALYSIS**

Once the data have been collected and prepared for analysis, several statistical procedures can aid in interpreting the data (Hair *et al.*, 2008:246). The captured data of this study were analysed using IBM SPSS Statistics, Version 22. The following statistical methods were used on the empirical data sets:

- Exploratory factor analysis
- Reliability and validity analysis
- Descriptive statistical analysis
- Correlation analysis
- Logistic regression analysis
- Two independent-samples t-test

### **4.9.1 Factor analysis**

Factor analysis is defined as the process of simplifying data by reducing a large number of original variables into a smaller and more manageable number of synthetic variables, called factors (McDaniel & Gates, 2013:560). Pallant (2013:181) concurs stating that factor analysis is a data reduction technique used to determine the underlying dimension of each factor. Malhotra (2010:636) opines that factor analysis is a valuable statistical method for determining the inter-correlations between variables in a large data set. In contrast to other statistical methods, such as t-tests and analysis of variance, factor analysis is applied for examining the communality and covariation amongst all of the variables without using criterion or predictor variables. There are two main types of factor analysis, namely exploratory factor analysis and confirmatory factor analysis (Pallant, 2013:181). Exploratory factor analysis explores the inter-relationships among a set of variables. In contrast, confirmatory factor analysis is designed for verifying the relationships between underlying factors and observed variables (Brace *et al.*,

2012:353). According to McDaniel and Gates (2013:561), the steps involved in conducting a factor analysis include selecting the most suitable method of extraction, selecting the most appropriate method of rotation, determining the number of factors to retain and interpreting those factors.

Before conducting a factor analysis, it is necessary to compute a correlation matrix in order to portray if a linear relationship exists between the variables. Factor analysis is only suitable if the variables are significantly correlated (Malhotra, 2010:636). Therefore, only after a correlation matrix indicate a significant correlation between the variables, is it advisable to conduct factor analyses (McDaniel & Gates, 2013:561).

After conducting a correlation matrix, it is necessary to assess the sampling adequacy of the data set. This may be done by conducting a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, together with a Bartlett's test of sphericity (Field, 2009:651). Sampling adequacy is indicated by a KMO value above 0.60 and a significant Bartlett's test of sphericity value (Pallant, 2010:183).

When conducting factor analysis, each variable's substantive importance to a factor is measured according to how much the variable contributes to the variation of each factor. In factor analysis, a factor refers to a linear combination of variables and is defined as a weighted summary score of a set of related variables similar to the composite derived by averaging the measures (McDaniel & Gates, 2013:561). A factor loading is a correlation between a factor and the observed variables (Field, 2009:631). Each factor is assessed for significance, where only items with a value off more than 0.30 are considered to load significantly onto a factor and are, therefore, retained. Notably, higher factor loadings closer to 1.00 indicate greater representativeness of the factor (Hair *et al.*, 1998:106).

There are two basic approaches to factor analysis, namely principal components analysis and common factor analysis. In principal components analysis, a large set of correlating variables are reduced into a minimum number of factors while still accounting for maximum variance. With principal components analysis the total variance in the data is considered (Malhotra, 2010:676). However, with common factor analysis the factors are determined by analysing only the shared variance (Pallant, 2013:181) and entails extracting as many latent variables (factors) as possible to explain the correlations (common variance) among items (Field, 2009:638).

Once the method of factor analysis has been decided upon, the next step is ascertaining the number of factors that account for the variation of the data and should therefore be



retained (Iacobucci & Churchill, 2010:496). The number of factors to be retained is based on the amount of variation displayed in the original data set that is explained by each factor (McDaniel & Gates, 2010:620). While there are several factor retaining techniques, amongst the most popular are Kaiser's criterion, Catell's scree test (Pallant, 2010:184) and the priori criterion method (Hair *et al.*, 1998:103). The eigenvalue approach involves retaining all factors with an eigenvalue greater than one and discarding those factors with eigenvalues below one (Malhotra, 2010:643). The scree plot technique identifies the maximum number of factors that can be extracted by plotting the number of dimensions on the x-axis and the corresponding eigenvalues on the y-axis (Wiid & Diggines, 2013:242). After inspecting the plot to find a point at which the shape of the curve changes direction and becomes horizontal, all the factors above the break in the plot are retained (Pallant, 2013:184). The priori criterion method is another method to be considered to specify the number of factors to extract. This method is based on prior knowledge of the theory under analysis (Malhotra, 2010:643).

An important output from factor analysis is the factor pattern matrix. Through this matrix, factors are rotated to identify a pattern that assists in interpreting the identified factors (Malhotra, 2010:619). There are two methods used to rotate factors, namely orthogonal and non-orthogonal rotations (Iacobucci & Churchill, 2010:500). Orthogonal rotation ensures that the factors remain uncorrelated during factor rotation. In contrast, with non-orthogonal rotation, also known as oblique rotation, the factors are allowed to correlate (Field, 2009:642). The most popular orthogonal rotation technique is the varimax procedure. The varimax technique attempts to simplify the interpretability of the factors by minimising the number of variables with high loadings on a factor, hence spreading the variance evenly among the factors (Malhotra, 2010:645).

After principle components/factor analysis has been completed, the output obtained has to be interpreted, which require allocating meaning to the results obtained from the factor analysis (McDaniel & Gates, 2013:563). Hair *et al.* (1998:103) postulate that variable loadings of above 0.40 on a factor should be considered significant in defining the factor and loadings above 0.50 are deemed practically significant. Iacobucci and Churchill (2010:501) propose various useful aids when interpreting factors. Start with the first variable and first factor in the rotated factor-loading matrix then move horizontally from left to right, identifying the highest loading and circling that loading. Repeat the procedure for each of the other dimensions. Thereafter, examine and judge each loading's significance by statistical or practical criterion. Statistical criterion suggests that the loading is practically significant on a specified alpha level, normally 0.05. Practical

significance illustrates that the factor accounts for a certain percentage of the variation in the given variable. By employing this same criteria, underline other practical significant loadings identified. Thereafter, study the loading matrix and locate all the non-significant variables on any factor. Additionally, unimportant variables with low factor loadings can be removed and a new factor solution may be derived. In order to conclude factor analysis, the factors with significant loadings are assigned names based on how the variables load upon their common traits.

For the purpose of this study, exploratory principle components analysis was used to determine the underlying factors of the measurement scale. A discussing pertaining to reliability analysis follows.

#### **4.9.2 Reliability analysis**

According to Cant *et al.* (2008:234), reliability assesses measurement accuracy. A measurement procedure or measurement scale is perceived as reliable when various efforts at measuring something produce the same outcome. McDaniel and Gates (2001:254) emphasise that a reliable scale would be the result of no errors found within the measurement. There are various methods of assessing reliability, such as test-retest reliability, alternative forms reliability and internal consistency reliability (Malhotra, 2010:318; Iacobucci & Churchill, 2010:259, Cant *et al.*, 2008:234, McDaniel & Gates, 2001:254). These three methods may be described as follows:

- **Test-retest reliability:** The test-retest method of determining reliability entails testing for constancy by administering the same measure or scale to the same group of participants at two different points in time under the same circumstances (Zikmund & Babin, 2013:257). The degree of similarity between the results of the first measurement and the second measurement are compared by calculating a correlation coefficient. A higher coefficient value, close to one, gives an indication that the measurement instrument has high reliability (Malhotra, 2010:318). McDaniel and Gates (2013:286) advocate that this method of determining reliability should be augmented with a combination of other approaches, such as the internal consistency reliability approach, due to this method of reliability having several pitfalls. First, it may be difficult to gain assistance from participants to participate in the subsequent measurement. Secondly, the first measurement may change a participant's response on the second measurement. Finally, personal or environmental factors may influence the participants resulting in to changes in the second measurement.

- **Alternative-forms reliability:** Similarly to the test-retest reliability method, the alternative-forms reliability method entails administering a scale or measure to the same participants at two different points in time. However, in this approach, instead of administering the same measurement scale twice, two measurement scales, which are similar as possible in terms of form, are used (Malhotra, 2010:319). By constructing equivalent measurement instruments the participant's memory effect to responses from the first testing can be avoided (Struwig & Stead, 2010:132). The aim is to measure the same object and the same participants during different time periods, usually two to four weeks apart (Malhotra, 2010:319). McDaniel and Gates (2013:288) identified two possible limitations with the alternative-forms reliability technique. First, it is extremely difficult to develop two equivalent measuring instruments. Secondly, even if equivalence can be achieved, this technique is viewed as problematic, as it is time-consuming, difficult and expensive to administer.
- **Internal-consistency reliability:** According to McDaniel and Gates (2013:288), internal-consistency reliability is a method used for determining the internal consistency of a number of summated items for the purpose of developing a total score for the scale. The internal-consistency reliability of a scale can be measured in several ways. One of the most frequently used ways of measuring internal consistency by researchers is the sophisticated, popular, and accurate internal reliability measurement, namely the Cronbach alpha coefficient (Brace et al., 2012:382). The Cronbach alpha measures a linear association that exists with each item and every other item and the average is measured. The mean of all split-half coefficients of a given test are represented by the coefficient alpha ( $\alpha$ ). The coefficient alpha values range from zero to one, whereby greater reliability is illustrated by a higher value closer to one (Hair et al., 2008:286). According to Wiid and Diggins (2013:238), coefficient alpha values of above 0.80, is considered to indicate good internal consistency reliability, values between 0.60 and 0.80 is considered acceptable and values of 0.60 and less are considered to indicate poor internal consistency. Brace et al. (2012:382) state that the rule of thumb of Cronbach alpha is that the value should report a minimum of 0.7 to be acceptable.

#### 4.9.3 Validity analysis

Validity is defined as the degree to which changes in measurement scores reproduce accurate results, even if the measuring instrument is applied in another occasion (Malhotra, 2013:320; Hair *et al.*, 2010:320). MacDaniel and Gates (2013:289) describe validity as the extent to which the measuring instrument measures what it is expected to

measure. Validity can be examined from a number of different perspectives, namely content validity, criterion validity and construct validity (McDaniel & Gates, 2013:289; Iacobucci & Churchill, 2010:256; Malhotra, 2010:320). These three perspectives may be described as follows:

- **Content validity:** Content validity, often referred to as face validity (Malhotra, 2013:320), assesses the items on a scale in order to ensure that the items directly measure what it is supposed to measure (Iacobucci & Churchill, 2010:256). McDaniel and Gates (2013:290) elaborate that content validity is assessing whether the items in a scale adequately cover the dimension under study.
- **Criterion validity:** Criterion validity is the relationship between scores as expected in relation to other variables selected as meaningful criteria (Malhotra, 2013:320). According to Zikmund & Babin (2013:259), criterion validity may be classified as either concurrent validity or predictive validity. Concurrent validity is where the measurement instrument can predict another variable measured at the same time as the variable of interest; contradictory predictive validity can forecast a future level of criterion variable by a current measurement scale.
- **Construct validity:** This form of validity exists when a measure reliably measures and truthfully represents a unique concept (Zikmund & Babin, 2013:259). Malhotra (2010:321) states that construct validity is made up of convergent, discriminant and nomological validity. According to McDaniel and Gates (2013:293), convergent validity reflects the degree of correlation between different measures of the same constructs, while discriminant validity measures the extent to which construct measures differ from other construct measures. Clark and Watson (1995:316) indicate that an average inter-item correlation value within the range of 0.15 and 0.50 suggests both convergent and discriminant validity. Malhotra (2013:321) emphasises that nomological validity is the extent to which the constructs correlate in theoretically predicted ways with measures of different but related constructs. Nomological validity can be assessed by constructing a correlation matrix using Pearson's product-moment correlation coefficient.

In this study, the research instrument's content validity was determined by asking two experienced researchers to assess the measurement instrument. Thereafter, the questionnaire was piloted on a small sample of participants to assess the internal consistency of the scaled items, as reported in Chapter 5. For the main survey, the scaled items were assessed using the measures of internal-consistency reliability,

convergent validity, discriminant validity and nomological validity – these results are presented in Chapter 5.

The next section explains the descriptive statistical analysis techniques applied in the study.

#### **4.9.4 Descriptive statistical analysis**

Descriptive statistical analysis is used when complex frequency tables need to be summarised in order to simplify the information provided (Malhotra, 2010:486). McDaniel and Gates, (2013:457) add that descriptive statistical analysis is the most efficient mean of summarising the characteristics of large sets of data (McDaniel & Gates, 2013:457).

Brace *et al.* (2012:53) indicate that there are three types of statistics related to descriptive analysis. These statistics are known as the measures of location (mean, median and mode), measures of variability (range, variance and standard deviation) and measures of shape (skewness and kurtosis). The following section explains these statistics:

- **Measures of location:** The measures of location often are referred to as a measure of central tendency. These measures consist of the mean, mode and median (Malhotra, 2013:486). According to McDaniel and Gates (2013:458), the mean of a sample is calculated by adding the values for all participants for a particular variable and dividing the resulting sum by the number of participants. Therefore, the mean derives an average value for a specific construct or variable from the total number of responses (Kolb, 2008:254). The median is the value representing the middle position of data arranged in sequence in either an ascending or descending sequence (Hair, et al, 2008:248). Zikmund and Babin (2013:458) define the mode as the value that can be calculated for any type of data, such as nominal, ordinal, interval or ratio and it is the value that occurs the most frequently amongst in a data set.
- **Measures of variability:** In contrast to measures of central tendency, measures of variability measure how spread out the data are (McDaniel & Gates, 2013:458). Measures of variability generally include the range, variance and standard deviation. Malhotra (2010:487) states that the range is calculated as the difference between the smallest and largest value of the variables. Hair et al. (2008:248) define variance as the average squared deviation from the mean and standard deviation as the square root of that variance.

- **Measures of shape:** Measures of shape are concerned with the distribution of the variables, when graphically presented. These measures comprise skewness and kurtosis (Pallant, 2010:57). Malhotra (2010:488) indicates that with skewness, the distributions can be symmetric or skewed, whereas with symmetrical distribution the values on either side of the centre of the distribution are equal, as are the mean, mode and median values. Kurtosis shows the relative peakedness or flatness of the frequency distribution.

Descriptive statistics were applied in this study to summarise the data sets, and to determine whether the data were normally distributed. Specifically, the descriptive statistics applied in this study included the measures of the mean, standard deviation, skewness and kurtosis values.

#### **4.9.5 Correlation analysis**

Correlation analysis is applied to measure the relationships between variables (Wiid & Diggines, 2013:282). This analysis measures the closeness of the relationship between two variables at a time (Iacobucci & Churchill, 2010:441). According to Hair *et al.* (2008:286), the Pearson product-moment correlation coefficient determines the strength of a linear relationship between two or more metric variables. McDaniel and Gates (2013:526) state that a relationship is identified when a change in one variable is associated with change in another variable.

Wiid and Diggines (2013:283) add that the correlation analysis produces a correlation coefficient ( $r$ ). The coefficient gives an indication of the strength of the linear relationship between the two variables (Berndt & Petzer, 2011:239). The strength varies between -1.00 and 1.00, where 0 represent no relationship between the two variables and -1.00 or 1.00 denote a perfect association between two variables. A null hypothesis for the Pearson correlation coefficient indicates that there is no relationship between the two variables and the correlation efficient is zero (Hair *et al.*, 2008:286). The strength of the relationship between variables depends on the size of the correlation value. A value ranging from 0.10 to 0.29 shows a small relationship, values between 0.30 and 0.49 indicates a medium relationship and a value of 0.5 to 1.0 represent a strong relationship between the variables (Pallant, 2010:134). The direction of the relationship may be positive or negative (Malhotra, 2010:563).

For the purpose of this study, Pearson's correlation coefficients were calculated, in order to examine for potential multicollinearity among the independent variables, namely

entrepreneurial motivations, personal barriers, environmental barriers and attitudes towards entrepreneurship, which could jeopardise the interpretation of these variables' influence on the dependent variable, namely entrepreneurial interest, in the subsequent analysis. In addition, these correlation coefficients were calculated in order to assess the nomological validity of the proposed logistic regression model.

While correlation analysis determines a possible relationship between two variables, as well as indicates the strength of the relationship between the variables (Hair *et al.*, 2008:291), the strength of association between the two variables do not consider whether one variable might be independent and the other variable dependent (Brace *et al.*, 2012:256). Therefore, in order to determine the influence of entrepreneurial motivation, personal barriers, environmental barriers and attitudes towards entrepreneurship, by means of hypotheses testing, regression analysis is required.

#### **4.9.6 Logistic regression analysis**

In statistics, regression analysis is a collective name for techniques for modelling and analysis of numerical data consisting of values of one dependent variable, also known as outcome variable and one or more independent variables, also called predictors or determinants (Wiid & Diggines, 2013:285). There are three main types of regression analysis, namely linear regression (bivariate), multiple regression and logistic regression analysis (Brace *et al.*, 2012:253). Linear regression analysis is the assumption of a straight-line relationship between the independent and dependent variables (Zikmund & Babin, 2013:403). This line, also known as the line of regression, shows the relationship between two variables (Wiid & Diggines, 2013:285). As indicated by Hair *et al.* (2008:292), the general formula for a straight-line is:

$$Y = a + bX + e_i$$

where

Y= the dependant variable

a= the intercept (point where the straight line intersects the y-axis when X=0)

b= the slope coefficient (the change in Y for every 1 unit change in X)

X= the independent variable used to predict Y

$e_i$ = the error for the prediction

Multiple regression analysis is an extension of linear regression in that it allows two or more independent variables to explain one dependent variable (Zikmund & Babin,

2013:403). Multiple independent variables are entered into the regression equation, and for each variable, a separate regression coefficient is calculated to explain that variable's relationship with the dependent variable (Hair *et al.*, 2008:296). A linear regression equation can be expanded to represent multiple regression analysis (Brace *et al.*, 2012:267) using the following formula:

$$Y_i = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_nX_n + e_i$$

Logistic regression analysis is a multivariate statistical analysis that assesses the joint influence and the relative weights of the independent variables, along with the significant determinants influencing the probability of establishing alliances (Brace *et al.*, 2012:323). In comparison to linear regression and multiple regression analysis, logistic regression analysis performs logistic regression with a dichotomous dependent variable, namely a categorical variable with two categories or values (Pallant, 2010:170). For the dichotomous dependent variable, the responses are coded zero, indicating a lack or absence of the characteristic of interest, and one, indicating that a characteristic or condition is present or if an event did or did not occur (Sweet & Martin, 2002:157). Likewise *et al.* (2002:33) concur, stating that logistic regression is applicable for studying the relationship between a categorical or qualitative outcome variable and one or more predictor variables. In the simplest case of one predictor  $X$  and one dichotomous outcome variable  $Y$ , the logistic model predicts the logit of  $Y$  from  $X$ . The logit is the natural logarithm ( $\ln$ ) of odds of  $Y$ . Pallant (2010:171) concurs, stating that logistic regression analysis provides an indication of the adequacy of the proposed model, comprising a set of predictor variables, by means of indicating the relative importance of each determinant variable or the interaction amongst the determinant variables.

Logistic regression uses a process known as iteration. The iterative process attempts to determine the best answer to a problem through a series of approximations and each iteration results in a slightly more accurate approximation (Brace *et al.*, 2012:345). The log-likelihood statistic is applied in logistic regression to measure the success of the model. A high value indicates that the model poorly predicts the outcome (Wvensch, 2015:4). In order to determine how well a model performs, either the omnibus tests of model coefficients or the Hosmer-Lemeshow goodness-of-fit test may be applied (Allison, 2014:5). While good model fit is indicated by a highly significant value ( $p \Rightarrow 0.05$ ) when applying the omnibus tests of model coefficients, poor model fit is indicated by a highly significant value ( $p \Rightarrow 0.05$ ) when applying the Hosmer-Lemeshow goodness-of-fit test. The results of these tests are expressed by means of the chi-square value. A good model fit is indicated by a highly significant value ( $p \Rightarrow 0.05$ ) (Pallant, 2010:175).



Furthermore, the Wald statistic is applied in logistic regression analysis to determine the significance of a specific predictor variable (Brace *et al.*, 2012:347).

Sweet and Matin, (2002:158) identify two advantages of logistic regression, namely it is highly effective at estimating the probability that an event will occur and when estimating for the likelihood that the event will occur, using a given a set of conditions. Therefore, due to the dependent variable used in this study being of a dichotomous nature, logistic regression analysis was performed to assess a proposed model containing the dependent variable of entrepreneurship inclination and its four possible determinants (independent variables), namely entrepreneurial motivation, personal barriers, environmental barriers and attitudes towards entrepreneurship.

#### **4.9.7 Two independent-samples t-test**

A t-test, frequently used in statistical analysis, is a parametric test used for testing differences between means or proportions (Silver *et al.*, 2013:211). There are three main types of t-tests – the one sample t-test, the two independent-samples t-test and the paired samples t-test (Malhotra, 2010:503) Note, that while the z-test is typically applied in the case of sample sizes greater than 30, SPSS treats z-tests and t-tests as one type of test. This study utilised the two independent-samples t-test to test whether there was a statistically significant difference between South African and Dutch female Generation Y students' entrepreneurship inclination. The significance level was set at the conventional 0.05 level. Typically, it is advisable to also consider the practical significance of these mean differences, as discussed next.

#### **4.9.8 Cohen's D – statistic**

In addition to the t-tests that were used to determine whether a statistically significant difference exist between mean scores, the Cohen's D-statistic is computed to determine whether the difference was practically significant (Brace *et al.*, 2012:11). The Cohen's D-statistic shows the strength of different effect sizes in order to determine practical significance (Pallant, 2010:210). According to Pallant (2010:210) and Brace *et al.* (2012:11), the general representation of Cohen's D-statistics are as follows:

- $0.20 \leq d \leq 0.50$ : signifies a small, practically non-significant effect
- $0.50 \leq d \leq 0.80$ : signifies a medium-sized effect moving towards practical significance
- $0.80 \leq d$ : signifies a large effect that has reached practical significance.

#### **4.10 CONCLUSION**

The objective of this chapter was to describe the theoretical background of the research methodology applied is gathering and analysing the data sets for the study. In the study, a descriptive research design was followed. The target population for this study was specified as female undergraduate students aged between 18 and 24 years who were enrolled full-time at South African HEIs (Sample SA) and Netherlands HEIs (Sample NL) in 2013. Data were gathered from a multiple cross-sectional sample comprising a convenience sample of South African Generation Y students and a convenience sample of Dutch Generation Y students in 2013.

A survey self-administered questionnaire was used to gather the required data. This questionnaire included questions pertaining to the participants' demographic information, a question requesting their entrepreneurial interest and scales measuring the determinants of their inclination towards entrepreneurship, including entrepreneurial motivations, personal barriers to entrepreneurship, business environmental barriers to entrepreneurship and attitudes towards entrepreneurship. In addition, the questionnaire included a cover letter outline the purpose of the study and requesting participation. The statistical analysis techniques applied to this gathered data, including exploratory principle component analysis using varimax rotation, measures of reliability and validity, descriptive statistical analysis, correlation analysis, logistic regression analysis and the two independent-samples t-test are described in this chapter in order to enhance understanding of the results of this analysis, as presented in Chapter 5.

The following chapter, Chapter 5, reports on the findings of the empirical portion of this study, in accordance with the research methodology laid out in this chapter (Chapter 4). In Chapter 5, the results obtained from the pilot study are discussed, which leads the way for a preliminary data analysis in the form of tabulation and coding. In addition, the results pertaining to the demographical information, factor analysis, reliability and validity analysis, descriptive statistical analysis, correlation analysis, logistic regression model and the two-independent samples t-test are discussed.

## **CHAPTER 5**

### **ANALYSIS AND INTERPRETATION OF EMPIRICAL FINDINGS**

---

#### **5.1 INTRODUCTION**

The previous chapter, Chapter 4, described the research methodology used for this study. The purpose of this chapter is to report on the analysis and interpretation of the empirical findings gathered from the study. This chapter begins with a summary of the results from the pilot test in Section 5.2, followed by a description of the data gathering process in Section 5.3. Section 5.4 provides a discussion of the preliminary data analysis that entails the coding and the tabulation of the data. Section 5.5 presents a description of the two sample groups, namely Sample SA and Sample NL, including a summary of their entrepreneurial interest. The results of the exploratory principal components analysis is presented in Section 5.6. The internal-consistency reliability and validity of the measuring instrument used in the main study is reported on in Section 5.7, while Section 5.8 discusses the descriptive statistics. Section 5.9 pertains to the correlation analysis conducted in the study.

Logistic regression modelling is the focus of Section 5.10. This section reports on the results of the empirical testing of the model of the determinants of South African and Dutch Generation Y students' inclination towards entrepreneurship as proposed in Chapter 3. Section 5.11 discusses the results of the two independent-samples t-test, whereby South African and Dutch Generation Y students' inclination towards entrepreneurship are compared.

IBM SPSS Statistics, Version 22 was used to perform the data analyses. The data analysis was executed in two stages. First, the results obtained in the pilot test are analysed. Secondly, the findings of the main survey are reported on. The subsequent section relates to a discussion on the data analyses performed during the pilot phase.

#### **5.2 PILOT TEST RESULTS**

Following the pre-testing of the questionnaire, as outlined in Section 4.6, the questionnaire was piloted on a judgement sample of 49 full-time undergraduate students registered at a South African public HEI campus that did not form part of the sampling frame in the main study. This pilot study was undertaken to determine the internal-consistency reliability of the scale employed within the questionnaire before carrying out the main survey. The Cronbach alpha coefficient value was calculated to determine the

reliability of the inclination towards entrepreneurship scale. The five-point scale returned a Cronbach alpha value of 0.794 for the entire scale, which is above the recommended level of 0.70 (Pallant, 2010:97), thereby suggesting that the scale is reliable (Wiid & Diggines, 2013:238). Therefore, none of the items included in the scale were removed. These 41 items from the inclination towards entrepreneurship scale, were then used to prepare the main survey questionnaire (refer to Annexure A), which was administered to a larger sample size.

### **5.3 DATA GATHERING PROCESS**

In accordance with the sampling plan set out in Chapter 4, the data required for this study were collected from 400 South African female Generation Y students (Sample SA) enrolled at two selected South African HEI campuses and 400 Dutch female Generation Y students (Sample NL) enrolled at two selected HEI campuses in the Netherlands. A self-administered questionnaire was used to collect the required data.

As stated in Section 4.5, lecturers at each institution were contacted and asked if they would partake in the study and allow the questionnaire to be distributed to their students during class time. Following the drop-off survey approach, the questionnaires for Sample SA were then hand-delivered to those lecturers who granted permission, and subsequently distributed to female students for completion during class time. In line with the specified sample size for Sample SA, 400 questionnaires were distributed – 200 per campus. After two weeks, the completed questionnaires were collected from the participating lecturers at the agreed upon time. Following the group self-administered survey approach, the questionnaires for Sample NL were personally distributed to the participating female students during one class period of those lecturers who granted permission. In line with the specified sample size for Sample NL, 400 questionnaires were distributed – 200 per campus. The completed questionnaires were collected directly after completion by the researcher. Students from both sample groups were informed that participation was strictly voluntary.

### **5.4 PRELIMINARY DATA ANALYSIS**

A preliminary data analysis includes coding and tabulation and is recommended for execution before the data set is analysed. The following two sections provide an overview of the coding and the tabulation employed on the collected data set of this study.

### 5.4.1 Coding

The questionnaire used in this study was divided into two sections. The first section, Section A, requested demographical data from the participants, as well as a question pertaining to their interest in entrepreneurship. Section B measured the determinants of the participants' inclination towards entrepreneurship, including entrepreneurial motivations, personal barriers, business environment barriers and entrepreneurial attitudes. Table 5.1 presents the codes used in the questionnaire utilised in this study.

**Table 5.1 Coding information**

Section A: Demographical data				
Question	Code	Variable	Value assigned to responses	
Question 1	A1	Year of birth	1988 (1); 1989 (2); 1990 (3); 1991 (4); 1992 (5); 1993 (6); 1994 (7)	
Question 2	A2	Gender	Male (1); Female (2)	
Question 3	A3	Country	South Africa (1); Netherland (2)	
Question 4	A4	Name of institution	A (1); B (2); C (3); D (4)	
Question 5	A5	Current year of study	1 <sup>st</sup> (1); 2 <sup>nd</sup> (2); 3 <sup>rd</sup> (3); 4 <sup>th</sup> (4)	
Question 6	A6	Subject majoring in	Open question	
Question 7	A7	Mother tongue language	Open question	
Question 8	A8	Idea of entrepreneurship attractive to you	Yes (1); No (2)	

**Table 5.1 Coding information (continued ...)**

Section B: Determinants of entrepreneurship inclination					
Item	Code	Dimension measured	Value assigned to response		
Items 1 – 9	B1 – B9	Entrepreneurial motivations	Disagree (1); Slightly disagree (2); Neutral (3); Slightly agree (4); Agree (5)		
Items 10 – 19	B10 – B19	Personal barriers			
Items 20 – 31	B20 – B31	Business environment barriers			
Items 32 – 41	B32 – B41	Attitudes towards entrepreneurship			

The following section discusses the tabulation of responses received.

#### 5.4.2 Tabulation of variables

According to Zikmund and Babin (2013:365), tabulation is the process of organising and summarising the number of observations in each response category in an orderly manner and presenting it in frequency tables. Table 5.2 illustrates the frequencies of the responses obtained from the total sample for Section B of the questionnaire, which aimed at measuring the determinants of female Generation Y students' inclination towards entrepreneurship.

**Table 5.2 Frequency table of responses**

Scale item	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
	1	2	3	4	5
Determinant A: Entrepreneurial motivations					
B1	3	13	52	140	370
B2	5	6	57	185	325
B3	18	23	90	155	292
B4	13	32	117	139	277

**Table 5.2**      **Frequency table of responses (Continued ...)**

Scale item	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
	1	2	3	4	5
Determinant A: Entrepreneurial motivations					
B5	1	20	80	155	322
B6	20	38	162	176	182
B7	13	44	160	205	156
B8	29	56	125	128	240
B9	21	33	120	200	204
Determinant B: Personal barriers					
B10	40	80	159	181	118
B11	81	121	130	144	102
B12	32	78	248	138	82
B13	39	93	192	171	83
B14	94	139	190	113	42
B15	90	138	191	110	49
B16	154	153	136	84	51
B17	98	117	153	141	69
B18	133	143	155	102	45
B19	168	133	154	75	48
B20	86	111	150	145	86
B21	86	135	162	128	67
B22	76	129	146	142	85

**Table 5.2**      **Frequency table of responses (continued ...)**

Scale item	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
	1	2	3	4	5
B23	88	138	169	128	55
B24	62	96	197	155	68
Determinant C: Business environment barriers					
B25	47	74	117	193	147
B26	62	106	170	156	84
B27	51	84	135	193	115
B28	114	95	119	96	154
B29	124	108	83	95	168
B30	47	102	189	127	113
B31	102	104	172	113	87
Determinant D: Attitudes towards entrepreneurship					
B32	10	20	100	149	299
B33	12	25	149	181	211
B34	14	45	109	178	232
B35	3	17	45	135	378
B36	20	51	137	210	160
B37	155	181	125	71	46
B38	124	144	160	103	47
B39	133	156	168	72	49
B40	174	167	130	76	31
B41	178	163	140	64	33



The following section, Section 5.5, reports on the demographical attributes and the entrepreneurial interest of the sample of participants that took part in this study.

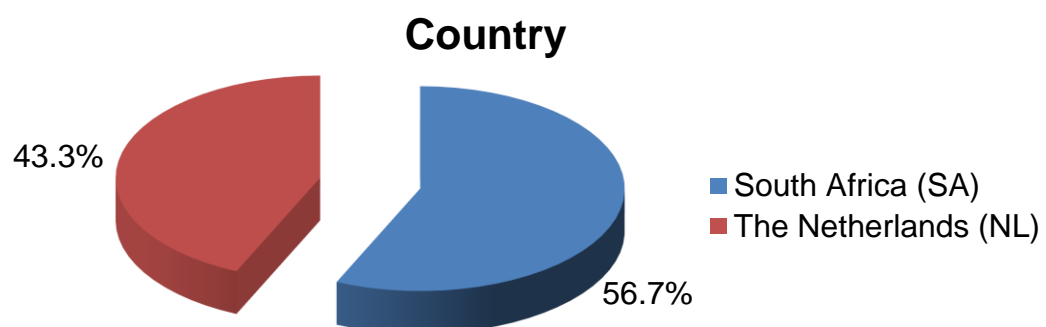
## **5.5 DEMOGRAPHIC AND ENTREPRENEURIAL INTEREST ANALYSIS**

In accordance with the topic of this study, the participants included in this study comprised two sample groups, namely Sample SA (South Africa) and Sample NL (Netherlands). This section first provides a description of the total sample, followed by a description of Sample SA and then Sample NL, in terms of their demographics, as well as a description of the two samples' reported interest in entrepreneurship. The demographical information is illustrated by means of pie charts and bar graphs.

### **5.5.1 Total sample description**

From the 800 questionnaires distributed to the total sample, 650 questionnaires were returned. As a result, a response rate of 81 percent was achieved. From the 650 questionnaires, only 578 completed questionnaires were deemed usable. This was because students falling outside the specified 18 to 24 year age range or female gender requirement were deemed unusable. Therefore, the final response rate of 72 percent was achieved for the total sample or respondents. The demographical information of the main survey questionnaire was included in Section A.

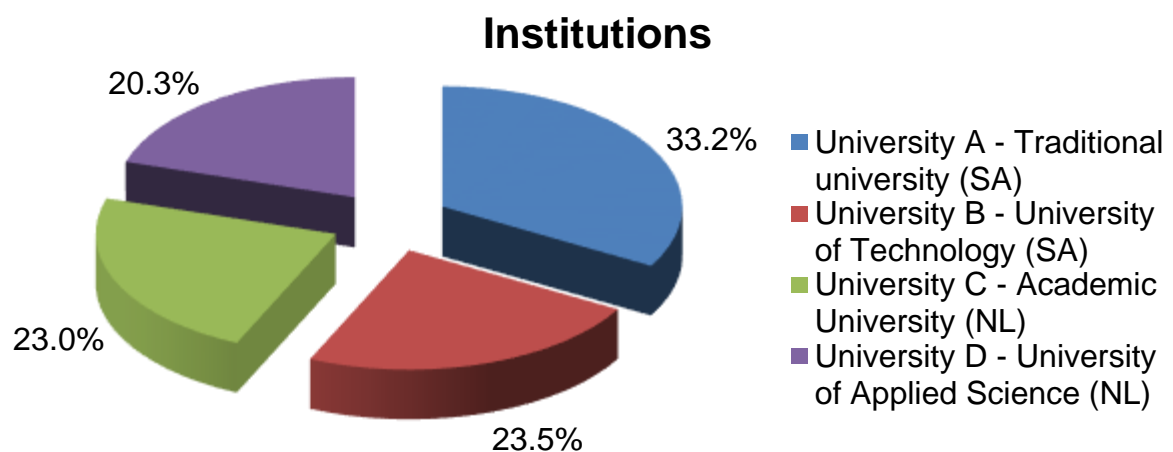
For the purpose of presenting a general overview of the total sample of participants who partook in this study, a description of the total samples' demographic characteristics pertaining to their residing country, gender, higher education institution and entrepreneurial interest follows.



**Figure 5.1 Country profile – total sample**

As illustrated in Figure 5.1, the majority of the total sample of participants indicated residing in South Africa (56.7%), followed by those who indicated residing in the Netherlands (43.3%).

As in accordance with the topic of this study, the participants' gender was used as a screening question to include only female Generation Y participants as defined under the target population in Chapter 4 (refer to Section 4.4.1). The total sample for this study comprised 578 female Generation Y participants.

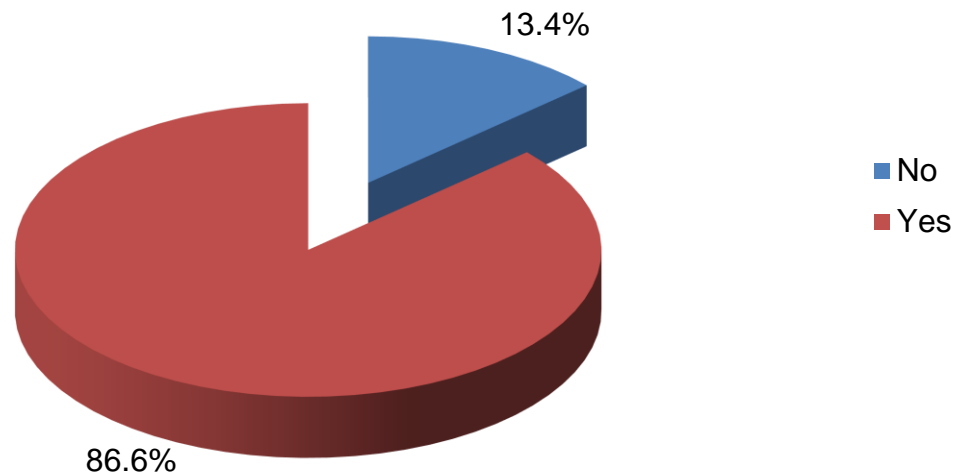


**Figure 5.2 Higher education institutions – total sample**

Figure 5.2 illustrates the number of responses obtained from each of the four HEI campuses for the total sample. This study aimed at achieving an equal ratio of responses from the two HEIs in South African and the two HEIs in the Netherlands. As a view of the total sample of 578 participants who partook in this study, the majority of the participants reported that they were studying at a traditional university (33.2%), followed by those studying at a university of technology (23.5%) and those studying at an academic university (23.0%). The participants studying at a university of applied science represented 20.3 percent of the total sample.

---

## Entrepreneurial interest



---

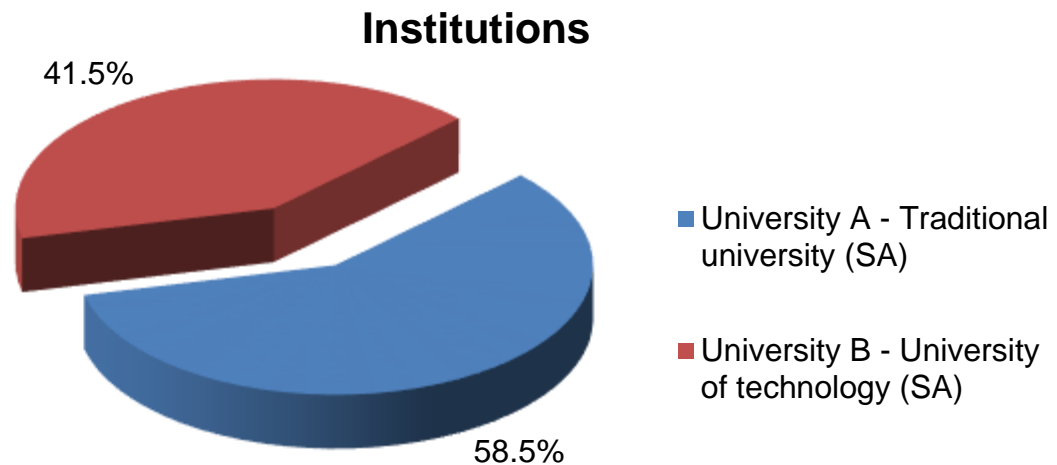
**Figure 5.3 Interest in entrepreneurship – total sample**

For the purpose of addressing the first empirical objective of this study, formulated in Chapter 1 (refer to Section 1.3.3), frequency distribution results were utilised to determine female Generation Y students' entrepreneurial interest. These results are illustrated in the pie chart in Figure 5.3. Regarding the total sample of participants' entrepreneurial interest, the majority of the participants indicated an interest to be entrepreneurial (86.6%), followed by those who indicated having no entrepreneurial interest (13.4%).

The following section reports on the demographical information of Sample SA.

### 5.5.2 Sample SA description

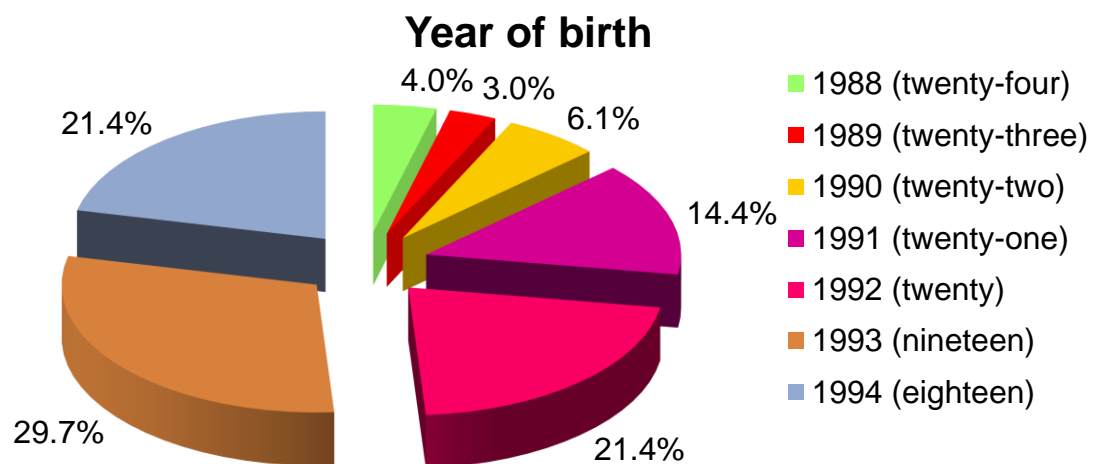
This section provides a description of the demographic characteristics of Sample SA and includes the participants' institution, year of birth, current year of study, the subject they are majoring in, their mother tongue language, as well as a description of the samples' reported entrepreneurial interest. From the 400 questionnaires distributed to Sample SA, 357 questionnaires were returned. As a result, a response rate of 89 percent was achieved. From the 357 questionnaires, only 328 completed questionnaires were deemed usable. This was because students falling outside the specified 18 to 24 year age range or female gender requirement were deemed unusable. Therefore, the final response rate of 82 percent was achieved for Sample SA.



**Figure 5.4 Higher education institutions – Sample SA**

Figure 5.4 illustrates the number of responses obtained from each of the two South African HEI campuses. The traditional university in South Africa (University A) had the highest response rate of 58.5 percent of the overall response, followed by the University of Technology (University B), which had a 41.5 percent response rate.

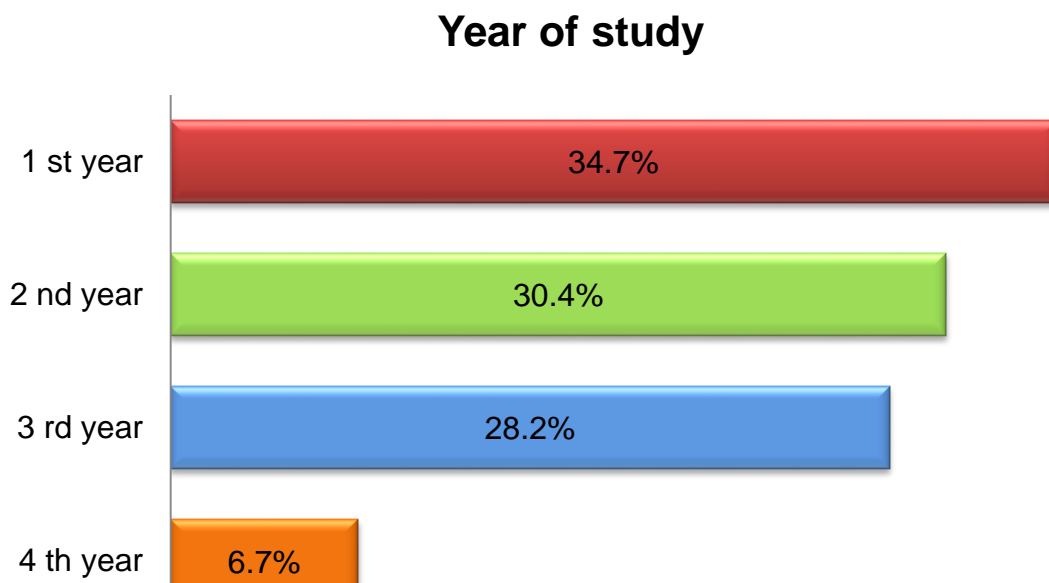
---



**Figure 5.5 Participants' age distribution – Sample SA**

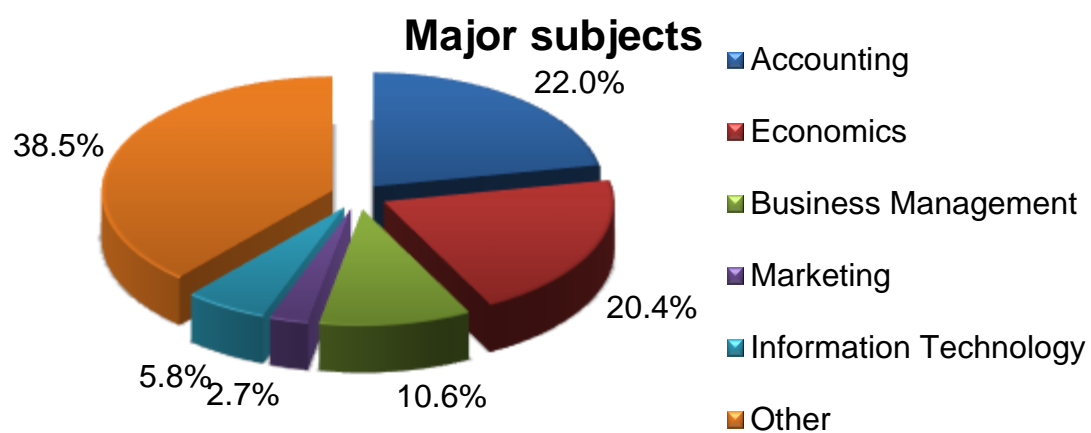
Figure 5.5 illustrates the distribution of information concerning the participants' age of Sample SA. As in accordance with the defined target population of students between 18 and 24 years old, age was used as a screening question (refer to Section 4.4.1). From Figure 5.5 it can be seen that all the participants qualified to participate in the study. The percentage of 18 year old participants was 21.4 percent, 29.7 percent of the participants

were 19 years old, 21.4 percent were 20 years old, 14.4 percent 21 years old, 6.1 percent 22 years old, 3.0 percent 23 years old and 4.0 percent were 24 years old.



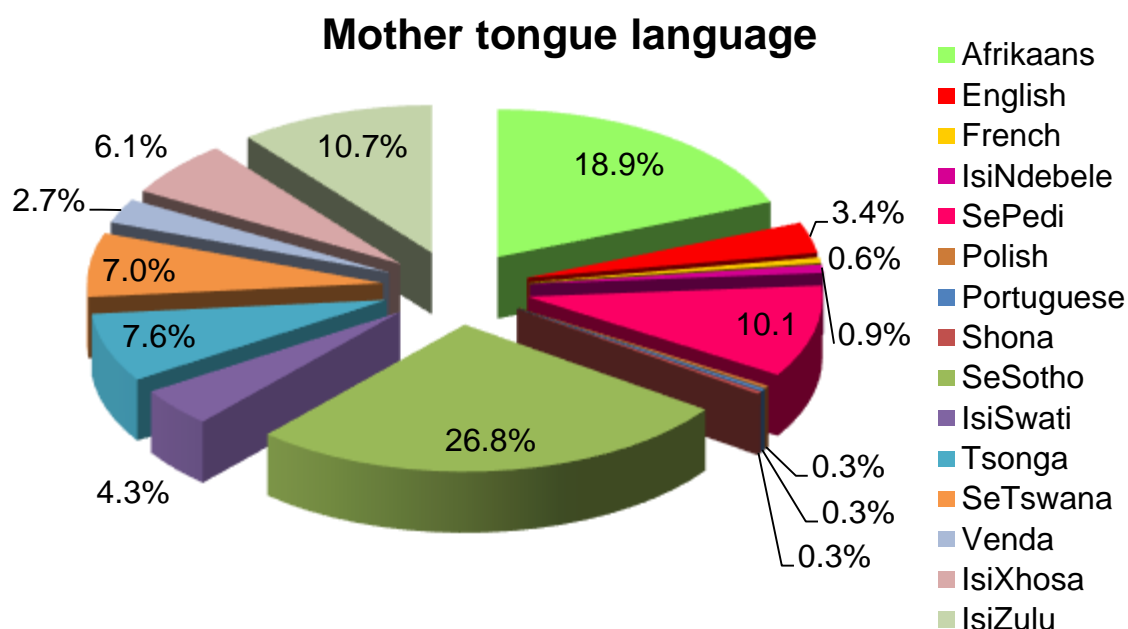
**Figure 5.6** Current year of study – Sample SA

Figure 5.6 illustrates the participants' current year of study. In order to ensure a representative sample, participants enrolled at different year levels (Years 1-4) were included in Sample SA. The largest portion of the sample was students in the first year of study, which represents 34.7 percent, followed by the students in the second year of study, with 30.4 percent. The third largest portion of the sample is the third year students, representing 28.2 percent, followed by the students in the fourth year, representing 6.7 percent.



**Figure 5.7** Major subjects – Sample SA

In order to ensure a representative sample, participants enrolled in different fields of study, were included in Sample SA. Most of the participants (38.5%) selected the category 'other', indicating that their major subject were subjects, such as law and human resource management. The students indicating having accounting as their major subject represented 22.0 percent of the participants. This is illustrated in Figure 5.7.

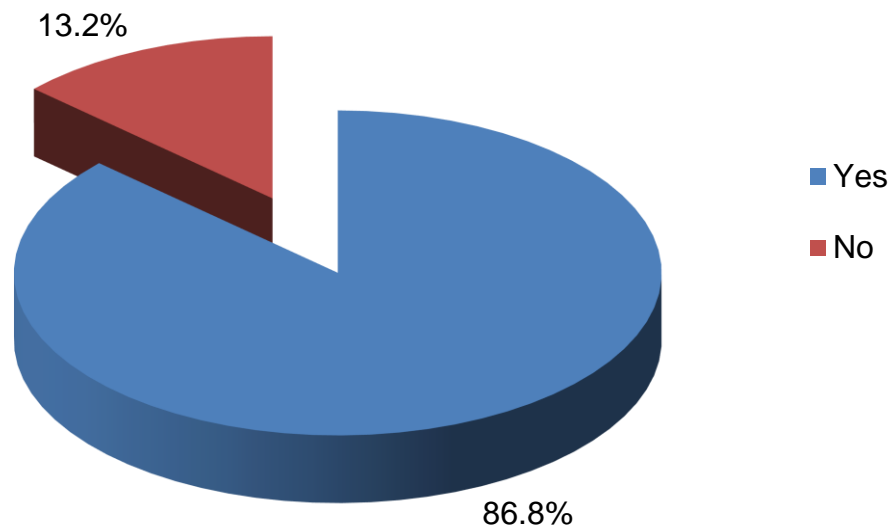


**Figure 5.8 Mother tongue language – Sample SA**

Regarding the Sample SA participants' mother tongue language, Figure 5.8 shows that the sample consisted of participants from each of South Africa's 11 official language groups. Most of the participants indicated their mother tongue language as Sesotho (26.9%). The participants speaking Afrikaans, with a value of 18.9 percent, followed this. The rest of the participants indicated that their mother tongue language was English (3.4%), French (0.6%), isiNdebele (0.9%), Sepedi (10.1%), Polish (0.3%), Portuguese, (0.3%), Shona (0.3 %), siSwati (4.3 %), Tsonga (7.6%), Setswana (7.0%), Venda (2.7%), isiXhosa (6.1%) and isiZulu (10.7%).

---

### Entrepreneurial interest



---

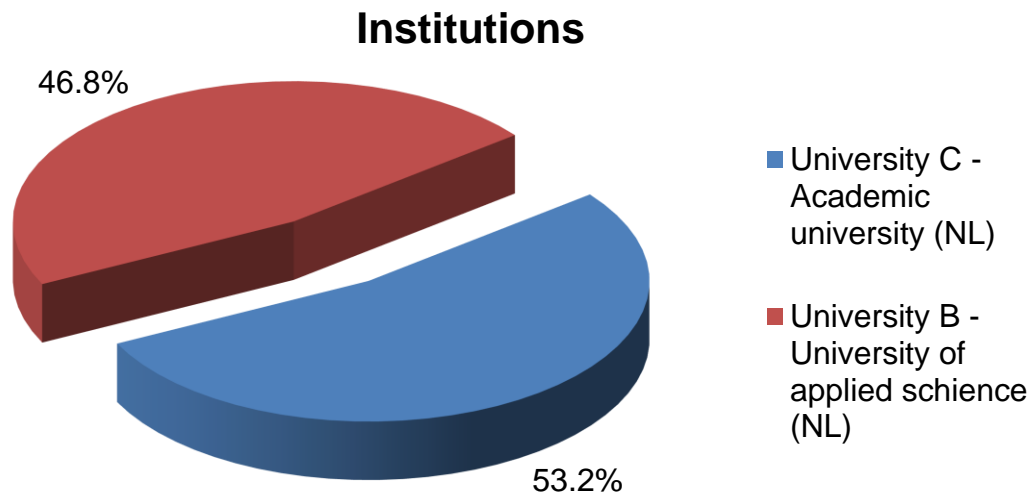
**Figure 5.9 Interest in entrepreneurship – Sample SA**

Figure 5.9 reveals that the majority of the participants indicated that they are interested in entrepreneurship (86.8%). Only 13.2 percent of the participants of Sample SA reported having no interest in entrepreneurship.

This section has provided the demographical information of Sample SA. The following section discusses the demographical information pertaining to Sample NL.

#### **5.5.3 Sample NL description**

The demographical information of Sample NL was gathered in Section A of the questionnaire and related to the participants' institution, year of birth, current year of study, major subject, home language as well as a description of the samples reported entrepreneurial interest. From the 400 questionnaires distributed to the Sample NL participants, 293 questionnaires were returned. As a result, a response rate of 73 percent was obtained. From the 293 questionnaires, 250 completed questionnaires were considered usable. The other questionnaires were deemed unusable due to missing responses or participants not meeting the screening criteria of age or gender requirements. Thus, the final response rate of 63 percent was achieved for Sample NL.

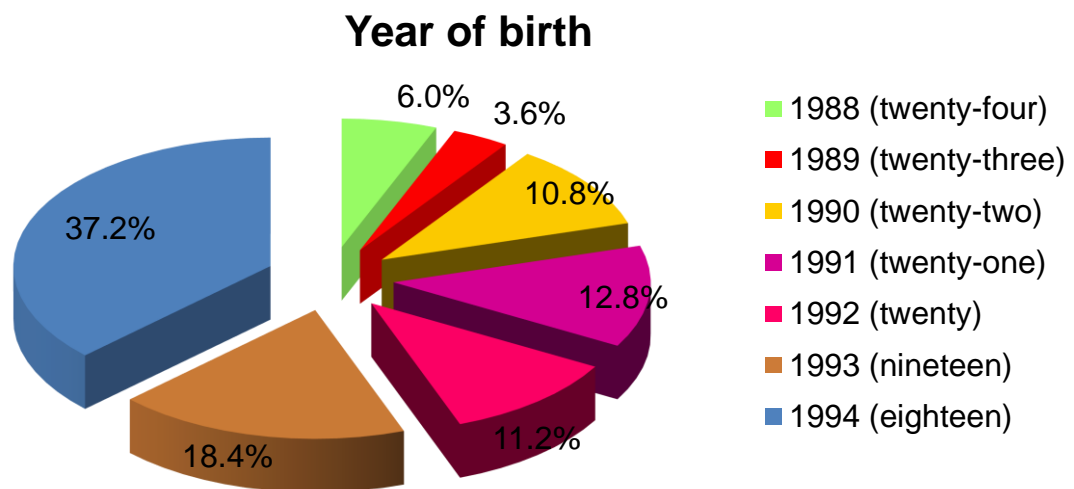


---

**Figure 5.10 Higher education institution – Sample NL**

Figure 5.10 illustrates the number of responses obtained from each of the two selected Dutch HEI campuses for Sample NL. This study aimed at achieving an equal ratio of responses from each of the two selected Dutch HEI campuses. As a view of Sample NL, it can be seen that 53.2 percent of came from an academic university in the Netherlands and 46.8 percent of the participants from a university of applied science.

---



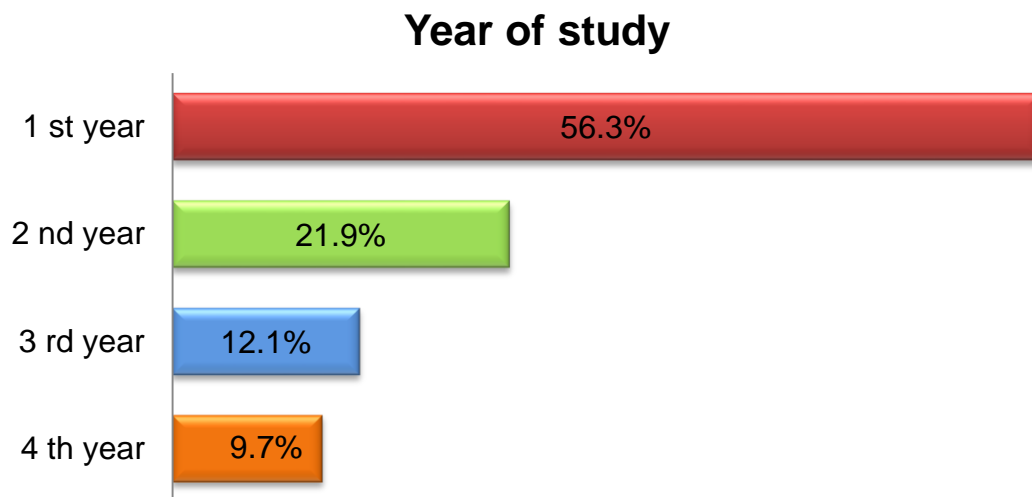
---

**Figure 5.11 Participants' age distribution – Sample NL**

Figure 5.11 indicates the participants' age groups of Sample NL. These age groups are in accordance with the defined target population of students between 18 and 24 years old, age was used as a screening question (refer to Section 4.4.1). From Figure 5.11 it can be seen that all the participants meet the requirements to participate in the study.

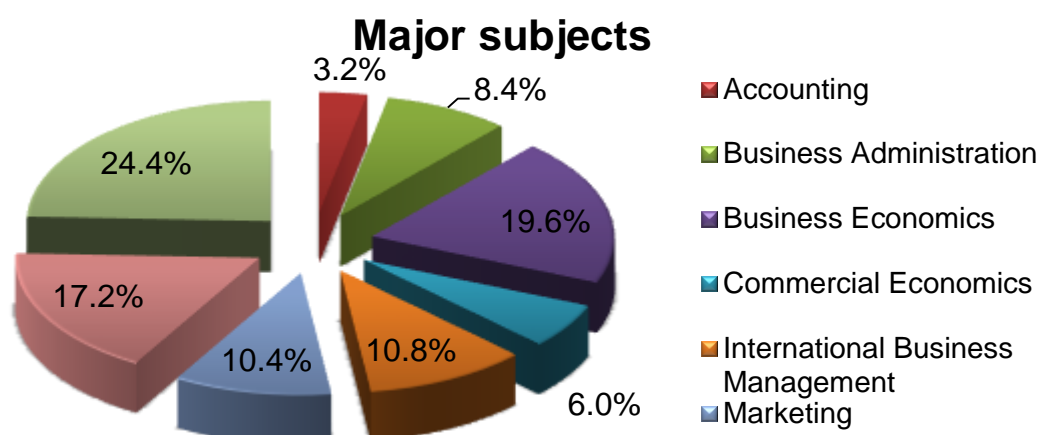


The percentage of 18 year old participants was 37.2 percent, 18.4 percent of the participants were 19 years old, 11.2 percent were 20 years old, 12.8 percent 21 years old, 10.8 percent 22 years old, 3.6 percent 23 years old and 6.0 percent were 24 years old.



**Figure 5.12 Current year of study – Sample NL**

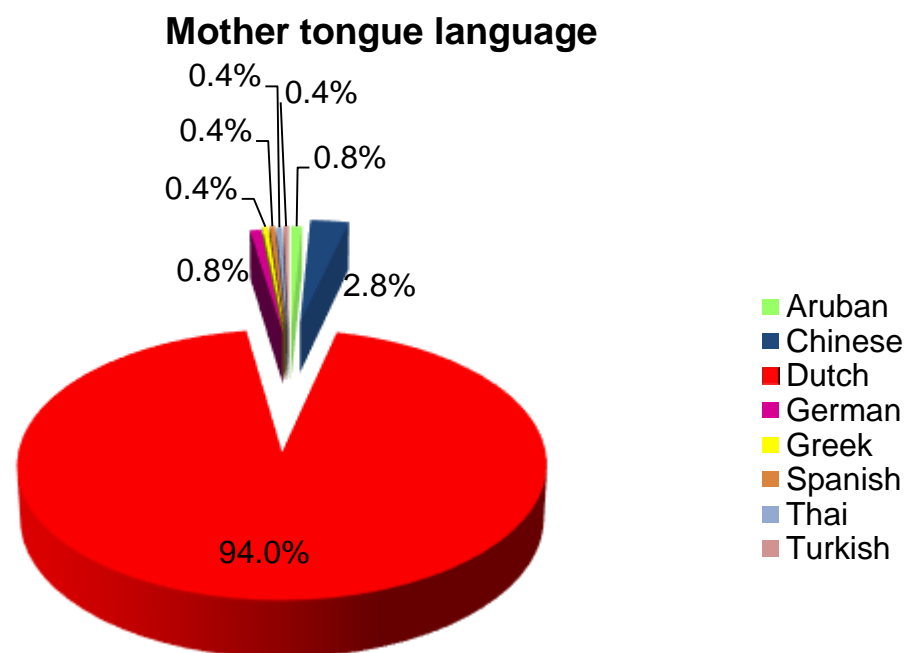
The distribution information pertaining to the Sample NL participants' current year of study is exhibited in Figure 5.12. The largest portion of Sample NL was first-year students, which represents 56.3 percent, followed by the students in their second year of study, with 21.9 percent. The third largest portion of Sample NL was the third-year students, representing 12.1 percent, followed by the students in their fourth-year, exemplifying 9.7 percent.



**Figure 5.13 Major subjects – Sample NL**

Participants enrolled in different fields of study, were included in Sample NL. This was done in order to ensure a representative sample. As illustrated in Figure 5.13, most of the participants (24.2%) indicated that their major subject was business administration, followed by business economics (19.6%), small business management (17.2%), international business management (10.8%), marketing (10.4%), business administration (8.4%) and commercial economics (6.0%).

The minority of the participants indicated that their major subject was accounting, representing 3.2 percent of the participants.



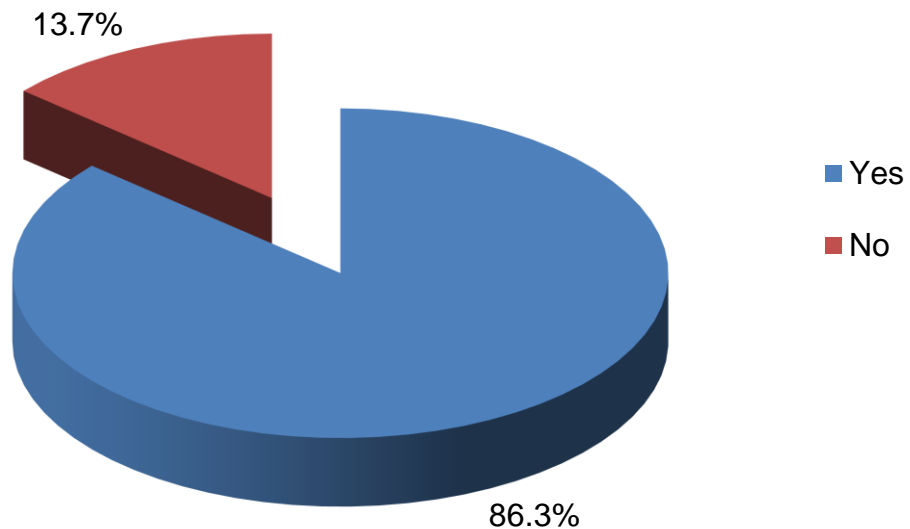
---

**Figure 5.14 Mother tongue language – Sample NL**

The majority of the participants of Sample NL were Dutch speaking, as indicated by 94.0 percent in Figure 5.14. The participants speaking Chinese, with a value of 2.8 percent, followed this. From the sample, 0.8 percent of the participants indicated that they are Aruban speaking, 0.8 percent German speaking, 0.4 percent Greek speaking and 0.4 percent Spanish speaking. Furthermore, 0.4 percent indicated that they speak Thai and 0.4 percent speaks Turkish.

---

### Entrepreneurial interest



---

**Figure 5.15 Interest in entrepreneurship – Sample NL**

Figure 5.15 illustrates that the majority of the participants of Sample NL have an interest in entrepreneurship (86.3%), which corresponds similarly to Sample SA (86.6%). Only 13.7 percent of the participants of this sample group indicated having no interest in entrepreneurship, which corresponds similarly to Sample SA (13.4%).

The above section has provided information on the demographics regarding the total sample as well as the two sample groups used in this study. The following section discusses the exploratory principal components analysis conducted on the scaled responses in the questionnaire used for the main survey in this study.

## 5.6 EXPLORATORY PRINCIPAL COMPONENTS ANALYSIS

Exploratory principal components analysis was used on the data set to determine whether the 41 items used within Section B of the questionnaire produced the proposed dimensions, and to identify whether the variables loaded on the intended dimensions. Before conducting this analysis, the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy, as well as the Bartlett's test of sphericity were executed.

Pallant (2010:183) recommends that a value of 0.6 and greater for the KMO test, and a significant Bartlett's test of sphericity value, reveal the adequacy of the sample data for principle components analysis. Both of these tests returned satisfactory values (KMO=0.882, chi square Bartlett test=9430.331 (df:820), ( $p=0.000<0.05$ ), thereby

confirming the data's suitability for principle components analysis. Once the factorability of the data was established, principle component analysis, using varimax rotation was performed on scaled items. From the scale, ten factors emerged with eigenvalues greater above 1.0, and these ten factors explained 61.90 percent of the total variance. As is evident from Table 5.3, while the items generally loaded as anticipated on the conceptualised dimensions, one item (B20) loaded on two factors. Therefore, Item B20 was removed. Table 5.3 presents the rotated factors.

**Table 5.3 Exploratory principal component analysis results**

Item	1	2	3	4	5	6	7	8	9	10
B1									0.700	
B2									0.828	
B3									0.690	
B4										0.444
B5							0.531			
B6							0.821			
B7							0.828			
B8										0.713
B9										0.625
B10	0.675									
B11	0.759									
B12	0.688									
B13	0.613									
B14	0.504									
B15						0.717				
B16						0.498				

**Table 5.3** Exploratory principal component analysis results (continued ...)

Item	1	2	3	4	5	6	7	8	9	10
B17	0.580									
B18						0.763				
B19						0.649				
B20*				0.433		0.413				
B21				0.762						
B22				0.798						
B23				0.614						
B24				0.585						
B25								0.707		
B26								0.734		
B27								0.736		
B28					0.799					
B29					0.809					
B30					0.645					
B31					0.600					
B32			0.706							
B33			0.741							
B36			0.565							
B37		0.659								
B38		0.669								

**Table 5.3 Exploratory principal component analysis results (continued ...)**

Item	1	2	3	4	5	6	7	8	9	10
B34			0.706							
B35			0.663							
B39		0.739								
B40		0.790								
B41		0.777								
*Item deleted										

As indicated in Table 5.3, the three items pertaining to the freedom afforded by being an entrepreneur loaded on Factor 1 and, therefore, were named independence motives. The three items pertaining to the motivations to perform activities for known external rewards associated with being an entrepreneur loaded on Factor 2 and, therefore, were named extrinsic motives. The three items pertaining to the innate drive to achieve success for known personal fulfilment associated with being an entrepreneur loaded on Factor 3 and, therefore, were named intrinsic motives. The six items concerned with the psychological impediments associated with being an entrepreneur loaded on Factor 4 and, therefore, were named personal motivational barriers. The four items pertaining to the required skills and competence, including the personality type often associated with becoming an entrepreneur loaded on Factor 5 and, therefore, were named personal competence barriers. The five items frequently associated with the obstacles that impede on business operations and growth loaded on Factor 6 and, therefore, were named organisational barriers. The four items relating to the processes and limitations within the business environment that entrepreneurial start-up firms are often associated with loaded on Factor 7 and, therefore, were named economic and financial barriers. The four items pertaining to the challenges faced by entrepreneurs when entering a given market loaded on Factor 8 and, therefore, were named entry barriers. The five items relating to favourable attitudes towards entrepreneurship loaded on Factor 9 and, therefore, were named positive attitudes. The five items relating to unfavourable attitudes towards entrepreneurship loaded on Factor 10 and, therefore were named negative attitudes.

The following section discusses the internal-consistency reliability of the total scale as well as these ten factors used in the main survey.

## 5.7 RELIABILITY AND VALIDITY ANALYSIS OF MAIN SURVEY

The ten factors in the measuring instrument of this study were assessed to determine their reliability and validity. Table 5.4 provides a summary of the Cronbach alpha values and average inter-item correlation values for the ten factors, as determined by factor analysis.

**Table 5.4 Reliability and validity of main survey – total sample**

Factors	Valid N	Cronbach Alpha	Average inter-item correlation
Independence motives	578	0.680	0.434
Extrinsic motives	578	0.699	0.438
Intrinsic motives	578	0.768	0.520
Personal motivational barriers	578	0.789	0.385
Personal competence barriers	578	0.789	0.497
Organisational barriers	578	0.813	0.519
Economic and financial barriers	578	0.750	0.500
Entry barriers	578	0.836	0.554
Positive attitudes	578	0.752	0.380
Negative attitudes	578	0.800	0.446

As indicated in Table 5.4, the entire scale used in Section B of the measuring instrument, measuring the determinants of inclination towards entrepreneurship returned a Cronbach alpha value of 0.881. The Cronbach alpha values for the ten factors ranged from 0.680 to 0.836, thereby indicating satisfactory internal-consistency reliability. The average inter-item correlation values for the entire scale were 0.149. The average inter-item correlation values for the ten factors ranged from 0.380 to 0.554, which were not far out of the

suggested value range of 0.15 and 0.50 (Clark & Watson, 1995:316). This suggests that the scale exhibits both convergent and discriminant validity.

The above section has confirmed that the research instrument used in this study is both reliable and valid. The next section focuses on the descriptive statistics.

## 5.8 DESCRIPTIVE STATISTICS

This section presents the results of the total sample descriptive statistics, as well as the results of Sample SA and Sample NL.

### 5.8.1 Total sample descriptive statistics

Table 5.5 represents the mean values, standard deviation, skewness and kurtosis for the ten factors of the scale. The number of questionnaires completed by the participants is indicated as the Valid N in Table 5.5. Given the five-point Likert scale, which ranged from disagree (1) to agree (5), higher mean values are associated with greater inclination towards entrepreneurship amongst female students. Table 5.5 reports on the descriptive statistics pertaining to entrepreneurial inclination of the total sample.

**Table 5.5 Descriptive statistics per factor – total sample**

Factors	Valid N	Mean	Standard deviation	Skewness	Kurtosis
Independence motives	578	4.3610	0.6846	-1.182	1.495
Extrinsic motives	578	3.9585	0.8729	-0.786	0.311
Intrinsic motives	578	3.9723	0.8082	-0.730	0.198
Personal motivational barriers	578	3.1397	0.8202	-0.179	-0.256
Personal competence barriers	578	2.6107	0.9718	0.252	-0.503
Organisational barriers	578	2.9918	0.9674	-0.116	-0.536
Economic and financial barriers	578	3.3749	0.9892	-0.492	-0.235



**Table 5.5 Descriptive statistics per factor – total sample (Continued ...)**

Factors	Valid N	Mean	Standard deviation	Skewness	Kurtosis
Entry barriers	578	3.1263	1.1315	-0.037	-1.060
Positive attitudes	578	4.0855	0.6950	-0.506	-0.250
Negative attitudes	578	2.4668	0.9003	0.495	-0.265

Given that the Likert scale used ranged from 1=disagree to 5=Agree, higher means are associated with greater agreement. As shown in Table 5.6, the highest mean was recorded on independence motives (mean=4.3610), followed by positive attitudes (mean=4.0855) and intrinsic (mean=3.9723) and extrinsic motives (mean=3.9585). The lowest means were recorded for negative attitudes (mean=2.4668), personal competency barriers (mean=2.6107) and organisational barriers (mean=2.9918). This suggests that female Generation Y students like the freedom afforded by being an entrepreneur, see the benefits of entrepreneurship, see it as rewarding and view it as suiting their personalities and skills. Furthermore, the low means recorded on negative attitudes, personal competency barriers and organisational barriers suggest that they do not perceive entrepreneurs as being unethical, nor do they perceive that they lack in the personal competencies required to be a successful entrepreneur. Interestingly, they also do not perceive that they will face any undue organisational barriers in terms of legal, licencing or labour hurdles.

The skewness and kurtosis was considered to determine whether there are any reasons to believe that the normality assumptions are violated. As are illustrated in Table 5.6, given that none of the skewness or kurtosis scores are lower than -2.00 or higher than 2.00, the distribution appears normal.

In the following section, the descriptive statistics for sample SA will be discussed as viewed per factor.

### **5.8.2 Sample SA descriptive statistics**

Table 5.6 reports on the descriptive statistics pertaining to entrepreneurial inclination of the Sample SA. Valid N indicates the number of questionnaires completed by the participants.

**Table 5.6 Descriptive statistics per factor – Sample SA**

Factors	Valid N	Mean	Standard deviation	Skewness	Kurtosis
Independence motives	328	4.4461	0.6786	-1.358	1.563
Extrinsic motives	328	4.3008	0.7217	-1.251	1.911
Intrinsic motives	328	4.1199	0.8147	-1.090	1.015
Personal motivational barriers	328	3.2373	0.8939	-0.293	-0.383
Personal competence barriers	328	2.6974	1.1179	0.136	-0.897
Organisational barriers	328	3.2050	1.0118	-0.291	-0.598
Economic and financial barriers	328	3.4268	1.1026	-0.524	-0.512
Entry barriers	328	3.6791	1.0370	-0.782	-0.77
Positive attitudes	328	4.3744	0.6551	-1.416	2.157
Negative attitudes	328	2.6091	0.9713	0.277	-0.560

As indicated in Table 5.7, the highest mean was recorded on independence motives (mean=4.4461), followed by positive attitudes (mean=4.3744) and extrinsic (mean=4.3008) and intrinsic motives (mean=4.1199). The lowest means were recorded for negative attitudes (mean=2.609), personal competency barriers (mean=2.6974) and organisational barriers (mean=3.2050). This proposes that South African female Generation Y students like the freedom afforded by being an entrepreneur, see the benefits of entrepreneurship, see it as rewarding and view it as suiting their personalities and skills. Furthermore, the low means recorded on negative attitudes, personal competency barriers and organisational barriers propose that they do not perceive entrepreneurs as being dishonourable, nor do they perceive that they lack in the personal competencies required to be a successful entrepreneur. Interestingly, they also do not perceive that they will face any undue organisational barriers in terms of legal, licencing or labour hurdles. Pertaining to the skewness and kurtosis, given that none of

the skewness or kurtosis scores are lower than -2.00 or higher than 2.00, the distribution appears normal. This is illustrated in Table 5.6.

The following section discusses the descriptive statistics pertaining to sample NL.

### 5.8.3 Sample NL descriptives

Table 5.7 report the mean values, standard deviation, skewness and kurtosis for the ten factors of the scale for Sample NL. The number of questionnaires completed by the participants is indicated as the Valid N.

**Table 5.7 Descriptive statistics per factor – Sample NL**

Factors	Valid N	Mean	Standard deviation	Skewness	Kurtosis
Independence motives	250	4.2493	0.6777	-1.041	1.827
Extrinsic motives	250	3.5093	0.8514	-0.459	0.123
Intrinsic motives	250	3.7787	0.7586	-0.390	-0.172
Personal motivational barriers	250	3.0113	0.6932	-0.230	-0.169
Personal competence barriers	250	2.4970	0.7241	0.106	-0.553
Organisational barriers	250	2.7120	0.8281	-0.222	-0.432
Economic and financial barriers	250	3.3067	0.8139	-0.556	0.174
Entry barriers	250	2.4010	0.7899	0.388	-0.245
Positive attitudes	250	3.7064	0.5490	0.028	0.162
Negative attitudes	250	2.2800	0.7600	0.691	0.267

As indicated in Table 5.7, the highest mean was recorded on independence motives (mean=4.2493), followed by intrinsic motives (mean=3.7787) and positive attitudes (mean=3.7064). The lowest means were recorded for negative attitudes (mean=2.2800), personal competency barriers (mean=2.4970) and entry barriers (mean=2.4010). This

proposes that female Generation Y students like the freedom afforded by being an entrepreneur, see the benefits of entrepreneurship and see it as rewarding. Furthermore, the low means recorded on negative attitudes, personal competency barriers and entry barriers propose that they do not perceive entrepreneurs as being dishonourable, nor do they perceive that they lack in the personal competencies required to be a successful entrepreneur. Interestingly, they also do not perceive that they will face any undue entry barriers in terms of corruption, crime, taxation or local infrastructure.

The skewness and kurtosis was considered to determine whether there are any reasons to believe that the normality assumptions are violated. As are illustrated in Table 5.8, given that none of the skewness or kurtosis scores are lower than -2.00 or higher than 2.00, the distribution appears normal.

The above section reported on the descriptive statistics for the total sample as well as Sample SA and Sample NL. The following section pertains to the correlation analysis conducted to determine whether there was any evidence of multicollinearity between the independent determinants of female students' inclination towards entrepreneurship.

## **5.9 CORRELATION ANALYSIS**

When conducting any type of multivariate statistical method, it is essential to assess whether there is any evidence of multicollinearity between the predictor variables (Malhotra, 2010:586). As such, a correlation analysis was conducted in order to measure the relationships between the factors in order to check for multicollinearity in the proposed model. Therefore, Pearson's product-moment correlation was computed. The correlation matrix is reported on in Table 5.8.

**Table 5.8      Correlation matrix**

	1	2	3	4	5	6	7	8	9
Independence motives									
Extrinsic motives	0.435**								
Intrinsic motives	0.279**	0.421**							
Personal motivational barriers	0.064	0.133**	-0.135**						
Personal competence barriers	0.001	0.87*	-0.274**	0.591**					
Organisational barriers	0.020	0.135**	-0.090*	0.482**	0.506**				
Economic and financial barriers	0.065	0.012	-0.173**	0.419**	0.391**	0.502**			
Entry barriers	0.087*	0.306**	0.065	0.340**	0.322**	0.523**	0.440**		
Positive attitudes	0.279**	0.406**	0.393**	0.085*	-0.009	0.112**	0.051	0.342**	
Negative attitudes	0.046	0.172**	0.038	0.242**	0.314**	0.224**	0.063	0.209**	-0.041
**Correlation is significant at the 0.01 level (2-tailed)									
*Correlation is significant at the 0.05 level (2-tailed)									

As indicated in Table 5.8, none of the correlation coefficients between the predictor variables exceeded the recommended cut-off point of 0.80 (Field, 2010:224). Therefore, there is no suggestion of any obvious evidence of multicollinearity between the predictors. This suggests that the proposed model of the determinants of female students' inclination towards entrepreneurship is suitable for logistic regression analysis.

The next section outlines the hypotheses tested in this study.

## **5.10 HYPOTHESES TESTING**

For the purpose of hypotheses testing, logistic regression analysis and a two independent-samples t-test were undertaken. The significance level for both tests was set at  $\alpha = 0.05$ , and the decision rules applied was as follows:

- If  $p\text{-value} \geq \alpha$ , conclude  $H_0$
- If  $p\text{-value} \leq \alpha$ , conclude  $H_a$

In addition, Cohen's D statistic was calculated in order to measure the effect size of the differences between South African and Dutch female students' determinants of inclination towards entrepreneurship. The following guidelines advocated by Pallant (2007:208) were employed to differentiate between a small, medium and large practical significance.

- $0.20 \leq d < 0.50$  – small effect, practically non-significant
- $0.50 \leq d < 0.80$  – medium effect, points towards being practically significant
- $0.80 \leq d$  – large effect and the results are practically significant.

The following 11 hypotheses were formulated for the purpose of this study:

$H_{01}$ : Independence motives do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

$H_{a1}$ : Independence motives do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

$H_{02}$ : Extrinsic motives do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a2</sub>: Extrinsic motives do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o3</sub>: Intrinsic motives do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a3</sub>: Intrinsic motives do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o4</sub>: Personal motivational barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a4</sub>: Personal motivational barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o5</sub>: Personal competence barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a5</sub>: Personal competence barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o6</sub>: Organisational barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a6</sub>: Organisational barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o7</sub>: Economic and financial barriers do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a7</sub>: Economic and financial barriers do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o8</sub>: Entry barriers do not have a significant influence on Dutch Generation Y female students' inclination towards entrepreneurship.

H<sub>a8</sub>: Entry barriers do have a significant influence on Dutch Generation Y female students' inclination towards entrepreneurship.

H<sub>o9</sub>: Positive attitudes do not have a significant influence on South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>9: Positive attitudes do have a significant influence on South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o</sub>10: Negative attitudes do not have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>a</sub>10: Negative attitudes do have a significant influence on Dutch and South African Generation Y female students' inclination towards entrepreneurship.

H<sub>o</sub>11: There is no significant difference between Dutch and South African Generation Y female students' independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes, negative attitudes towards entrepreneurship.

H<sub>a</sub>11: There is a significant difference between Dutch and South African Generation Y female students' independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes, negative attitudes towards entrepreneurship.

The hypotheses to be tested, using logistic regression analysis and two independent-samples t-test are set out in the following section.

### **5.10.1 Logistic regression analysis**

For the purpose of addressing the second, third, fourth and sixth empirical objective of this study, formulated in Chapter 1 (refer to Section 1.3.3), logistic regression analysis were employed. Logistic regression analysis was employed in this study to identify the proposed model of key determinants of entrepreneurship inclination amongst female Generation Y students. This proposed model is derived from Ajzen's model of planned behaviour (1991) and Shapero's model of entrepreneurial event (1975) as discussed in the literature (Chapter 3). The model illustrated in Figure 5.16 comprises ten determinants of entrepreneurial inclination.





**Figure 5.16 Proposed model of determinants of entrepreneurial inclination for this study**

For the purpose of this study, a logistic regression analysis was conducted to test the formulated hypotheses. The dependent variable used in this study, namely entrepreneurial interest is a dichotomous variable. Therefore, logistic regression was used to test the probability of the dichotomous event happening, in this case being interested in becoming an entrepreneur. Owing to maximum likelihood determinants calculating the logit of an event occurring, in this study logistic probabilities were given by maximum likelihood determinants and were provided for each group, those who are interested in entrepreneurship, and those who are not interested. The value 1 was used to indicate entrepreneurial interest and the value 0, the dummy variable, indicating no interest in becoming an entrepreneur. The results of the logistic regression analysis are illustrated in Table 5.9.

**Table 5.9**      **Logistic regression determinants of entrepreneurial inclination**

Model	B	SE $\beta$	Wald	df	p	$e^{\beta}$	95% C.I. for $e^{\beta}$	
							Lower	Upper
Independence motives	0.469	0.222	4.445	1	0.035*	1.598	1.034	2.470
Extrinsic motives	-0.294	0.217	1.845	1	0.174	0.745	0.487	1.139
Intrinsic motives	1.494	0.216	48.001	1	0.000***	4.456	2.920	6.801
Personal motivational barriers	-0.696	0.266	6.841	1	0.009**	0.499	0.296	0.840
Personal competence barriers	-0.100	0.213	0.219	1	0.640	0.905	0.596	1.374
Organisational barriers	-0.75	0.215	0.121	1	0.728	0.928	0.609	1.413
Economic and financial barriers	0.005	0.196	0.001	1	0.979	1.005	0.685	1.476
Entry barriers	-0.011	0.181	0.003	1	0.954	0.990	0.693	1.412
Positive attitudes	0.119	0.253	0.220	1	0.639	1.126	0.686	1.848
Negative attitudes	-0.357	0.190	3.527	1	0.600	0.700	0.482	1.016
Constant	-1.104	1.181	0.875	1	0.350	0.332		
<p>*      Statistically significant at <math>p &lt; 0.05</math></p> <p>**     Statistically significant at <math>p &lt; 0.01</math></p> <p>***   Statistically significant at <math>p &lt; 0.001</math></p>								

Table 5.9 gives coefficients and the Wald statistic and associated degrees of freedom and probability values for each of the determinants of entrepreneurial inclination factors. The goodness-of-fit of the logistic model was determined for the entire model and for each of the determinants in the model. The omnibus tests of model coefficients ( $p < 0.05$ ) and the Hosmer-Lemeshow test ( $p > 0.05$ ) were employed as measures of the entire model's goodness-of-fit. The proposed model containing all of the determinants of entrepreneurial inclination was statistically significant with a chi-square value of 116.158 for both the omnibus tests of model coefficient ( $N=578$ ) ( $p=0.000 < 0.05$ ) and the Hosmer-Lemeshow test ( $p=0.778 > 0.05$ ). This indicates that the model was able to differentiate between participants with an entrepreneurial interest and those who did not. Two additional descriptive measures of goodness-of-fit were used to indicate the variation in the dependent variable explained by the model, namely the Cox and Snell R square, and the Nagelkerke R square values. The model as a whole explained between 18.3 percent (Cox and Snell R square) and 33.6 percent (Nagelkerke R squared) of the variance in the participants' entrepreneurial interest, and correctly classified 88.7 percent of the responses ( $R^2=0.336$ ).

For the purpose of this study, the Wald chi-square statistic was used to calculate whether the ten determinants of entrepreneurial inclination were associated with entrepreneurial interest amongst female Generation Y students. The results show that three factors are statistically significant ( $p < 0.05$ ). According to the model, the log of the odds of female Generation Y students' entrepreneurial interest was negatively related to personal motivational barriers ( $p=0.009 < 0.05$ ) and positively related to independence motives ( $p=0.035 < 0.05$ ) and intrinsic motives ( $p=0.000 < 0.05$ ). The strongest determinant of entrepreneurial interest, relating positively, was intrinsic motives ( $e^{\beta}=4.456$ ), followed by independence motives ( $e^{\beta}=1.598$ ) and relating negatively, was personal motivational barriers ( $e^{\beta}=0.499$ ). This suggests that participants who are interested in entrepreneurship were over four times more likely to be inclined entrepreneurially by intrinsic motives than those participants who are not interested in entrepreneurship. The odds ratio of 0.499 for personal motivational barriers was less than one, indicating that personal motivational barriers, pertaining to the psychological barriers that an entrepreneur encounters when entering entrepreneurship, were 0.499 times less likely to impact the participants' entrepreneurial inclination.

As is evident from Table 5.10, independence motives have a significant positive influence ( $p=0.035 < 0.05$ ) on female inclination towards entrepreneurship. Therefore, there is insufficient evidence in the sample to reject  $H_{01}$ ; as such, the alternative  $H_{a1}$  is

concluded. Concerning extrinsic motives influencing Dutch and South African Generation Y female students' inclination towards entrepreneurship, a p-value of  $p > 0.05$  was calculated and, therefore,  $H_{a2}$  is rejected and  $H_{o2}$  is concluded. This suggests that female students' entrepreneurial inclination is not statistically significantly influenced by extrinsic motives. Relating to intrinsic motives influencing female students' entrepreneurial interest, a p-value of  $p < 0.05$  was calculated, indicating a significant positive influence ( $p=0.000$ ) on female inclination towards entrepreneurship. Therefore, there is insufficient evidence in the sample to reject  $H_{o3}$ ; as such, the alternative,  $H_{a3}$  is concluded. This suggests that intrinsic motives appear to have a statistically significant influence on female Generation Y students' entrepreneurial inclination. Likewise, a p-value of  $p < 0.05$  was computed on the influence of personal motivational barriers on entrepreneurial inclination. As such,  $H_{o4}$  is rejected and  $H_{a4}$  is concluded. Personal motivational barriers appear to have a significant negative influence ( $p=0.009$ ) on female inclination towards entrepreneurship. Concerning personal competence barriers influencing Dutch and South African Generation Y female students' inclination towards entrepreneurship, a p-value of  $p > 0.05$  was calculated and, therefore,  $H_{a5}$  is rejected and  $H_{o5}$  is concluded. This suggests that personal competence barriers do not significantly influence female students' entrepreneurial inclination. Similarly, a p-value of  $p > 0.05$  was calculated on the influence of organisational barriers on female inclination towards entrepreneurship. Therefore,  $H_{a6}$  is rejected and  $H_{o6}$  is concluded. Concerning economic and financial barriers, entry barriers, positive attitudes as well as negative attitudes towards entrepreneurship influencing female inclination towards entrepreneurship, a p-value of  $p > 0.05$  was calculated. Therefore, there is insufficient evidence in the sample to reject  $H_{o7}$ ,  $H_{o8}$ ,  $H_{o9}$  and  $H_{o10}$ . This suggests that organisational barriers, economic and financial barriers, entry barriers, positive attitudes as well as negative attitudes towards entrepreneurship, appears to have no significant influence towards female inclination towards entrepreneurship.

This suggests that independence motives and intrinsic motives have a significant positive influence and personal motivational barriers a significant negative influence amongst Dutch and South African Generation Y female students' inclination towards entrepreneurship.

#### **5.10.2 Two independent-samples t-test**

For the purpose of addressing the seventh empirical objective of this study, formulated in Chapter 1 (refer to Section 1.3.3), two independent-samples t-test were utilised to determine whether there is a significant divergence between the two sample groups

regarding the ten factors pertaining to the determinants of the students' inclination towards entrepreneurship. The hypothesis was formulated as follows:

H<sub>011</sub>: There is no significant difference between Dutch and South African Generation Y female students' independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes, negative attitudes towards entrepreneurship.

H<sub>a11</sub>: There is a significant difference between Dutch and South African Generation Y female students' independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes, negative attitudes towards entrepreneurship.

The statistical and practical significance of students in South Africa and students in the Netherlands, in terms of the ten factors, tested for the survey, are outlined in Table 5.10.

**Table 5.10 Country difference on determinants of entrepreneurial inclination**

Factor	South African		Netherlands		t-value	p-value	Cohen's D
	Mean N=328	Std. Dev.	Mean N=250	Std. Dev.			
Independence motives	4.4461	0.6786	4.2493	0.6776	-3.456	0.001*	0.29**
Extrinsic motives	4.3008	0.7217	3.5093	0.8513	-12.080	0.000*	0.93****
Intrinsic motives	4.1199	0.8147	3.7787	0.7586	-5.139	0.000*	0.42**
Personal motivational barriers	3.2373	0.8939	3.0113	0.6932	-3.310	0.001*	0.25**
Personal competence barriers	2.6974	1.1179	2.4970	0.7241	-2.467	0.009*	0.18**

**Table 5.10 Country difference on determinants of entrepreneurial inclination (continued ...)**

Factor	South African		Netherlands		t-value	p-value	Cohen's D
	Mean N=328	Std. Dev.	Mean N=250	Std. Dev.			
Organisational barriers	3.2050	1.0118	2.7120	0.8281	-6.268	0.000*	0.49**
Economic and financial barriers	3.4268	1.1026	3.3067	0.8139	-1.448	0.132	*****
Entry barriers	3.6791	1.0370	2.4010	0.7899	-16.226	0.000*	0.35**
Positive attitudes	4.3744	0.6551	3.7064	0.5490	-13.011	0.000*	0.15**
Negative attitudes	2.6091	0.9713	2.2800	0.7600	-4.424	0.000*	0.13**

\* Statistically significant at  $p < 0.05$

\*\* Small effect, practically non-significant

\*\*\* Medium effect and moving toward practical significance

\*\*\*\* Large effect, practically significant

\*\*\*\*\* Cohen's d-statistic not calculated as the variable was not statistically significant

Table 5.10 indicates a p-value of  $p=0.000 < 0.05$  was calculated on nine of the ten factors between South African and Dutch female students' perceived determinants of entrepreneurial interest. Therefore, for these factors the null hypotheses,  $H_{011}$ , is rejected and the alternative,  $H_{a11}$ , is concluded. This suggests that participants in the South African sample and Dutch sample differ in their perceptions towards the determinants of entrepreneurial inclination. South African and Dutch female Generation Y students appear to have statistically significant different perceptions on the determinants of students' inclination towards entrepreneurship.

The South African female students perceived independence motives ( $p=0.001 < 0.05$ ), extrinsic motives ( $p=0.000 < 0.05$ ), intrinsic motives ( $p=0.000 < 0.05$ ), personal

motivational barriers ( $p=0.001<0.05$ ), personal competence barrier ( $p=0.009<0.05$ ), organisational barriers ( $p=0.009<0.05$ ), entry barriers ( $p=0.000<0.05$ ), positive attitudes ( $p=0.000<0.05$ ) and negative attitudes ( $p=0.000<0.05$ ) to be more important determinants of entrepreneurial inclination than their Dutch counterparts. From Table 5.10 it is evident that there was no significant difference between South African and Dutch female students concerning perceived economic and financial barriers ( $p=0.132>0.05$ ) as an important determinant of entrepreneurial inclination. Thus, for Factor 7, owing to the P-values that lend support to  $H_{011}$ , there is a failure to reject the null hypothesis. This infers that South African and Dutch participants did not vary much in their perceptions towards the importance of economic and financial barriers towards entrepreneurial inclination. Therefore, with the exception of Factor 7, at a 95 percent confidence interval, this infers female students in South African and female students in the Netherlands have different levels of interest in entrepreneurship and different attitudes with respect to being an entrepreneur.

Cohen's D calculations were computed for determining the practically significant difference found between South African and Dutch female Generation Y students' perceived importance of the determinants of entrepreneurial inclination. As presented by Table 5.11, the P-values on each of the nine factors were statistically significant, thus enabling the Cohen's D calculations. The Cohen's D value computed indicated a large effect size of 0.93 for extrinsic motives, thus indicating moving towards practical significant influence on the participant's country as a determinant of entrepreneurial inclination. For independence motives, intrinsic motives, personal motivational barriers, personal competence barrier, organisational barriers, entry barriers, positive attitudes and negative attitudes, a small effect size of 0.29, 0.42, 0.25, 0.18, 0.49, 0.35, 0.15 and 0.13, respectively, was returned. This infers that these determinants have a practical non-significant influence on the participants' country as determinants of entrepreneurship inclination.

The following section concludes the chapter.

## 5.11 CONCLUSION

The empirical findings of this study were presented in this chapter and a discussion on the results of the pilot test was conducted. The preliminary data analysis entailing coding, tabulation and the data gathering process undertaken were reported on. This was followed by the demographical analysis, which explains the demographical information retrieved from the main sample of this study. In order to measure the

factorability of the data, exploratory factor analysis was executed to help the researcher examine the interrelationships between variables. Reliability and validity measures of the scale were introduced to determine if the ten factors in the measuring instrument were reliable and valid, and the reliability and validity were confirmed. Descriptive statistics including the mean values, standard deviations, skewness and kurtosis for the ten factors on the scale, together with the 40 items were then computed. Correlation analysis was also used to determine whether any relationships were formed between the factors. Correlation analysis was also conducted in order to check for multicollinearity in the proposed model. Hypotheses were formulated from the observed relationships found in the correlation analysis, where the hypotheses were tested using logistic regression analysis and two independent-samples t-test.

Based on the findings of Chapter 2 and Chapter 3, Chapter 6 concludes the study by providing a holistic view. This will be outlined in the contributions of the study, recommendations emanating from the analysis and interpretation of the findings described in this chapter, the limitations and opportunities for future research.



## CHAPTER 6

### CONCLUSION AND RECOMMENDATIONS

---

*“You can tell the condition of a nation by looking at  
the status of its females”.*

- Jawaharlal Nehru -

#### 6.1 INTRODUCTION

Entrepreneurship is a powerful force that drives innovation, productivity, job creation and economic growth and, as such, is critical to all sectors of the economy. Job creation is essential for a country's long-term economic wealth. Consequently, entrepreneurs creating new ventures and growing existing entrepreneurial businesses are vital contributing factors to a robust economy. Female entrepreneurs, in particular, are viewed as important agents of social and economic change, and significant contributors to the economies of the world in terms of employment generation, innovation and wealth creation. However, evidence in the literature suggests that, compared to their male counterparts, there is a slow growth in the number of female entrepreneurs. Possible reasons identified include a lack of entrepreneurial competencies, motivation, education and training, and access to capital and technology.

South Africa, as an emerging economy, faces significant socio-economic problems, including high levels of unemployment and poverty. For this reason, entrepreneurship has an important role and function to fulfil in the country's economic survival and growth by creating employment opportunities. The South African government has implemented various strategies to motivate entrepreneurs and encourage small business development in the country. In contrast to South Africa, the Netherlands is a developed economy and has one of the most productive and competitive economies in the world. Notably, entrepreneurship is recognised as the key driver behind the economic prosperity of the country. Possible aspects that have been identified as contributing to the Dutch entrepreneurial climate include the availability of financial start-up capital, young peoples' positive attitudes towards entrepreneurship, access to physical infrastructure and low entrepreneurial barriers. In 2015, the youth market is known as the Generation Y cohort, and in South Africa, they make up a significant portion of the population. Those Generation Y members pursuing a tertiary qualification are of particular importance to the

future of the country given that graduates have a higher future earning potential and typically higher social standing within society.

Understanding female Generation Y students' inclination towards entrepreneurship amongst students from an emerging and developed economy makes an important contribution in that it will help better tailor marketing strategies designed to stimulate interest in entrepreneurship amongst female students. In addition, the information gleaned from this study will assist in the design of entrepreneurial education programmes better geared at converting their interest into action. Based on this assumption, the primary objective of this study was to determine and compare undergraduate university Generation Y female students' inclination towards entrepreneurship in the South African and the Netherlands context in order to market the concept of entrepreneurship to Generation Y female students in South Africa.

This chapter represents the conclusion of the study. It starts with an overview of the study followed by a discussion of the main findings of the study, which are set out in accordance with the empirical objectives formulated in Chapter 1. Included in this discussion, is the empirically derived model of the determinant factors of female entrepreneurial inclination. In addition to this model, the difference between South Africa and the Netherlands Generation Y undergraduate female students' perceived importance of the determinants of entrepreneurial inclination are reviewed. Thereafter, the contribution of the study and the recommendations effusing from the study are discussed. The chapter concludes with a discussion of the limitations of the study together with recommendations for further research and final concluding remarks of the study.

## **6.2 OVERVIEW OF THE STUDY**

The purpose of this study was to determine and compare the factors that influence South African and Dutch female Generation Y students' inclination towards entrepreneurship. In order to achieve this and to gain a perspective on the potential determinants of entrepreneurial inclination, the definition of entrepreneurship and entrepreneurial intention, the importance of entrepreneurship, female entrepreneurship, as well as models and factors that influence entrepreneurship intention derived from the literature were discussed. This section provides a synopsis of the preceding five chapters for the purpose of adding clarity on the main findings (Section 6.3) and resulting recommendations (Section 6.5).

Chapter 1 provided a background to the research and identified the research problem. In this chapter, the importance of entrepreneurship was highlighted, with particular emphasis on the various socio-economic challenges facing emerging economies. In addition, the various strategies implemented by the South African and Dutch governments to encourage entrepreneurship and small business development were outlined in Chapter 1. Furthermore, this chapter highlighted the potential role that motivation, business environmental barriers, personal barriers and attitudes towards entrepreneurship may play in influencing entrepreneurship inclination. Based on the problem identified, one primary objective, eight theoretical objectives and seven empirical objectives were formulated in Section 1.3. The hypotheses formulated in Chapter 5 are set out in Section 1.4. The remainder of the chapter provided a summary of the research methodology (Section 1.5) and a discussion of the ethical considerations (Section 1.6) of the study.

The purpose of Chapter 2 was to address the first four theoretical objectives of the study in the form of a literature review. The concept of entrepreneurship is explained in Section 2.2, with particular emphasis on entrepreneurship in South Africa and entrepreneurship in the Netherlands. In Section 2.3, the importance of entrepreneurship is described. This was followed by a review of the entrepreneur in Section 2.4 and a discussion of entrepreneurship education followed in Section 2.5. In Section 2.6, the entrepreneurial process was discussed. Female entrepreneurship and barriers female face when entering entrepreneurial activity was discussed in Section 2.7, while Section 2.8 describes the Generation Y cohort. The main findings from the literature reviewed in this chapter are that entrepreneurship is vital for economic development and job creation. The entrepreneur is an individual that contributes to economic growth and development. Generation Y is faced with unique challenges to be entrepreneurial. Entrepreneurial education can assist in promoting entrepreneurship to Generation Y that can help reduce unemployment.

Chapter 3 addressed the remaining two theoretical objectives of the study. This chapter began with a discussion on entrepreneurial intention in Section 3.2. In Section 3.3, the available entrepreneurial intention models in the literature are discussed, including the predominant models, model of entrepreneurial event and theory of planned behaviour. Section 3.4 provided a discussion on the determinant factors of entrepreneurial inclination, namely entrepreneurial motivation (3.4.1), barriers towards entrepreneurship (3.4.2) and attitude towards entrepreneurship behaviour (3.4.3). A model of entrepreneurial inclination is proposed (Section 3.5). The main findings of the literature

reviewed in this chapter are that an entrepreneur is considered to be an agent who intentionally makes things happen by his or her actions. Intentions are the best predictor for planned behaviour. Two models for entrepreneurship intention are discussed in this chapter, namely model for entrepreneurial event (Figure 3.1) and theory of planned behaviour (Figure 3.2). Entrepreneurs would not be entrepreneurs without motivational factors that motivate them to be entrepreneurs. A model of the entrepreneurial motivation process (Figure 3.3) is discussed. Further, in this chapter it was stated that an entrepreneur faces substantial risks to entrepreneurship and different barriers effect individuals to act entrepreneurially. An individuals' attitude influences him or her to get involved in entrepreneurship.

In Chapter 4, the research methodology followed in the empirical part of the study is described. A descriptive research design guided the study (Section 4.2). The target population comprised full-time undergraduate female Generation Y students between the ages of 18 and 24 years who were enrolled at a South African HEI and a Netherland HEI in 2013 (Section 4.4.1). The judgement sampling method (Section 4.4.3) was employed in this study to narrow down the 26 registered South African public HEIs and the 56 registered public HEIs situated in the Netherlands to two institutions in the Gauteng province of South Africa and two institutions in the North-easternmost province of the Netherlands. The HEIs in South Africa consisted of one traditional university and one university of technology. In the Netherlands, the HEIs consisted of one academic university and one university of applied sciences. Thereafter, two sample groups were selected, namely Sample SA and Sample NL. For Sample SA, a non-probability convenience sample of 400 undergraduate Generation Y female students in South Africa was selected. For Sample NL, 400 undergraduate Generation Y female students in the Netherlands (200 per HEI) was drawn (Section 4.4.4). As such, the study utilised a multi cross-sectional approach. The data were collected using a self-administered questionnaire comprising a scale that was adapted from an existing validated scale (Section 4.5). The statistical methods applied in this study are reviewed in Section 4.9 and include exploratory factor analysis (Section 4.9.1), internal-consistency reliability (Section 4.9.2) and validity measures (Section 4.9.3), descriptive statistics (Section 4.9.4), logistic regression analysis (Section 4.9.5) and two independent-samples t-tests (Section 4.9.6).

Against the background of Chapter 4, the empirical findings of the study are reported in Chapter 5. These results are in accordance with the empirical objectives formulated at the beginning of the study in Section 1.3.3.

### 6.3 MAIN FINDINGS OF THE STUDY

The main findings in this study are presented in order to meet the following empirical objectives:

- Determine female Generation Y students' entrepreneurial interest.
- Determine female Generation Y students' entrepreneurial motivation.
- Determine female Generation Y students' perceived personal barriers to entrepreneurship.
- Determine female Generation Y students' perceived business environment barriers to entrepreneurship.
- Determine female Generation Y students' entrepreneurial attitude.
- Empirically test a proposed logistic regression model of the determinants of female Generation Y students' inclination towards entrepreneurship.
- Determine whether female Generation Y students registered at South African HEIs differ from those registered at HEIs in the Netherlands in terms of their entrepreneurial interest, entrepreneurial motivation, perceived personal barriers, perceived business environment barriers and entrepreneurial attitude.

In order to address the first empirical objective, the frequencies for the responses pertaining to the question on entrepreneurial interest were computed. The results indicate that the majority of participants in both Sample SA (Section 5.5.2) and Sample NL (Section 5.5.3) reported being interested in entrepreneurship.

An exploratory principle components analysis (Section 5.6) was conducted on scaled items pertaining to the possible determinants of entrepreneurial inclination and produced 10 factors, namely independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes and negative attitudes. These ten factors explained 61.90 percent of the total variance in female Generation Y students' perceived determinants of entrepreneurial inclination.

Descriptive statistics (Section 5.8) were computed to address empirical objectives 2-5. Means in the agreement area of the five-point Likert scale were recorded on all factor-related items. For the total sample of participants (Section 5.8.1), the highest mean was recorded on independence motives, which is in line with the results of a study conducted by Malebane (2014) who found that independence is the primary reason explaining why

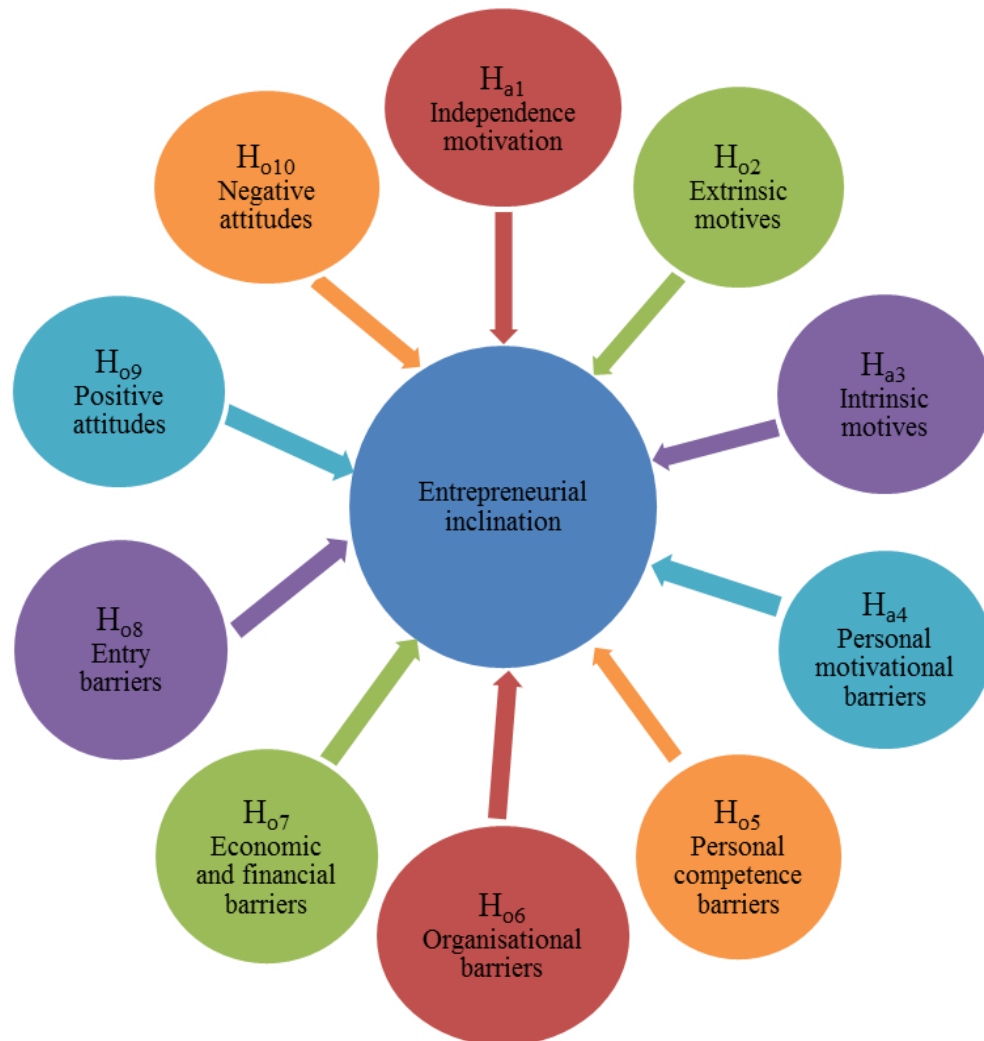
individuals are entrepreneurially inclined. The second highest mean was recorded on positive attitudes, which is supported by the findings of Karhunen and Ledyeva (2010), who indicate that positive attitudes towards entrepreneurship is indicative of a positive attitude to become self-employed. The third highest mean was obtained for intrinsic and extrinsic motives respectively. This is similar to the findings of Benzing *et al.* (2009) who found that intrinsic and extrinsic motives are positive drivers of entrepreneurship. This suggests that female Generation Y students like the freedom afforded by being an entrepreneur, recognise the benefits of entrepreneurship, see it as rewarding and view it as suiting their personalities and skills. The lowest means were recorded for negative attitudes, which is consistent with those of Ali *et al.* (2011). The low means recorded on negative attitudes, personal competency barriers and organisational barriers suggests that female Generation Y students do not perceive entrepreneurs as being unethical, nor do they perceive that they lack in the personal competencies required to be a successful entrepreneur or that they will face any undue organisational barriers in terms of legal, licencing or labour difficulties.

Correlation analysis (Section 5.9) was performed based on the factors extracted from the exploratory factor analysis. This was done to aid the logistic regression modelling analysis, where a regression model was developed for the purpose of establishing the causal relationships amongst these factors. The results from the correlation analysis indicated no obvious evidence of multi-collinearity between the predictors. As such, logistic regression analysis on the proposed model was deemed suitable.

Logistic regression analysis (Section 5.10.1) was carried out to address the sixth empirical objective of testing the proposed model of the determinants of female Generation Y students' inclination towards entrepreneurship. The regression model consisted of 10 possible determinants of entrepreneurial inclination, namely independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, economic and financial barriers, entry barriers, positive attitudes and negative attitudes, as well as one possible outcome, namely the dependent variable pertaining to interest versus non-interest in entrepreneurship. Once the goodness-of-fit of the logistic model was determined, it was concluded that the regression model was able to differentiate between participants' with an entrepreneurial interest and those with no entrepreneurial interest. As indicated in Section 5.10.1, independence motives (Factor 1) and intrinsic motives (Factor 3) had a significant positive influence on entrepreneurial interest, whereas personal motivational barriers (Factor 4) had a significant negative influence on entrepreneurial interest.

However, the influence of economic and financial barriers (Factor 7) and positive attitudes (Factor 9) while positive, were not significant. Similarly, the influence of extrinsic motives (Factor 2), personal competence barriers (Factor 5), organisational barriers (Factor 6), entry barriers (Factor 8) and negative attitudes (Factor 10) were negative but not significant.

As such, the findings of this study suggest that independence motives, intrinsic motives and personal motivational barriers have a significant influence on female Generation Y cohort members' entrepreneurial interest. This is in line with the findings of studies conducted by Venesaar *et al.* (2006) who found independence motives influence entrepreneurial interest, as well as with Sivarajah and Achchuthan's (2013) findings, which indicate that intrinsic motives are a key determinant of entrepreneurial intention amongst undergraduate students. In addition, the findings of this study suggest that economic and financial barriers, positive attitudes, extrinsic motives, personal competence barriers, organisational barriers, entry barriers and negative attitudes do not have a significant influence on female Generation Y cohort members' entrepreneurial interest. These results are in keeping with the study of Stamboulis and Barlas (2014) who found personal motivational barriers have a negative influence on an individual to be entrepreneurial. Therefore, in accordance with the findings of this study, the model presented in Figure 6.1 explains the determinants of female Generation Y students' inclination towards entrepreneurship.



Ho: Null hypothesis not rejected

Ha: Alternative hypothesis concluded

**Figure 6.1 Determinants of Generation Y female students' inclination towards entrepreneurship**

Following the logistic regression analysis, a two-independent samples t-test was conducted in order to address the last empirical objective pertaining to entrepreneurial inclination. As is evident from Table 5.11, the findings of this study indicate no statistically significant difference between South African and Dutch female students concerning perceived economic and financial barriers as a determinant of entrepreneurial inclination was found. However, in comparison to Sample NL, South African female Generation Y students scored a statistically significant higher means for independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, entry barriers, positive



attitudes and negative attitudes (Section 5.10.2). These findings are similar to the findings of a number of previous studies (Sjöstrand & Shadloo, 2013; Davey, *et al.* 2011; Iakovleva, *et al.* 2011) where it was found that individuals from emerging economies are more entrepreneurially inclined compared to individuals from developed countries.

Concerning Sample SA (Section 5.8.2), the highest mean was recorded on independence motives, followed by positive attitudes, extrinsic and intrinsic motives. The lowest means were recorded for negative attitudes, personal competency barriers and organisational barriers. This infers that female Generation Y students in South Africa like the freedom afforded by being an entrepreneur. However, the low means recorded on negative attitudes, personal competency barriers and organisational barriers suggests that they do not perceive becoming an entrepreneur as being problematic, nor do they perceive that they lack in the personal competencies required to be a successful entrepreneur. Interestingly, they also do not perceive that they will face any undue organisational barriers in terms of legal, licencing or labour hurdles. Similarly for Sample NL (Section 5.8.3), the highest mean was recorded on independence motives. This suggests that female Generation Y students in the Netherlands also like the freedom afforded by being an entrepreneur. The lowest means were recorded for negative attitudes, entry barriers and personal competence barriers, suggesting that they also do not perceive becoming an entrepreneur as being problematic, nor do they think that they lack in the personal competencies required to be a successful entrepreneur.

The following section explains the contribution made by this study.

#### **6.4 CONTRIBUTION OF THE STUDY**

The findings of this study contribute to the limited literature available on comparative studies between emerging and developed economies focusing on Generation Y female students' inclination towards entrepreneurship. This study contributed to the body of knowledge in the area of female entrepreneurial inclination by first empirically testing a model of factors determining the entrepreneurial inclination amongst female Generation Y students in an emerging and developed economy, namely South African and the Netherlands, and secondly, by comparing the identified factors that influence inclination towards entrepreneurship. It is suggested that the determinants comprised independence motivation, intrinsic motives and personal competence barriers. Importantly, the results also found that the South African female Generation Y students perceived independence motives, extrinsic motives, intrinsic motives, personal motivational barriers, personal competence barriers, organisational barriers, entry

barriers, positive attitudes and negative attitudes to be more important determinants of entrepreneurial inclination than their Dutch counterparts did. This model represents an important tool for predicting the Generation Y female student cohort's entrepreneurial inclination in the South African and the Netherlands context. The model may add value in predicting other race and age cohorts' inclinations. In addition, the recommendations discussed in the following section will enable HEIs and industry professionals, such as business incubator managers, academics and incubator managers to tailor marketing strategies designed to stimulate interest in entrepreneurship as well as tailor entrepreneurship programmes towards the female generation cohort in South Africa and the Netherlands.

## **6.5 RECOMMENDATIONS**

In accordance with the findings of this study, the following section outlines the recommendations to stimulate entrepreneurship and convert entrepreneurial interest into action.

### **6.5.1 Stimulate female entrepreneurship**

The findings of this study suggest that female Generation Y students in both South Africa and the Netherlands are inclined towards entrepreneurship. While the number of female entrepreneurs is growing, there continues to be a considerable gap between men and women starting and running a business successfully (Alam *et al.*, 2010:171). Evidence from the literature suggests that more attention should be given to the economic and social phenomenon of female entrepreneurship in order for female entrepreneurs to succeed (Montenegrin Employers Federation, 2013:11).

Female empowerment is increasing, as females are labelled just as important for the economic growth of a country as their male counterparts (Doepke & Tertilt, 2014:1). Most support for female entrepreneurs today addresses existing start-ups, either through specific programmes directed at females or through the overall support structures for start-ups, such as government support (Iakovleva *et al.*, 2013:316). However, access to mainstream support is indirectly gender biased because certain industries and part-time entrepreneurs are excluded (Vossenbergh, 2013:21).

Furthermore, business organisations such as chambers of commerce, business support agencies and associations have to adapt their approaches towards female entrepreneurs, ensuring that they address their needs without an indirect gender bias. Support measures encouraging females to start their own businesses might be more

appropriate as this indicates a specific role for government in creating adequate political and socio-economic framework conditions, which includes measures that facilitate their access to resources.

It is also suggested that females receive training and education that will assist them in improving their level of knowledge and aid them in following entrepreneurship as a career path. The number of female entrepreneurs is growing steadily but their ability to survive and grow will require continuous learning (Kickul *et al.*, 2007:16). The effective development of start-up female entrepreneurs may be met by mentoring programmes that serve to encourage them and provide on-going support. Research has demonstrated that mentors provide added value interventions that are likely to bring about long-term benefits to both mentees and society at large (Hall, 2003:3).

### **6.5.2 Embrace entrepreneurship in emerging economies**

In this study, the participants residing in the South African emerging economy viewed entrepreneurship as a career path more positively than their counterparts' residing in the Dutch developed economy. These findings support the literature that indicates that entrepreneurship may prosper in more economic environments that are turbulent and that a combination of an uncertain future together with constantly new emerging market opportunities may encourage young people in entrepreneurial activities (Steenkamp *et al.*, 2011:49).

While individuals in emerging economies may face greater constraints than their counterparts in developed economies, these may be negated by greater perceived opportunities arising from entrepreneurial behaviour and cultural factors fuelling entrepreneurial intentions (Nguyen *et al.*, 2009:33). The entrepreneurial intentions of a nation are dependent upon the dynamism of an economic environment and possibly on risk-perceiving behaviours (Iakovleva *et al.*, 2011:353). Developed economies are associated with excessively stable or socialistic social systems, which often are viewed as a natural barrier to the process of increasing the entrepreneurial potential of a nation. Entrepreneurship, in such situations, is largely opportunity-based (Warnecke *et al.*, 2012:3). This tends not to be the case in emerging economies where a greater pull of necessity-based entrepreneurship is present (Davey *et al.*, 2011:346), which are associated with innovativeness, proactivity, and risk-perceiving behaviour.

However, the value lies in the likely success of the start-ups and their possible contribution to the country's economic prosperity. Therefore, HEIs and industry

professionals from emerging economies need to focus on informing and educating young people not only about the importance of entrepreneurial start-ups but also on the necessary tools to succeed. Female inspiration, encouragement and motivation should be a continuous attempt.

### **6.5.3 Role of education in fostering female entrepreneurship**

Education is essential in fostering entrepreneurship (Iacobucci & Micozzi, 2012:674). In addition to business knowledge and skills, entrepreneurship education is concerned with developing certain beliefs, values and attitudes aimed at encouraging individuals to consider entrepreneurship as a career path (Raposo & Do Paco, 2011:454). Likewise, entrepreneurial education's goal is to promote creativity, innovation and self-employment (Sinkovec, 2013:2). Dickson *et al.* (2008) suggest that the higher the education levels in a country, the higher the rates of selecting entrepreneurship as a career path. Entrepreneurship education has an important role to play in promoting the spirit of entrepreneurship among individuals in a country (Iacobucci & Micozzi, 2012:674).

Therefore, it is suggested that entrepreneurship should be introduced from a young age to establish an entrepreneurial culture. Entrepreneurship may be introduced to the youth as early as the beginning of their education (Sinkovec, 2013:6). Teaching entrepreneurship as a subject from primary school up to university level may play an active role in creating a positive entrepreneurial culture in a country. Students with experience and exposure to entrepreneurship attitudes towards entrepreneurship that are more positive (Karhunen & Ledyeva, 2010:229). Taking into consideration that attitude is an essential determinant of entrepreneurial intention, educators should promote entrepreneurship education at all levels, namely in schools, universities and through different adult entrepreneurial programmes. As such, entrepreneurial awareness contributes to the establishment of an entrepreneurial culture. The awareness may be established through workshops, seminars, business competitions for primary schools, high schools and tertiary education students. Basic entrepreneurship needs to be implemented in schools to increase the number of entrepreneurs in a country. Introducing, these education tools to the female youth, specifically, will help contribute to more creative and self-confident female entrepreneurs.

Entrepreneurial education is a necessary instrument for promoting and influencing economic growth and development (Dutse, *et al.* 2013:7). The Dutch has a different entrepreneurial culture than South Africa, where in the Netherlands entrepreneurship forms part of their everyday life. In many primary schools throughout the Netherlands, a

programme called 'The Entrepreneurial City' was implemented. This programme encourages young students to take part in entrepreneurial activity, although it is based on a school project, for example to open a candy store. The main aim of the initiative is to get students to start thinking about entrepreneurship at a young age. At the secondary education level in the Netherlands, attempts have also been made to improve entrepreneurial awareness. A programme called 'Entrepreneurship: Something for me' was piloted by a secondary school teacher to stimulate young entrepreneurs to start a business and write a business plan (Ballanco, 2008:85).

It is seen in the literature, if individuals are exposed to entrepreneurial education, they will grasp the importance of entrepreneurship better and gain experience in various sections of entrepreneurship (Karhunen & Ladyaeva, 2010:229). Much more ambitious education initiatives should be included such as raising awareness and fostering an entrepreneurial spirit. Entrepreneurship can be introduced on first year level to students as part of career guidance to become self-employed. While entrepreneurship education provides theoretical knowledge, it may also assist students in developing an entrepreneurial mind-set through entrepreneurial skills, behaviours and attitudes, and training students' entrepreneurial abilities to support them to start their own business or engage in entrepreneurship activities.

Moreover, universities are the best environment where an entrepreneurial culture may be spread amongst students (Keat *et al.*, 2011:207). Therefore, it is important for universities to provide an entrepreneurial-friendly environment while establishing an entrepreneurial culture. Programmes to promote entrepreneurial activity in the university setting must focus on gender differences in perceptions and entrepreneurial culture. In addition, an effort must be made to decrease the fear females have towards the term entrepreneurship.

Universities should provide required networking opportunities with entrepreneurs and workshops, as well as help generate ideas to start-up businesses. This may include project work focusing on entrepreneurship. Universities have an important role to play in promoting entrepreneurship and the entrepreneurial curricula. Universities are needed in order to create an entrepreneurial environment in an effort to foster entrepreneurship among students.

Creating student-oriented entrepreneurship education by means of a university incubator may also assist with the promotion of female entrepreneurship. A centre of entrepreneurship or a entrepreneurship hub on campus that spreads entrepreneurial

services and support to all departments on campuses, for example by helping students to create trial firms or other start-up opportunities will not only develop the students' relevant skill set, but also enhance the perceived feasibility of self-employment. South African universities may consider either offering ideas for start-ups or teaching students about how to engage their creativity and innovativeness in developing their own ideas. In comparison, the Dutch universities should consider opening their services to student-run businesses; as such, activities may stimulate entrepreneurship across the whole student body. The creation of student-oriented entrepreneurship education might influence individuals to be more inclined to become involved in entrepreneurship.

More entrepreneurial programmes are required at school and university level. Entrepreneurship courses should focus on practical qualities of entrepreneurship, such as motivational factors and barriers entrepreneurs face when starting a business. Entrepreneurial education programmes should also aim to strengthen risk tolerance by educating students to take risks and to familiarise themselves with practical examples of successful entrepreneurs. In particular, female students should be encouraged to attend such courses. While many primary schools in South Africa has introduced initiatives such as a market day or entrepreneurship day in order to encourage entrepreneurial thinking amongst the youth, entrepreneurship initiatives are absent in most secondary schools. Moreover, entrepreneurship education is not integrated well in school curriculum, especially at secondary level, and educational systems educate traditional aspects of entrepreneurship rather to focus on innovation. Some universities offer programmes that are more focused on managing than creating an awareness to be entrepreneurial. More entrepreneurial focused programmes need to be introduced in schools and universities to create employers rather than just employees.

Greater encouragement and involvement by educators is essential in developing entrepreneurial mind sets and encouraging business start-ups amongst students (Hofer *et al.*, 2013:5). Educators often have limited skills on entrepreneurship and the creation of a business. It is vital to equip educators with the right skills and knowledge to educate the new generation that are entering the business environment. Generation Y is a digital generation and educators should be educated on different tools that can be used to educate this generation. Educators should indicate the advantages of starting a business and enable students to gain experience in successful start-ups. Educators lacking knowledge, skills and personal entrepreneurial experiences (Isaacs *et al.*, 2007:613) may experience difficulty in guiding students regarding launching a new business venture (Sinkovec, 2013:18). To this end, inviting successful entrepreneurs to share their

experiences with students may help to alleviate this problem and assist educators to demonstrate the real issues related to business start-up to students.

Further promotion of entrepreneurship to students could be facilitated through the discussion of role models in an education setting. The distance between the realities of a worldwide international success stories and students potentially could be bridged through the alignment of students with local entrepreneurs who could act as role models. In addition, to enable scholars and students interested in entrepreneurship to pursue their business ideas into reality, simulations and experimentation from business start-up projects to liquidation may be developed, together with providing internal support and frameworks.

In addition, governments should promote and advertise successful entrepreneurship, from the point when an individual start studying entrepreneurship up to the point to business start-up. At the same time, government officials in both developed and emerging countries need to understand clearly that government initiatives will affect business formations only if these initiatives affect attitudes and motivate young individuals to business start-up.

#### **6.5.4 Role of the South African government in fostering female entrepreneurship**

The findings of this study suggest that female Generation Y students in South Africa have favourable attitudes towards entrepreneurship. While the South African Government has introduced various initiatives to support female entrepreneurs in the country such as the South African Women Entrepreneur's Network (SAWEN), Technology for Women in Business (TWIB), Isivande Women's Fund, Bavumile, Khula Enterprise Finance Limited and Ntsika Enterprise Promotion Agency (Mandipaka, 2014), more should be done to promote awareness and access to such initiatives. In fostering female entrepreneurship effectively, the South African government should establish more programmes and initiatives to establish an entrepreneurial culture amongst female students. Governments may fund various entrepreneurial programmes and initiatives on primary and secondary school level in order to ensure effective female entrepreneurial education and training, fund the introduction of entrepreneurial subjects in curricula, motivate and support teachers with different entrepreneurial programmes, workshops and activities as well as offer simulations and experimentation projects.

Female entrepreneurs face numerous barriers when they enter the business world (Nieman & Nieuwenhuizen, 2014). The greatest barriers are lack of financial resources (Cantwell, 2014) and gender inequality (Mandipaka, 2014). This study showed that female Generation Y students perceive personal motivational barriers to have a significant effect on the inclination towards entrepreneurship. Governments can decrease these barriers by for examples have more business-friendly laws, avoid complicated business registering processes and avoid corruption. For South Africa, to enhance female entrepreneurship the infrastructure of the country should be adapted to give females easy access to business capital. In the Netherlands, the government created a positive entrepreneurial climate where financial capital is available and such barriers of entrepreneurship for young entrepreneurs are diminished (Bosma *et al.*, 2002). Schools and universities should focus on gaining the support of local businesses to introduce business competitions aimed at female students. The private sector can support such initiatives, by providing training, mentoring and financial grants. In return, initiatives such as simulations, projects and competitions may help females to start their own businesses and in return contribute to the economic development of the country. Although a lot has been done in South Africa to address gender issues, South African females are still affected by the gender inequality phenomenon (Mandipaka, 2014). Government needs to create a culture where females are viewed equally in all industry sectors.

Having high entrepreneurial intention alone may not be enough, as the desire should be transformed into action. Thus, there is an urgent need for businesses in the private sector as well as the South African Government to focus their attention to diminish the barriers that are preventing females from becoming entrepreneurs. To enhance funding and networking, the government needs to ensure enough funds are allocated to entrepreneurs and create networking opportunities among local businesses, scholars and students. It is important for the government and universities to understand how to develop future female entrepreneurs even while they are still students. Activities to improve education, infrastructure, legal conditions and financial support for potential business founders should be expanded further. A proper support system, entrepreneurial education and the development of knowledge and skills, and new government policies may go a long way in making graduates to succeed in their entrepreneurial businesses.



### **6.5.5 A caveat**

Given the benefits associated with having a strong entrepreneurial culture, it is indeed encouraging that the findings of this study suggest that female Generation Y students in both South Africa and the Netherlands are inclined towards entrepreneurship. However, it is important to reflect on the possible reasons why females in an emerging economy, such as South Africa, seem to be significantly more enamoured with the benefits associated with being an entrepreneur, as well as significantly less daunted by the possible barriers that entrepreneurs face than their counterparts in the developed economy of the Netherlands. As an emerging economy, South African faces several socio-economic problems, most specifically high unemployment and poverty. There may be unrealistic expectations that entrepreneurship offers an all-fix solution and a guaranteed road to success. Government itself may be partially to blame for creating the impression that entrepreneurship is the route to economic freedom. The caveat here is that entrepreneurship requires hard work, determination, self-motivation, persistence and a great deal of resilience. The barriers that entrepreneurs face are often very daunting and should be taken very seriously. Moreover, the financial rewards of being an entrepreneur often take many years to accrue, and sometimes lead to financial losses. Often, entrepreneurial failure has to do with circumstance rather than ability. For example, in South Africa several small businesses have experienced financial losses due to the country's unreliable power supply. Therefore, this study recommends that programmes geared at equipping people with entrepreneurial skills offer a balanced approach that not only highlights the benefits of being an entrepreneur but also indicates the risks involved in such ventures, including the relevant skills in how to overcome these challenges.

The following section explains the limitations and future research opportunities for the study.

## **6.6 LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES**

This study measured the inclination of Generation Y female students towards entrepreneurship. As with any other study, this study had certain limitations that may present several future research opportunities.

A non-probability convenience sampling method was utilised to select the sample. Despite the inclusion of a several demographic questions to determine the extent to which the sample was representative of the target population, care should be taken in

generalising the results to the population (Section 4.4.3). In addition, quantitative research was used in this study (Section 4.3). Future research utilising qualitative research may provide a more accurate reflection of the extent to which the factors identified in this study influence students' inclination towards entrepreneurship. This study relied on questionnaires to measure inclination. Moreover, this study undertook a single cross-sectional research design (Section 4.3). Future research may use a longitudinal research design; this may provide valuable information regarding any changes in the determinant factors that influence Generation Y female students' inclination towards entrepreneurship. An observational research approach may provide a more accurate measure of student inclination towards entrepreneurship.

Future research directed at testing the proposed inclination model amongst non-students and entrepreneurs of South Africa and Netherland Generation Y cohort, as well as amongst other generational cohorts would also contribute to the literature on South Africa and the Netherland's propensity to be inclined to entrepreneurship. Future research should also examine the impact of other institutional factors such as the role of government on entrepreneurial inclination. Role models that inspire students to be entrepreneurial should be identified and the potential differences between the types of role models, as this was thought to provide further insight into the attractiveness of entrepreneurial behaviour. These responses may provide ideas and initiatives to be used in entrepreneurship education.

## **6.7 CONCLUSION**

In conclusion, entrepreneurship is vital for economic development of a country. Promoting entrepreneurship to female students can ensure positive growth and job creation. The promotion of entrepreneurship to female students is important as female entrepreneurs have evolved quite a lot over the last few decades. The determinant factors and intention model proposed in this study can help researchers, educators, government and marketers understand female inclination towards entrepreneurship and how to promote or market the concept of entrepreneurship to them and different segments of the population.

Moreover, the Dutch population has a different culture on entrepreneurship, a higher passion for the business world and consider their entrepreneurial principles more seriously. More importantly, the Dutch youth are raised to be innovative thinkers from an early stage in life. Conversely, the South African government is constantly introducing initiatives to promote entrepreneurial activity, which should continue, as it is assisting in

developing South African youths' perception on entrepreneurial activity, the economic health of the country and uplifting unemployment levels.

## BIBLIOGRAPHY

---

Acar, A.B. 2014. Do intrinsic and extrinsic motivation factors differ for Generation X and Generation Y. *International Journal of Business and Social Science*, 5(5):12 – 20.

Acs, A.J. & Szerb, L. 2011. The global entrepreneurship and development index for the Netherlands: The analysis of the entrepreneurial position of the Netherlands. [http://gedi.mobility-labs.com/wp-content/uploads/2011/05/Acs\\_en\\_Szerb\\_GEINDEX\\_Netherlands1.pdf](http://gedi.mobility-labs.com/wp-content/uploads/2011/05/Acs_en_Szerb_GEINDEX_Netherlands1.pdf). Date of access: 10 Feb 2014.

Acs, Z. 2006. How is entrepreneurship good for economic growth? *Innovations*, 1(1):97 – 107.

Acs, Z. & Virgill, N. 2009. Entrepreneurship in developing countries. *Jena economic research papers*. [https://www.econstor.eu/dspace/bitstream/10419/31789/1/597\\_772908.PDF](https://www.econstor.eu/dspace/bitstream/10419/31789/1/597_772908.PDF). Date of access: 25 Aug 2014.

Acs, Z.J. & Amoros, J.E. 2008. Introduction: The start-up process. *Estudios de Economia*, 35(2):121 – 132.

Acs, Z.J. & Audretsch, D.B. 2006. Handbook of entrepreneurship research: An interdisciplinary survey and introduction. 2nd ed. <http://www.springer.com/gp/book/9781441911902>. Date of access: 2 May 2015.

Adema, W., Ali, N., Frey, V., Kim, H., Lunati, M., Piacentini, M & Queisser, M. 2014. Enhancing Women's Economic Empowerment through entrepreneurship and business leadership in OECD countries. [http://www.oecd.org/gender/Enhancing%20Women%20Economic%20Empowerment\\_Fin\\_1\\_Oct\\_2014.pdf](http://www.oecd.org/gender/Enhancing%20Women%20Economic%20Empowerment_Fin_1_Oct_2014.pdf). Date of access: 5 Aug 2014.

Agholor, E.D., Smith, W., Akeem, A.O., & Serik, I.I. 2015. Challenges faced by women entrepreneurs and strategies adopted by women entrepreneurs to ensure small business success in Nkonkobe Municipality South Africa. *Journal of Economics*, 6(1):37 – 49

Ajzen, I. 1991. The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes*, 50(2):179 – 211.

Ajzen, I. 2011. The theory of planned behaviour: Reactions and reflections. *Psychology and Health*, 26(9):1113 – 1127.

Ajzen, I. & Fishbein, M. 1980 Understanding attitudes and predicting social behaviour. Englewood-Cliffs, NJ: Prentice-Hall.

Alam, S.S., Jani, M.F.M. & Omar, N.S. 2010. An empirical study of success factors of women entrepreneurs in Southern Region in Malaysia. *International Journal of Economics and Finance*, 3(2):166 – 175.

Alecchi, B.A. & Radovic-Markovic, M. 2013. Women and entrepreneurship: Female durability, persistence and intuition at work. <http://www.ashgate.com/isbn/9781409466185>. Date of access: 5 Aug 2015.

Ali, A., Topping, K.J. & Tariq, R.A. 2011 . Entrepreneurial attitudes among potential entrepreneurs. *Pak. J. Commer. Soc. Sci*, 5(1):12 – 46.

Allen, I. E., Elam, A., Langowitz, N. & Dean, M. 2008. The 2007 Global Entrepreneurship Monitor Report on Women and Entrepreneurship. Wellesley, MA: Babson College.

Alport, G. W. 1935. Attitudes. *In* C. Murchison handbook of social psychology.

Anantatmula, V.S. & Shrivastav, B. 2012. Evolution of project teams for Generation Y workforce. *International Journal of Managing Projects in Business*, 5(1):9 – 26.

Avnimelech, G., Zelekha, Y. & Sharabi, E. 2013. The effect of corruption on entrepreneurship in developed vs non-developed countries. *International Journal of Entrepreneurial Behaviour & Research*, 20(3):237 – 262.

Baba, G.K. 2013. The challenges of entrepreneurship development in Nigeria and way forward. *Journal of Business and Organisational Development*, 5(1):54 – 64.

Bagozzi, R.P. 1992. The self-regulation of attitudes, intentions and behaviour. *Social quarterly*, 178 – 204.

Balaraman, P., Kosalram, K. & Kamalakannan. 2014. Essentials of Entrepreneurship for Emerging Economies. <http://www.ibimapublishing.com/journals/JSAR/AIP/640248/640248.pdf>. Date of access: 11 Oct 2015.

Ballanco, M. 2008. The state of entrepreneurship in Belgium and the Netherlands. <http://martindale.cc.lehigh.edu/sites/martindale.cc.lehigh.edu/files/TheState.pdf>. Date of access 10 Feb 2014.

Bates, B., Botha, M., Botha, S., Goodman, S., Ladzani, W., De Vries, C., De Vries, L., November, M. & Southey, L. 2005. Business management: Fresh perspectives. Cape Town: Pearson.

Baycan-Levent, T., Masurel, E. & Nijkamp, P. 2006. Gender differences in ethnic entrepreneurship. *International Journal of Entrepreneurship and Innovation Management*, 6(3):173 – 190.

Bayon, M.C., Vaillant Y. & Lafuente, E. 2015. Initiating nascent entrepreneurial activities: The relative role of perceived and actual entrepreneurial ability. *International Journal of Entrepreneurial Behaviour and Research*, 21(1):27 – 49.

Begley, T.M., Tan, W. & Schoch, H. 2005. Politico-economic factors associated with interest in starting a business: A multi-country study. *Entrepreneurship theory and practice*, 29(1):35 – 51.

Bekh, O. 2013. Training for women entrepreneurs: An imperative for growth and jobs. European training foundation. *Inform*: 14, 8 March.

Benzing, C., Chu, H.M. & Kara, O. 2009. Entrepreneurs in Turkey: A factor analysis of motivations, success factors and problems. *Journal of Small Business Management*, 47(1):58 – 91.

Berndt, A. & Petzer, D. 2011. Marketing research. Cape Town: Pearson.

Bessant, J. 2014. Democracy Bytes: New Media, New Politics and Generational Change. Melbourne: Palgrave Macmillan.

Bevan-Dye, A.L., Dhurup, M. & Surujlal, J. 2009. Black generation Y students' perceptions of national sport celebrity endorsers as role models: Sport Management. *African Journal for Physical Health Education, Recreation and Dance*, 1:172 – 188.

Bird, B. 1988. Implementing entrepreneurial ideas: The case for intentions. *Academy of Management Review*, 13: 442 – 454.

Black, H., Holman, T. Nadon, J., Otter, J. & Powell, J. 2012. Generations Y's traits, entitlement and career expectations. <http://seanlyons.ca/wp-content/uploads/2012/01/Black-et-al-20121.pdf>. Date of access: 31 Oct 2015.

Bodolica, V. & Spraggon, M. 2015. Life on heels and making deals: A narrative approach to female entrepreneurial experiences in the UAE. *Management Decision*, 53(5):984 – 1004.

Bosma, N. & Wennekers, S. 2004. Entrepreneurial attitudes versus entrepreneurial activities: Global Entrepreneurship Monitor 2003, The Netherlands. <http://www.entrepreneurship-sme.eu/pdf-ez/A200316.pdf>. Date of access: 23 Mar 2015.

Bosma, N., Stigter H. & Wennekers, S. 2002. The long road to the entrepreneurial society: Global Entrepreneurship Monitor 2001, The Netherlands. <http://www.entrepreneurship-sme.eu/pdf-ez/A200115.pdf>. Date of access: 23 Mar 2015.

Botha, E., Du Toit, D., Erasmus, A., Maree, T. & Mugobo, V. 2013. Consumer behaviour: South African psychology and marketing applications. Cape Town: Oxford University Press.

Botha, S. & Musengi, S. 2012. Introduction to Business Management fresh perspectives. 1st ed. Cape Town: Pearson.

Bouwer, S. 2015. Entrepreneurs in Water Governance: Strategies for Change. New York, NY: Springer Cham Heidelberg. <https://books.google.co.za/books> Date of access: 31 Oct 2015.

Brace, N., Kemp, R. & Snelgar, R. 2012. SPSS for psychologists. 5<sup>th</sup> ed. London: Palgrave Macmillan.

Brush, C.G., De Bruin, A. & Welter, F. 2009. A gender-aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, 1(1):8 – 24.

Buli, B.M. & Yesuf, W.M. 2015. Determinants of entrepreneurial intentions: Technical-vocational education and training students in Ethiopia. *Education and Training*, 57(8 – 9):891 – 907.

Burns, C.A. and Bush, F.R. 2014. Marketing Research. 7th ed. Edinburgh: Pearson Education.

Burrows, W. 2013. Insights on Generation Y: Students, colleagues and clients. <http://www.cmnzl.co.nz/assets/sm/8651/61/WendyBurrows.pdf>. Date of access: 13 Apr 2013.

Byabashaija, E., Katono, I. & Isabalija, R. 2011. The impact of college entrepreneurial education on entrepreneurial attitudes and intention to start a business in Uganda. *Journal of Developmental Entrepreneurship*, 16(1):127 – 144 .

Cahoon, J.M., Wadhwa, V. & Mitchell, L. 2010. The Anatomy of an entrepreneur: Are successful women entrepreneurs different from men? [http://www.kauffman.org/~media/kauffman\\_org/research%20reports%20and%20covers/2009/07/successful\\_women\\_entrepreneurs\\_510.pdf](http://www.kauffman.org/~media/kauffman_org/research%20reports%20and%20covers/2009/07/successful_women_entrepreneurs_510.pdf). Date of access: 5 Aug 2015.

Cameron, R., Ginsburg, H., Westhoff, M. & Mendez, R.V. 2012. Ajzen's theory of planned behaviour and social Media use by college students. *American Journal of Psychological Research*, 8(1):1 – 20.

Cant, M., Gerber-Nel, C., Nel, D. & Kotze, T. 2008. Marketing research. 3rd ed. Pretoria: New Africa Books.

Cantwell, M. 2014. 21<sup>st</sup> century barriers to women's entrepreneurship. Majority report of the U.S. senate committee on small business and entrepreneurship. <http://www.microbiz.org/wp-content/uploads/2014/07/21st-Century-Barriers-to-Womens-Entrepreneurship.pdf>. 31 Oct 2015.

Cardon, M.S., Wincent, J., Singh, J. & Drnovsek, M. 2009. The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3):511 – 532.

Carree, M.A. & Thurik, A.R. 2010. The impact of entrepreneurship on economic growth. *Handbook of entrepreneurship research*. New York: Springer. [http://link.springer.com/chapter/10.1007%2F978-1-4419-1191-9\\_20#page-1](http://link.springer.com/chapter/10.1007%2F978-1-4419-1191-9_20#page-1). Date of access: 11 Oct 2015.

Carayannis, E.G., Evans, D. & Hason, M. 2003. A cross-cultural learning strategy for entrepreneurship education: Outline of key concepts and lessons learned from a comparative study of entrepreneurship students in France and the U.S. *Technovation*, 23(9), 757:771.

Casrud, A. & Brannback, M. 2011. Entrepreneurial motivations: What do we still need to know ? *Journal of Small Business Management*, 49(1): 9 – 26.

Central Registration of Higher Education Programmes. 2015. <http://ghana.nlembassy.org/you-and-netherlands/study-in-the-netherlands/check-before-you-register-for-a-study-programme.html>. Date of access: 23 Sept 2015.



- Chalera, C.S. 2007. An impact analysis of South Africa's national strategy for the development and promotion of SMMEs. Pretoria: University of Pretoria (Thesis – PhD).
- Chell, C. 2001. Entrepreneurship: Globalisation, innovation and development. 1st ed. London, UK: Thompson learning.
- Chimucheka, T. 2014. Entrepreneurship Education in South Africa. *Mediterranean Journal of Social Sciences*, 5(2):403 – 416.
- Clark, L.A. & Watson, D. 1995. Constructing validity: basic issues in objective scale development. *Psychological Assessment*, 7(3):309-319.
- Co, M.J., Groenewald, J., Mitchell, B., Nayager, T., Van Zyl, J., Visser, K., Train, W. & Emanuel, B. 2007. Entrepreneurship: fresh perspectives. Cape Town: Pearson.
- Co, M.J. & Mitchell, B. 2006. Entrepreneurship education in South Africa: A nation wide survey. *Education and Training*, 48(5):348 – 359.
- Comeau, J.D. & Tung, L.C. 2013. Re-defining the concepts of generational labelling perspective from Malaysia. *Journal of Science and Technology*, 3(3):259 – 276.
- Costa, Jr, P., Terracciano, A. & McCrae, R.R. 2001. Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of personality and social psychology*, 81(2):322
- Coulter, M. 2003. Entrepreneurship in action. 2nd ed. New Jersey: Prentice Hall.
- Culbertson, H.M. 1968. What is an attitude? *Journal of Cooperative Extension*, 6(2):79 – 84.
- Cullens, J. 2013. Gen Y and the world of work. *Hays recruiting experts worldwide*. [https://www.hays.nl/cs/groups/hays\\_common/@nl/@content/documents/webassets/hays\\_1243981.pdf](https://www.hays.nl/cs/groups/hays_common/@nl/@content/documents/webassets/hays_1243981.pdf). Date of access: 31 Oct 2015.
- Davey, T., Plewa, C. & Struwig, M. 2011. Entrepreneurship perceptions and career intentions of international students. *Education and Training*, 53(5):335 – 352.
- Davidsson, P. 1995a. Culture, structure and regional levels of entrepreneurship. *Entrepreneurship and Regional development*, 7(1):41 – 62.

Davidsson, P. 1995b. Determinants of entrepreneurial intentions. *Paper presented at the annual; meeting of the Rent IX workshop, Piacenza Italy*. <http://eprints.qut.edu.au/2076/>. Date of access: 2 May 2015.

De Coulon, S. & Baltar, F. 2013. Understanding the dynamic of the entrepreneurial process: The innovative entrepreneur and the strategic decisions. *Global conference on Business and finance proceedings*, 8(1):322 – 331.

De Faoite, D., Henry, C., Johnston & van der Sijde, P. 2004. Entrepreneurs' attitudes to training and support initiatives: Evidence from Ireland and The Netherlands. *Journal of Small Business and Enterprise Development*, 11(4):440 – 448.

De Mel, S., McKenzie, D. & Woodruff, C.M. 2009. Innovative firms or innovative owners? Determinants of innovation in micro, small and medium enterprises. *World Bank Policy Research Working Paper Series*. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1407952](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1407952). Date of access: 11 Oct 2015.

Deakins, D. & Freel, M.S. 2003. Entrepreneurship and small firms. 3rd ed. London: McGraw-Hill.

Deal, J.J., Altman, D.G. & Roggelberg, S.G. 2010. Millennials at work: What we know and what we need to do (if anything). *Journal Business Psychology*, 25:191 – 199.

Dekhordi, A.M., Sasani, A., Fathi, M. & Khanmohammadi, E. 2012. Investigating the effect of emotional intelligence and personality traits on entrepreneurial intention using the fuzzy DEMATEL method. *International Journal of Business and Social Science*, 3(13):286 – 296.

Delloite Millennial innovation survey. 2013. Summary of global findings. <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/dttl-millennial-innovation-survey.pdf>. Date of access: 13 Apr 2015.

Deng, S., Wang, X. & Alon, I. 2011. Framework for female entrepreneurship in China. *International Journal of Business and Emerging Markets*, 3(1):3 – 20.

Department of Trade and Industry Republic of South Africa. 2015. Financial incentives. <http://www.thedti.gov.za>. Date of access 22 Sept 2015.

Dickson, P.H., Solomon, G.T. & Weaver, K.M. 2008. Entrepreneurial selection and success: Does education matter? *Journal of Small Business and Enterprise Development*, 15(2):239 – 258.

Dioneo-Adetayo, E.A. 2012. Factors influencing attitude of youth towards entrepreneurship. *International Journal of Adolescence and Youth*, 13 (1 - 2):127 – 145. <http://www.tandfonline.com/doi/pdf/10.1080/02673843.2006.9747970> . Date of access: 11 Apr 2015.

Ding, W.W., Murray, F., Stuart, T.E. 2012. From Bench to Board: Gender differences in university scientists' participation in Corporate Scientific Advisory Boards. *Academy of Management Journal*, 56(5):1443 – 1464.

Doepke, M. & Tertilt, M. 2014. Does female empowerment promote economic development? *NBER Working paper series*, 1 – 69. <http://www.parisschool ofeconomics.eu/IMG/pdf/nber19888.pdf>. Date of access: 29 Apr 2015.

Dollinger, M.J. 1995. Entrepreneurship: Strategies and resources. 1st ed. Flossmoor, IL: Irwin / Austen Press.

Donatus, M.M.A. 2011. Challenges and barriers facing entrepreneurship development through public investment: A case of millennium development villages project in Rwanda – Mayange. Maastricht: Maastricht School of Management (Masters - Thesis).

Driessen, M.P. & Zwart, P.S. 2010. The role of the entrepreneur in small business success: The entrepreneurship scan. <http://www.ondernemerstest.nl/wp-content/uploads/2010/03/ICSBv5.pdf>. Date of access: 10 Nov 2015.

Drucker, P.F. 1985. Innovation and Entrepreneurship: Practice and Principles. 1st ed. New York: Prentice Hall.

Dutse, U.Y., Mamaki, U.P. & Djibo, I. 2013. Perception and attitude of students of tertiary institutions towards entrepreneurship education in Nigeria. *Journal of Humanities and Social science*, 15(3):5 – 8.

Dyck, B. & Neubert, M.J. 2009. Principals of management. 1st ed. London: Cengage Learning.

Dzisi, S. 2014. Youth entrepreneurship: Investigating obstacles to youth enterprise creation and development. *International Journal of Economics, Commerce and*

*Management*, 2(7):1 – 21. <http://ijecm.co.uk/wp-content/uploads/2014/07/2717.pdf>. Date of access: 31 Oct 2015.

Eckleberry-Hunt, J. & Tucciarone, J. 2011. The challenges and opportunities of teaching Generation Y. *Journal of Graduate Medical Education*, 3(4):458 – 461.

Eikhof, D.R., Summers, J. & Carter, S. 2013. Women doing their own thing: Media representations of female entrepreneurship. *International Journal of Entrepreneurial Behaviour & Research*, 19(5):547 – 564.

Ehmke, C. & Akridge, J. 2007. The elements of a business plan: First steps for new entrepreneurs. <https://www.extension.purdue.edu/extmedia/ec/ec-735.pdf>. Date of access: 11 Oct 2015.

Elam, C., Stratton, T. & Gibson, D.D. 2007. Welcoming a new generation to college: The millennial students. *Journal of college admission*, 20 – 25. <http://files.eric.ed.gov/fulltext/EJ783953.pdf>. Date of access: 13 Apr 2015.

Ellis, P.D. 2011. Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalisation. *Journal of International Business Studies*, 42(1): 99 – 127.

Elfving, J., Brännback, M., & Carsrud, A. 2009. Toward a contextual model of entrepreneurial intentions. *In Understanding the entrepreneurial mind*. New York: Springer.

Elmuti, D., Khoury, G & Omran, O. 2012. Does entrepreneurship education have a role in developing entrepreneurial skills and ventures' effectiveness. *Journal of Entrepreneurship Education*, 15(1):83 – 98.

Engle, R.L., Dimitriadi, N., Gavidia, J.V., Schlaegel, C., Delanoe, S., Alvarado, I., He, X., Buame, S. & Wolff, B. 2008. Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behaviour. *International Journal of Entrepreneurial Behaviour & Research*, 16(1): 35 – 57.

Erasmus, B., Strydom, J.W. & Rudansky-Kloppers, S. 2013: Introduction to business management. 9th ed. Cape Town: Oxford University Press.

Estrin, S. & Mickiewicz, T. 2011. Female entrepreneurship in developed and developing economies. *Small Business Economics*, 37(4):397 – 415.

European Commission enterprise and industry directorate-general. 2008. Entrepreneurship in higher education, especially within non-business studies. <http://ec.europa.eu/DocsRoom/documents/8969/attachments/1/translations/en/renditions/native>. Date of access: 3 Aug 2014.

European Economic Forecast. 2014. [http://ec.europa.eu/economy\\_finance/publications/european\\_economy/2014/pdf/ee2\\_en.pdf](http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee2_en.pdf). Date of access 5 Feb 2015.

Farouk, A., Ikram, A. & Sami, B. 2014. The influence of individual factors on the entrepreneurial intention. *International Journal of Managing Value and Supply Chains*, 5(4):47 – 57.

Fatoki, O. & Patswawairi, T. 2012. The motivations and obstacles to immigrant entrepreneurship in South Africa. *Journal of Social Science*, 32(2):133 – 142.

Fatoki, O.O. 2010. Graduate entrepreneurial intention in South Africa: Motivations and obstacles. *International Journal of Business Management*, 5(9):87 – 98.

Fatoki, O. & Oni, O. 2014. Students perceptions' of the effectiveness of entrepreneurship education at a South African university. *Mediterranean Journal of Social Sciences*, 5(20):585 – 591.

Fayolle, A. & Gailly, B. 2008. From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7):569 – 593.

Fayolle, A. & Klandt, H. 2006. International Entrepreneurial Education: Issues and Newness. Cheltenham, UK: Edward Elgar Publishing.

Female Entrepreneurship Index Report. 2015. The Global entrepreneurship and development institute. <http://thegedi.org/female-entrepreneurship-index-2015-report/>. Date of access: 23 Sept 2015.

Ferreira, J.J., Raposo, M.L., Rodrigues, R.G., Dinis, A. & do Paco, A. 2012. A model of entrepreneurial intention: An application of the psychological and behavioural approaches. *Journal of Small Business and Enterprise Development*, 19(3):424 – 440.

Field, A. 2011. Discovering statistics using SPSS. 3rd ed. London: Sage.

Fini, R., Grimaldi, R., Marzocchi, G.L. & Sobrero, M. 2009. The foundation of entrepreneurial intention. *In summer conference*, pp. 17 – 19.

Fishbein, M. & Ajzen, I. 1975. Belief, attitude, intention and behaviour: An introduction to theory and research. <http://people.umass.edu/ajzen/f&a1975.html>. Date of access: 19 Jun 2014.

Fry, R. 2015. This year, Millennials will overtake Baby Boomers. *Pew Research Center*. <http://www.pewresearch.org/fact-tank/2015/01/16/this-year-millennials-will-overtake-baby-boomers/>. Date of access: 23 Sept 2015.

Gallant M., Majumdar, S. & Varadarajan, D. 2010. Outlook of female students towards entrepreneurship: An analysis selection of business students in Dubai. *Education Business and Society: Contemporary Middle Eastern Issues*, 3(3):218-230.

Gandhi, D. & Sharma, V. 2014. Women Entrepreneurship: The emerging economic workforce in the 21 st century. *International Journal of Commerce Business Management*, 3(4):543 – 548.

Garba, A.S., Kabir, S. & Nalado, A.M. 2014. An assessment of students' entrepreneurial intentions in tertiary institution: A case of Kano state polytechnic, Nigeria. *International Journal of Asian Social Science*, 4(3):434 – 443.

Gartner, W.B. 1989. Who is an entrepreneur? Is the wrong question. *Entrepreneurship, Theory and Practice*, 12:47 – 68.

Giagtzi, Z. 2013. How perceived feasibility and desirability of entrepreneurship influence entrepreneurial intentions: A comparison between southern and northern European countries. Rotterdam: Erasmus University (Dissertation – Masters).

Gibcus, P., de Jong, P.M. & Kemp, R.G.M. 2006. Determinants of growth of start-ups in the Netherlands. <http://www.entrepreneurship-sme.eu/pdf-ez/N200517.pdf>. Date of access 19 May 2015.

Giles, M., McClenahan, C., Cairns, E. & Mallet, J. 2004. An application of the theory of planned behaviour to blood donation: The importance of self-efficacy. *Health Education Research*, 19(4):380 – 391.

Gill, A. & Biger, N. 2012. Barriers to small business growth in Canada. *Journal of Small Business and Enterprise Development*, 19(4):656 – 668.

Glass, A. 2007. Understanding generational differences for competitive success. *Industrial and Commercial Training*, 39(2):98 – 103.

Global Entrepreneurship Monitor (GEM). 2012. Women's report. *Babson College*.  
[http://www.babson.edu/Academics/centers/blank-center/globalresearch/gem/  
Documents/GEM%202012%20Womens%20Report.pdf](http://www.babson.edu/Academics/centers/blank-center/globalresearch/gem/Documents/GEM%202012%20Womens%20Report.pdf). Date of access: 29 Apr 2015.

Global Entrepreneurship Monitor (GEM). 2013. Global report. *Babson College*.  
[http://www.babson.edu/Academics/centers/blank-center/global-research/gem/  
Documents/GEM%202013%20Global%20Report.pdf](http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents/GEM%202013%20Global%20Report.pdf). Date of access: 29 Apr 2015.

Global Entrepreneurship Monitor (GEM). 2014. Global report. *Babson College*.  
[http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents  
/GEM%202014%20Global%20Report.pdf](http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents/GEM%202014%20Global%20Report.pdf). Date of access: 31 Oct 2015.

Gongxeka, V. 2012. Employee perception of self-employment. Port Elizabeth: Nelson Mandela Metropolitan University. (Dissertation – Masters).

Gonzalez-Alvarez, N. & Solis-Rodriguez, V. 2011. Discovery of entrepreneurial opportunities: A gender perspective. *Industrial Management and Data Systems*, 111(5):755 – 775.

Gorji, M., Siani, S., Khozain, A. & Nezamabad, M.N. 2012. The survey of barriers to individual entrepreneurship and their priority in men and women. *International Journal of Research in Management*, 2(2):97 – 107.

Gorji, M.B. & Rahimian, P. 2011. The study of barriers to entrepreneurship in men and women. *Australian Journal of Business and Management Research*, 1(9):31 – 36.

Guerrero, M., Rialp, J. & Urbano, D. 2008. The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, 4(1):35 – 50.

Guitjens, H. 2014. The future of business citizenship. Netherlands findings. *Peoples insight magazine*: (3):2, 22 Sept. [http://msl.nl/wp-content/uploads/Netherlands\\_22-09-14.pdf](http://msl.nl/wp-content/uploads/Netherlands_22-09-14.pdf). Date of access: 31 Oct 2015.

Guzmán-Alfonso, C. & Guzmán-Cuevas, J. 2012. Entrepreneurial intention models as applied to Latin America. *Journal of Organisational Change Management*, 25(5):721 – 735.

Hair, J.F., Wolfenbarger, M., Ortinau, D.J. & Bush, R.P. 2008. Essentials of marketing research. New York: McGraw-Hill.

Halkias, D., Nwajiuba, C., Harkiolakis, N. & Caracatsanis, S.M. 2011. Challenges facing women entrepreneurs in Nigeria. *Management Research Review*, 34(2): 221 – 235.

Hall, J.C. 2003. Mentoring and young people: A literature review. *Glasgow: The SCRE Centre, Faculty of Education, University of Glasgow*. <http://www.educationandemployers.org/wp-content/uploads/2014/06/mentoring-and-young-people-hall.pdf>. Date of access: 29 Apr 2015.

Hampel-Milagrosa, A., van Hong, P., Quoc, N.A. Thanh, N.R. 2010. Gender related obstacles to Vietnamese women entrepreneurs, Technical report. [https://www.unido.org/fileadmin/user\\_media\\_upgrade/What\\_we\\_do/Topics/Women\\_and\\_Youth/FMVIE09005\\_GOVERN\\_Report\\_final.pdf](https://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Women_and_Youth/FMVIE09005_GOVERN_Report_final.pdf). Date of access: 29 Apr 2015.

Hatala, J.P. 2008. Identifying barriers to self-employment: The development and validation of the barriers to entrepreneurship success tool. *Performance Improvement Quarterly*, 18(4):50 – 70.

Hession, J. 2009. Women in the modern workplace: Gender barriers to business start-ups. 1st ed. Newcastle, UK: Cambridge Scholars Publishing.

Heuer, A. & Kolvereid, L. 2014. Education in entrepreneurship and the theory of planned behaviour. *European Journal of Training and Development*, 38(6):506 – 523.

Hewitt, M. & van der Bank, J. 2011. Entrepreneurship defined. (*In van Aardt et al.*, ed. Entrepreneurship and new venture management. Cape Town: Oxford University Press. p. 4 – 14).

Hindle, K. & Klyver, K. 2007. Exploring the relationship between media coverage and participation in entrepreneurship: Initial global evidence and research implications. *International Entrepreneurship and Management Journal*, 3(2): 217 – 242.

Hisrich, R.D., Peters, M.P. & Shepherd, D.A. 2005. Entrepreneurship. 6th ed. New York: McGraw-Hill.

Hofer, A. & Potter, J. 2010. Universities, innovation and entrepreneurship: Criteria and examples of good practice, *OECD Local Economic and Employment Development (LEED) Working papers*, 2010/10, OECD Publishing. <http://www.oecd-ilibrary.org/content/workingpaper/5km7rq1xvnxp-en>. Date of access: 5 Feb 2015.



Hofer, A., Potter, J. Redford, D. & Stolt, J. 2013. Promoting successful graduate entrepreneurship at the Technical University Ilmenau, Germany, *OECD Local Economic and Employment Development (LEED) Working papers*, 2013/03, OECD Publishing. <http://www.oecd.org/leed-forum/publications/Promoting%20Successful%20Graduate%20Entrepreneurship%20at%20the%20Technical%20University%20Ilmenau.pdf>. Date of access: 1 Feb 2015.

Home coming revolution South Africa. 2015. *The brain gain company for Africa*. <http://homecomingrevolution.com/>. 31 Oct 2015.

Hormozi, A.M., Sutton, G.S., McMin, R.D. & Lucio, W. 2002. Business plans for new or small businesses: Paving the path to success. *Management Decision*, 40(8):755 – 763.

Horvath, Z. 2012. Entrepreneurship education, democratic empowerment and subjective well-being. (*In Knowledge and Learning: Global Empowerment, Proceedings of the Management, Knowledge and Learning International Conference*), pp 435 – 422.

Hosworth, C., Tempest, S. & Coupland, C. 2005 Rethinking entrepreneurship methodology and definitions of the entrepreneur. *Journal of Small Business and Enterprise Development*, 12(1):24 – 40.

Howe, N. & Strauss, S. 2003. Millennials go to college. *Executive summary*. [http://fys.utk.edu/wp-content/blogs.dir/108/files/2014/01/Howe\\_millennials.pdf](http://fys.utk.edu/wp-content/blogs.dir/108/files/2014/01/Howe_millennials.pdf). Date of access: 13 Apr 2015.

Howe, N. & Strauss, W. 2000. Millennials rising: The next great generation. New York: Vintage books.

Huckabay, C. 2015. Y-Gen females more confident than other Gens. *Daily briefing*: 19 Mar. <http://www.audiencescan.com/y-gen-females-more-confident-than-other-gens/>. Date of access: 31 Oct 2015.

Iacobucci, D. & Churchill, G.A. 2010. Marketing research: methodological foundations. 10th ed. Ohio: South-Western Cengage Learning.

Iacobucci, D. & Micozzi, A. 2012. Entrepreneurship education in Italian universities: Trend, situation and opportunities. *Education Training*, 54 (8 – 9):673 – 696.

Iakovleva, T., Kolvereid, L. & Stephan, U. 2011. Entrepreneurial intentions in developing and developed countries. *Education and Training*, 53(5): 353 – 370.

Iakovleva, T., Solesvik, M. & Trifilova, A. 2013. Financial availability and government support for women entrepreneurs in transitional economies: Cases of Russia and Ukraine. *Journal of Small Business and Enterprise Development*, 20(2):314 – 340.

Ianasi, C. & Pecingina, O. 2013. Entrepreneurship in the small companies with financial difficulties.

Iberkleid, D. 2010. Entrepreneurial attitudes towards social design patterns. Chapel Hill: University of Carolina. (Masters – Dissertation).

Irwin, D. & Scott, J.M. 2010. Barriers faced by SMEs in raising bank finance'. *International Journal of Entrepreneurial Behaviour & Research*, 16(3):245 – 259.

Isaacs, E., Visser, K., Friedrich, C. & Brijlal, P. 2007. Entrepreneurship education and training at the Further Education and Training (FET) level in South Africa. *South African Journal of Education*, 27:613 – 629.

Iskandarini. 2014. The impact of entrepreneurial barrier toward entrepreneurial intention for decreasing unemployment through community empowerment. The 5th Indonesia International Conference on Innovation, Entrepreneurship, and Small Business (IICIES 2013). *Procedia - Social and Behavioural Sciences*, 115:166 – 174.

Itani, H., Sidani, Y.M. & Baalbaki, I. 2011. United Arab Emirates female entrepreneurs: Motivations and frustrations. *Equality Diversity and Inclusion: An International Journal*, 30(5):409 – 424.

Jalivand, M.R. & Samiei, N. 2012. The impact of electronic word of mouth on a tourism choice: Testing the theory of planned behaviour (TPB). *Internet Research*, 22(5):591 – 612.

Jerinabi, U. & Santhi, P. 2012. Creativity, Innovation and entrepreneurship. New Delhi: Allied publishers.

Johansen, V., Schanke, T. & Clausen, T.H. 2012. Entrepreneurship education and pupils' attitudes towards entrepreneurs. [http://cdn.intechopen.com/pdfs/31837/InTechEntrepreneurship\\_education\\_and\\_pupils\\_attitudes\\_towards\\_entrepreneurs.pdf](http://cdn.intechopen.com/pdfs/31837/InTechEntrepreneurship_education_and_pupils_attitudes_towards_entrepreneurs.pdf). Date of access: 27 Mar 2015.

Jonas-Dwyer, D. & Pospisil, R. 2004. The millennial effect: Implications for academic development. <http://www.herdsa.org.au/wp-content/uploads/conference/2004/PDF/P050-jt.pdf>. Date of access: 13 Apr 2015.

Jordaan, A.J. 2014. Entrepreneurial self-efficacy, intrinsic motivation and entrepreneurial intention as antecedents of nascent necessity entrepreneur business start-up behaviour in South Africa: A longitudinal study. Adelaide: University of Adelaide. (Thesis – PhD).

Jowell, R. 2005. Scottish government social research group social science methods and series. <http://www.gov.scot/resource/doc/175356/0091396.pdf>. Date of access: 1 Nov 2015.

Kakarika, M. 2013. Staffing an entrepreneurial team: Diversity, breeds success. *Journal of Business strategy*, 34(4):31 – 38.

Kalkan, M. & Kaygusuz, C. 2012. The psychology of entrepreneurship. <http://cdn.intechopen.com/pdfs-wm/31831.pdf>. Date of access: 31 October 2015.

Kanchana, R.S., Divya, J.V. & Beegom, A.A. 2013. Challenges faced by new entrepreneurs. *International Journal of Current Research and Academic Review*, 1(3):71 – 78.

Karali, S. 2013. The impact of entrepreneurship education programs on entrepreneurial intentions: An application of theory of planned behaviour. Rotterdam: Erasmus University. (Masters – Thesis).

Karhunen, P. & Ledyeva, S. 2010. Determinants of entrepreneurial interest and risk tolerance among Russian University students: Empirical study. *Journal of Enterprising Culture*, 18(3):229 – 263.

Karimi, S., Chizari, M., Biermans, H.J. & Mulder, M. 2010. Entrepreneurship education in Iranian higher education: The current state and challenges. *European Journal of Scientific Research*, 48(1):35 – 50.

Katz, J. & Gartner, W.B. 1988. Properties of emerging organisations. *The Academy of Management Review*, 13(3):429 – 441.

Keat, O.Y., Selvarajah, C. & Meyer, D. 2011. Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(4):206 – 220.

Kennedy, E. 2013. The roles of Entrepreneurship Education in Ensuring Economic Empowerment and Development. *Journal of Business Administration and Education*, 4(1):35 – 46.

Kepler, E. & Shane, S. Are male and female entrepreneurs really that different ? 2007. *Office of Advocacy, US Small Business Administration*. <http://www.pw.seipa.edu.pl/s/p/artykuly/90/909/Female%20Entrepreneurs%20Different%20Shane%202007.pdf>. Date of access: 5 Aug 2015.

Kgagara, M.R. 2011. An assessment of the attitude towards entrepreneurship among higher education students in Sedibeng district. Potchefstroom: North-West University (Mini-dissertation – Masters).

Khalil, M.A. & Olafsen, E. 2010. Enabling innovation entrepreneurship through business incubation. Worldbank. <http://www.innovationfordevelopmentreport.org/Report2009/papers.html>. Date of access: 15 Jun 2015.

Khuong, M.N. & An, N.H. 2015. The factors affecting entrepreneurial intention of the students of Vietnam National University – A mediation analysis of perception toward entrepreneurship. *Journal of Economics, Business and Management*, 4(2):104 – 111.

Kickul, J., Gundry, L.K. & Iakovleva, T. 2007. Mentoring women entrepreneurs in emerging markets: Leveraging relationships, building confidence and creating wealth. Paper presented at the annual United States Association Small Business and Entrepreneurship Conference, Orlando, FL, 12 Jul.

Kilber, J., Barclay, A. & Ohmer, D. 2014. Seven tips for managing Generation Y. *Journal of Management Policy and Practice*, 15(4):80 – 91.

Kilborn, J.J. 2006. The hidden life of consumer bankruptcy reform: Danger signs for the new U.S. law from unexpected parallels in the Netherlands. *Vanderbilt Journal of Transnational law*, 39(1):77 – 124.

King, T. & Dennis, C. 2006. Unethical consumers, qualitative market research: *An International Journal*, 9(3):282 – 296.

Kingley, T.R., Josiam, B.M. & Lockett, F. 2010. Shopping behaviour and the involvement construct. *Journal of Fashion Marketing and Management: An International Journal*, 14(4): 562 – 575.

Kirkwood, J. 2009. Motivational factors in a push-pull theory of entrepreneurship: Gender in management. *An International Journal*, 24(5):346 – 364.

Klapper, L., Laeven, L. & Rajan, R. 2006. Entry regulation as a barrier to entrepreneurship. *Journal of Financial Economics*, 82:591 – 629.

Knabe, A. 2012. Applying Ajzen;s theory of planned behaviour to a study of online course adoption in public relations education. [http://epublications.marquette.edu/cgi/viewcontent.cgi?article=1186&context=dissertations\\_mu](http://epublications.marquette.edu/cgi/viewcontent.cgi?article=1186&context=dissertations_mu). Date of access: 12 May 2015.

Koe, W.L., Sa'ari, J.R., Majid, I.A. & Ismail, K. 2012. Determinants of entrepreneurial intention among millennial generation. The 2012 International Conference on Asia Pacific business Innovation and Technology Management, Pattaya, Thailand. *Procedia - Social and Behavioural Sciences*, 40:197 – 208.

Kolb, B. 2008. Marketing research: a practical approach. Los Angeles: Sage.

Kritikos, A.S. 2014. Entrepreneurs and their impacts on jobs and economic growth. <http://wol.iza.org/articles/entrepreneurs-and-their-impact-on-jobs-and-economic-growth.pdf>. Date of access 5 Feb 2015.

Kroth, M. 2007. Maslow-move aside! A heuristical motivation model for leaders in career and technical education. <http://scholar.lib.vt.edu/ejournals/JITE/v44n2/kroth.html>. Date of access: 12 May 2015.

Krueger, N.F. 1993. The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship, Theory and practice*, 18(1):5 – 21.

Krueger, N.F. & Brazeal, D.V. 1994. Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship, Theory and Practice*, 18:91 – 104.

Krueger, N.F. & Casrud, A.L. 1993. Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship and Regional Development*, 5(4):315 – 330.

Krueger, N.F., Reilly, M.D. & Carsrud, A.L. 2000. Competing Models of Entrepreneurial Intentions. *Journal of Business Venturing*, 15(5-6):411 – 432.

Kumah, O.M.& Omilola, B. 2014. Small business is big business: A UNDP perspective on SMME development in South Africa. *UNDP South Africa*.

[http://www.undp.org/content/south\\_africa/en/home/library/poverty/small-business-is-big-business-a-undp-perspective-on-smme-develo.html](http://www.undp.org/content/south_africa/en/home/library/poverty/small-business-is-big-business-a-undp-perspective-on-smme-develo.html). Date of access: 22 Oct 2015.

Kumar, S. & Ali, J. 2010. Indian agri-seed industry: Understanding the entrepreneurial process. *Journal of Small Business and Enterprise Development*, 17(3):455 – 474.

Kupperschmidt BR. 2000. Multigeneration employees: Strategies for effective management. *The Health Care Manager*, 19: 65–76.

Kuratko, D.F. 2013. Entrepreneurship: Theory, process and practice. 9th ed. Australia: Cengage Learning.

Kuratko, D.F. & Hodgetts, R.M. 2007. Entrepreneurship: Theory, process and practice. 7th ed. Mason: Thomson South-Western.

Kwong, C., Jones-Evans, D. & Thompson, P. 2012. Differences in perceptions of access to finance between potential male and female entrepreneurs: Evidence from the UK. *International Journal of Entrepreneurial Behaviour & Research*, 18(1):75 – 97.

La Pira, F. 2010. The motivational drivers of repeat entrepreneurs. <http://www.aabri.com/OC2010Manuscripts/OC10002.pdf>. Date of access: 31 Oct 2015.

Lai, E.R. 2011. Motivation: A literature research report. *Pearson assessments*. <http://www.pearsonassessments.com>. Date of access: 31 Oct 2015.

Lancaster, MC. 2008. The business plan. (In Van Rensburg, L.R.J., ed. Business management: An introduction. Pretoria: Van Schaik. pp. 160-170).

Landheer, G & Waasdorp, P. 2014. Entrepreneurship in the Netherlands: The top sectors. <http://www.entrepreneurship-sme.eu/pdf-ez/A201417.pdf>. Date of access 5 Feb 2015.

Landreneau, K.J. 2004. Sampling strategies. <http://www.natco1.org/research/files/samplingstrategies.pdf>. Date of access: 29 April 2015.

Lans, T., Biermans, H. & Baggen, Y. 2015. Opportunity competence contributes to successfully leveraging ideas for entrepreneurship and innovativeness in enterprises. *Policy brief September 2015*. [http://www.illightineurope.com/fileadmin/illightineurope/download/LLLight\\_Opportunity\\_Identification\\_Competence\\_for\\_Entrepreneurship\\_policybrief\\_E6\\_20150922.pdf](http://www.illightineurope.com/fileadmin/illightineurope/download/LLLight_Opportunity_Identification_Competence_for_Entrepreneurship_policybrief_E6_20150922.pdf). Date of access: 10 Nov 2015.

Lashley, J. 2010. Nascent female entrepreneurs in Barbados: Attitudes and intentions. *Social and Economic Studies*, 59(3): 59 – 95.

Lee, M.C. 2009. Understanding the behavioural intention to play online games. *Online Information Review*, 33(5):849 – 872.

Lee, S.M., Chang, D. & Lim, S.B. 2005. Impact of Entrepreneurship Education: A comparative study of the U.S. and Korea. *International Entrepreneurship and Management Journal*, 1(1):27 – 43.

Lee, S.S. & Stearns, T.M. 2012. Critical success factors in the performance of female owned businesses: A study of female entrepreneurs in Korea. *International Journal of Management*, 29(1):3 – 18.

Levent, T.B., Masurel, E. & Nijkamp, P. 2006. Gender differences in ethnic entrepreneurship. *International Journal of Entrepreneurship and Innovation Management*, 6(3):173 – 190.

Linan, F. 2008. Skill and value perception: How do they affect entrepreneurial intentions. *International Entrepreneurship Management Journal*, 4:257 – 272.

Linan, F. & Chen Y.W. 2007. Testing the entrepreneurial intention model on a two country sample. [http://ddd.uab.cat/pub/estudis/2006/hdl\\_2072\\_2213/UABDT06-7.pdf](http://ddd.uab.cat/pub/estudis/2006/hdl_2072_2213/UABDT06-7.pdf). Date of access: 2 May 2015.

Linan, F., Rodriguez-Cohard, J.C. & Rueda-Cantuche, J.M. 2011. Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7(2):195 – 218.

Lorz, M. 2011. The impact of entrepreneurship education on entrepreneurial intention. Germany: University of St. Gallen (Thesis – PhD).

Low, M.B. & MacMillan, I.C. 1988. Entrepreneurship: Past research and future challenges. *Journal of management*, 14(2):139 – 161.

Lowrey, A. 2013. Do millennials stand a change in the real world? *New York Times*: 26 March. [http://www.thealchemiagroup.com/wp-content/uploads/2013/10/Do-Millennials-Stand-a-Chance-in-the-Real-World\\_-NYTimes.com\\_.pdf](http://www.thealchemiagroup.com/wp-content/uploads/2013/10/Do-Millennials-Stand-a-Chance-in-the-Real-World_-NYTimes.com_.pdf). Date of access: 13 Apr 2015.

Lowry, Y. 2006. Women in business: A demographic review of women's business ownership, *SBA Office of Advocacy Small Business Research Summary*, 280: 1 – 38.

Lu, H.Y., Hou, H.Y., Dzwo, T.H., Wu, Y.C., Andrews, J.E., Weng, S.T., Lin, M.C. & Lu, J.Y. 2010. Factors influencing intentions to take precautions to avoid consuming food containing dairy products: Expanding the theory of planned behaviour. *British Food Journal*, 112(9):919 – 933.

Lub, X., Bijvank, M.N., Bal, P.M., Blomme, R. & Schalk, R. 2011. Different or alike? Experiencing the psychological contract and commitment of different generations of hospitality workers. *International Journal of Contemporary Hospitality Management*, 24(4): 553 – 573.

Luiz, J.E. & Mariotti, M. 2008. Perceptions regarding entrepreneurship in an emerging and culturally diverse economy: A South African survey. *Working Paper 95*. <http://www.econrsa.org/papers/w-papers/wp95.pdf>. Date of access: 13 Apr 2015.

Luiz, J. & Mariotti, M. 2011. Entrepreneurship in an emerging and culturally diverse economy: A South African survey of perceptions. *South African Journal of Economic and Management Sciences*, 14(1):47 – 65.

Mackey, K., Gardner, D. & Forsyth, S. 2008. Generational differences at work: Introduction and overview. *Journal of managerial Psychology*, 23(8):857 – 861.

Malach-Pines, A. & Schwartz, D. 2007. Now you see them, now you don't: Gender differences in entrepreneurship. *Journal of Managerial Psychology*, 23(7):811 – 832.

Malach-Pines, A., Lerner, M. & Schwartz, D. 2010. Gender differences in entrepreneurship equality, diversity and inclusion in times of global crisis. *An International Journal*, 29(2):186 – 198.

Malebane, M.J. 2014. Entrepreneurial intentions and entrepreneurial motivation of South African rural university students. *Journal of Economics and Behavioural Studies*, 6(9):709 – 726.

Malhotra, N.K. 2010. Marketing research: an applied orientation. 6th ed. New Jersey: Prentice-Hall.

Mandipaka, F. 2014. Overview of women entrepreneurs in South Africa. *Mediterranean Journal of Social Sciences*, 5(9):127 – 130.

Markert, J. 2004. Demographics of age: generational and cohort confusion. *Journal of Current Issues and Research in Advertising*, 26 (2):11-25.



Mars library. 2013. Barriers to entry: Factors preventing start-ups from entering a market. <https://www.marsdd.com/mars-library/barriers-to-entry-factors-preventing-startups-from-entering-a-market/>. Date of access: 1 Nov 2015.

Martin, C.A. 2005. From high maintenance to high productivity: What managers need to know about Generation Y. *Industrial and Commercial Training*, 37(1):39 – 44.

Matlala, L.S. 2012. The impact of business support for women owned small business enterprises in Agriculture: A South African perspective. University of South Africa. (Dissertation – Masters).

Matlay, H. 2008. The impact of entrepreneurship education on entrepreneurial outcomes. *Journal of small business and enterprise development*, 15(2):382 – 396.

Mbedzi, L.P. 2011. The role of government agencies in promoting SMMEs in Limpopo: A critical assessment. Stellenbosch: University of Stellenbosch. (Dissertation – Masters).

McDaniel, C. & Gates, R. 2013. Marketing research. 9th ed. Singapore: John Wiley.

Meier, J., Austin, S.F. & Crocker, M. 2010. *The journal of Human Resource and adult learning*, 6(1):68 – 78.

Mitchell, R.K., Busenitz, L., Lant, T., McDougall, P.P., Morse, E.A. & Smith, J.B. 2002. Toward a theory of entrepreneurial cognition: Rethinking the people side of entrepreneurship research. *Entrepreneurship, Theory and Practice*, 27(2):93 – 104.

Mohamad, N., Lim, H.E., Yusof, N. & Soon, J.J. 2015. Estimating the effect of entrepreneur education on graduates' intention to be entrepreneurs. *Education and Training*, 57(8 – 9):874 – 890.

Molaei, R., Zali, M.R., Mobaraki, M.H. & Farsi, J.Y. 2014. The impact of entrepreneurial ideas and cognitive style on students entrepreneurial intention. *Journal of Entrepreneurship in Emerging Economies*, 6(2):140 – 162.

Montenegrin Employee Federation. 2013. Assessment of the environment for women entrepreneurship in Montenegro. <http://www.poslodavci.org/biblioteka/dokumentacija/upcg/assessment-of-the-environment-for-women-entrepreneurship-in-montenegro>. Date of access: 31 Oct 2015.

Morrisette, S. & Schraeder, M. 2007. Affirming entrepreneurship: The best hope for organisations. Development and Learning in Organisations. *An International Journal*, 21(1):15 – 17.

Mungai, E.N. 2013. Socio-cultural factors and entrepreneurial intentions of undergraduate students in public universities in Kenya. Nairobi: University of Nairobi. (Thesis – PhD).

Mutambi, J. 2010. Stimulating industrial development in Uganda through open innovation business incubators. Sweden: Blekinge Institute of Technology. (Thesis – PhD).

Myers, K.K. & Sadaghiani, K. 2010. Millennials in the workplace: A communication perspective on millennials' organisational relationship and performance. *Journal Business Psychology*, 25:225 – 238.

Mzinyathi, D. 2012. The 10 things you did not know about student spending. <http://www.studentmarketing.co.za/research-student-spend-report-2012/students-have-moremoney-than-we-think>. Date of access: 26 Jan. 2012.

Naffziger, D.W., Hornsby, J.S. & Kuratko, D.F. 1994. A proposed research model of entrepreneurial motivation. *Entrepreneurship, Theory and Practice*, 18(3):29 – 42.

Nassif, V.M.J., Ghobril, A.N. & Silva, N.S. 2010. Understanding the entrepreneurial process: A dynamic approach. *BAR-Brazilian Administration Review*, 7(2):213 – 226.

Ndebi, A.A. 2009. Entrepreneurship training and job creation in South Africa: Are tertiary institutions filling the gap? *Journal of Contemporary Management*, (6):463 – 470.

Nehru, J. 2015. 2015. Jawaharlal Nehru quotes. [http://www.azquotes.com/author/10713-Jawaharlal\\_Nehru](http://www.azquotes.com/author/10713-Jawaharlal_Nehru). Date of access: 31 Oct 2015.

Nelson, J. 2007. Building linkages for competitive and responsible entrepreneurship. [https://www.unido.org/fileadmin/user\\_media/Services/PSD/CSR/Building-Linkages-for-Competitive-and-Responsible-Entrepreneurship](https://www.unido.org/fileadmin/user_media/Services/PSD/CSR/Building-Linkages-for-Competitive-and-Responsible-Entrepreneurship). Date of access 7 Nov 2014.

Netherlands Demographic Profile. 2014. *Index Mundi*. [http://www.indexmundi.com/netherlands/demographics\\_profile.html](http://www.indexmundi.com/netherlands/demographics_profile.html). Date of access: 11 Aug 2015.

Ngugi, J.K., Gakure, R.W., Waithaka, S.M. & Kiwara, A.N. 2012. Application of Shapero's model in explaining the entrepreneurial intentions among university students in Kenya. *International Journal of Business and Social Research*, 2(4):125 – 148.

Nguyen, N.M. 2013. Differences and similarities in the entrepreneurial process of independent new ventures and corporate new ventures. Twente: University of Twente. (Masters – Thesis).

Nguyen, T.V., Briyani, S.E., Rose, J., Tseng, C.H. & Kapasuwan, S. 2009. Cultural values, market institutions and entrepreneurship potential: A comparative study of the United States, Taiwan and Vietnam. *Journal of Developmental Entrepreneurship*, 14(1):21 – 37.

Nicolaides, A. 2011. Entrepreneurship: The role of higher education in South Africa. *Educational Research*, 2(4):1043 – 1050.

Nielsen, B. 2014. Doing well by doing good: Increasingly consumers care about corporate responsibility, but does concern convert to consumption? <http://www.nielsen.com/content/dam/nielsen-global/apac/docs/reports/2014/Nielsen-Global-Corporate-Social-Responsibility-Report-June-2014.pdf>. Date of access: 31 Oct 2015.

Nieman, G. & Nieuwenhuizen, C. 2009. Entrepreneurship: A South African perspective. 2nd ed. Pretoria: Van Schaik Publishers.

Nieman, G. & Nieuwenhuizen, C. 2014. Entrepreneurship: A South African perspective. 3rd ed. Pretoria: Van Schaik Publishers.

Niethammer, C. 2013. Women entrepreneurship and the opportunity to promote development and business. <http://www.brookings.edu/~media/research/files/reports/2013/09/private-sector-global-poverty-blum-roundtable/2013-bbr-women-entrepreneurship.pdf>. Date of access: 5 Aug 2015.

Nieuwenhuizen, C. & Swanepoel, E. 2015. Comparison of the entrepreneurial intent of master's business students in developing countries: South Africa and Poland, original research. *Acta Commercii*, 15(1):1 – 10 .

Nieuwenhuizen, C. 2004. The nature and development of entrepreneurship. (*In* Nieman, G., Hough, J. & Nieuwenhuizen, C., ed. Entrepreneurship: A South African perspective. Pretoria: Van Schaik. pp. 3-26).

Nkechi, A., EJ, E.I. & Okechukwu, U.F. 2012. Entrepreneurship development and employment generation in Nigeria: Problems and prospects. *Journal of Education and General Studies*, 1(4):88 – 102.

Nooteboom, B. & Stam, E. 2008. Micro-foundations for Innovative policy. Amsterdam: WRR Amsterdam University Press.

North, E. 2002. A decade of entrepreneurship education in South Africa. *South African Journal of Education*. 22(1):24 – 27.

OECD. 1998. The OECD strategy fostering entrepreneurship. Paris: OECD Publications. <http://www.oecd.org/cfe/leed/fosteringentrepreneurship.htm> . Date of access: 10 Feb 2014.

OECD. 2009. Better regulation in Europe: An assessment of regulatory capacity in 15 member states of the European Union. Better regulation in the Netherlands. <http://www.oecd.org/netherlands/43307757.pdf>. Date of access: 10 Feb 2014.

Okpara, F.O. 2007. The value of creativity and innovation in entrepreneurship. *Journal of Asia Entrepreneurship and Sustainability*, 3(2):81 – 131.

Olsen, M.A. & Fazio, R.H. 2004. Reducing the influence of extrapersonal associations on the implicit association test: Personalising the IAT. *Journal of Personality and Social Psychology*, 86(5):653 – 667.

Oosterbreek, H., van Praag, M. & Jsselstein, A.I. 2008. The impact of entrepreneurship education on entrepreneurship competencies and intentions: An evaluation of the Junior Achievement Student Mini-company program. [http://papers.ssrn.com/sol3/Papers.cfm?abstract\\_id=1118251](http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=1118251). Date of access: 3 Aug 2014.

Osman, M.H.M., Ahmad, F.S., Rashid, M.A. & Hussain, G. 2011. Assimilating entrepreneurial orientation and market orientation dimensions in the context of women-owned small- and medium-sized businesses. *African Journal of Business Management*, 5(14):5974 – 5983.

Oudeyser, P.Y. & Kaplan, F. 2008. How can we define intrinsic motivation? In proceedings of the 8<sup>th</sup> international conference on epigenetic robotics: modelling cognitive development in robotic systems, 93 – 101.

Ozcelik, G. 2015. Engagement and retention of the millennial generation in the workplace through internal branding. *International Journal of Business Management*, 10(3):99 – 107.

Pallant, J. 2007. SPSS survival manual. London: Open University Press.

Pallant, J. 2010. SPSS survival manual: a step by step guide to data analysis using SPSS. 4th ed. England: Open University Press.

Pandey, V. 2011. Entrepreneurship system of small and medium enterprises of Uttar Pradesh. *Asian Journal of Technology & Management Research*, 1(1). <http://www.ajtmr.com/papers/vol1issue1/AN-ANALYTICAL-STUDY-OF-ENTREPRENEURIAL-SUCCESS.pdf>. Date of access: 25 Aug 2014.

Peprah, J.A., Afoakwah, C. & Koomson, I. 2015. Savings, entrepreneurial trait and self-employment: Evidence from selected Ghanaian universities. *Journal of Global Entrepreneurship Research*, 5(1):1 – 17.

Petzer, D.J. & De Meyer, C.F. 2013. Trials and tribulations: Marketing in modern South Africa. *European Business Review*, 25(4):382 – 390

Pickens, J. 2005. Attitudes and perceptions. In Borkowski (ed), *Organisational behaviour in Health Care*. Sudbury, MA: Jones and Barlett Publishers.

Pihie, Z.A.L. & Sani, A.S.A. 2009. Exploring the entrepreneurial mindset of students: Implication for improvement of entrepreneurial learning at university. *The Journal of International Social Research*, 2(8): 340 – 345.

Piperopoulos, P. 2012. Ethnic female business owners: More female or more ethnic entrepreneurs. *Journal of Small Business and Enterprise Development*, 19(2):192 – 208.

Popescu, S. 2012. Women and men in entrepreneurship. *Journal of Knowledge Management, Economics and Information Technology*, 2(4):1 – 10.

Psychological characteristics and their role in gender related discrimination. *Journal of Business Venturing*, 5:29 – 36.

Quigley, N.R. & Walter, G.T. 2006. Toward an integrated model of intrinsic motivation and career self-management. *Career Development International*, 11(6):522 – 543.

Radu, M. & Redien-Collot, R. 2008. The social representation of entrepreneurs in the French press – Desirable and feasible models ? *International Small Business Journal* 26(3): 259 – 298.

Raheem, S. & Akhuemonkhan, I.A. 2014. Enterprise development through incubation management. *Developing country studies*, 4(18):67 – 82.

Ramaswamy, G. 2013. Psychosocial and psycho entrepreneurial predictors: An exploratory study on Indian women entrepreneurs. *Women studies*, no 42:163 – 192

Raposo, M. & do Paco, A. 2011. Entrepreneurship education: Relationship between education and entrepreneurial activity. *Psicothema*, 23(3):453 – 457.

Ray, A. Arokiasamy, A. 2011. The role of higher education in promoting entrepreneurship in Malaysia. *Asian Journal of Management Research*, 2(1):520 – 532.

Reeves, M. 2010 Women in business: Theory, case studies and legal challenges. 1st ed. New York: Routledge.

Reeves, T.C. & Oh, E. 2008. Generational differences. *Handbook of research on educational communications and technology*, 3:295 – 303.

Remeikiene, R., Startiene, G. & Dumciuviene, D. 2013. Explaining entrepreneurial intention of university students: The role of entrepreneurial education. *Management Knowledge and Learning International Conference*, 299 – 307.

Riskier, D.C. 2012. Toward an innovation typology of entrepreneurs. *Small Business & Entrepreneurship*, 15(2):27 – 41.

Robinson, P. B., Stimpson, D. V., Huefner, J. C. & Hunt, H. K. 1991. An attitude approach to the prediction of entrepreneurship. *Entrepreneurship, Theory and Practice*, 15(4): 13 – 31.

Roudaki, J. 2009. University students perceptions on entrepreneurship: Commerce Students Attitudes at Lincoln University. *Journal of Accounting – Business & Management*, 16(2): 36 – 53.

Samuel, Y.A., Ernst, K. & Awuah, J.B. 2013. An assessment of entrepreneurship intention among Synyani polytechnic marketing students. *International Review of Management and Marketing*, 3(1): 37 – 49.

- Sanchez, V.B. & Sahuquillo, C.A. 2012. Entrepreneurial behaviour: Impact of motivation factors on decision to create a new venture. *Investigaciones Europeas de Direccion y Economia de la Empresa*, 18(2):132 – 138.
- Sandhu, M.S., Sidique, S.F. & Riaz, S. 2011. Entrepreneurship barriers and entrepreneurial inclination among Malaysian postgraduate students. *International Journal of Behaviour & Research*, 17(4):428 – 449.
- Sandström, C.G. 2010. A revised perspective on Disruptive Innovation – Exploring Value, Networks and Business models. Göteborg: Chalmers University of Technology. (Thesis – PhD).
- Schiraldi, H. & Silva, J. 2012. Writing a business plan: Reference tools to assist budding entrepreneurs. *Reference Reviews*, 26(8): 7 – 9.
- Schlaegel, C. & Koenig, M. 2014. Determinants of Entrepreneurial Intent: A Meta-Analytic Test and Integration of Competing Models. *Entrepreneurship Theory and Practice*, 38(2): 291 – 332.
- Schmiemann, M. 2012. Eurostat statistical books. Entrepreneurship determinants: Culture and capabilities. Luxembourg: Publication office of the European Union.
- Schwab, K. 2013. The Global Competitiveness Report 2013 – 2014. <http://www.weforum.org/reports/global-competitiveness-report-2013-2014>. Date of access: 23 March 2015.
- Schwarz, N. & Bohner, G. 2001. The construction of attitudes. *In* Intrapersonal processes. Oxford, UK: Blackwell.
- SEDA Annual Review. 2013. <http://www.seda.org.za/Publications/Publications/Seda%20Annual%20Report%202013-14.pdf>. Date of access: 31 Oct 2015.
- Seda small enterprise development agency. 2014. Annual review. <http://www.seda.org.za>. Date of access 3 Aug 2014.
- Segal, G., Borgia, D. & Scoenfeld, J. 2005. The motivation to become an entrepreneur. *International Journal of Entrepreneurial behavior*, 11(1):42 – 57.
- Segumpan, R.G. & Zahari, J.S.A. 2012. Attitude towards entrepreneurship among Omani college students trained in business. *International Journal of Business and Behavioural Sciences*, 2(4):61 – 72.

- Sexton, D. L. & Bowman-Upton, N. 1990. Female and male entrepreneurs. *Journal of Business Venturing*, 5(1):29 – 36.
- Shane, S. & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25:217 – 226.
- Shapero, A. 1975. The displaced, uncomfortable entrepreneur. *Psychology today*, 9(6): 83 – 88.
- Shapero, A. & Sokol, L. 1982. The social dimensions of entrepreneurship. *The Encyclopaedia of Entrepreneurship*, 72 – 90.
- Siegel, J.J., Navarro, M.A., Tan, C.N. & Hyde, M.K. 2014. Attitude-behaviour consistency the principle of compatibility an organ donation: A classic innovation. *Health Psychology*, 33(9):1084 – 1091.
- Singh, G., & Belwal, R. 2008. Entrepreneurship and SMEs in Ethiopia: Evaluating the role, prospects and problems faced by women in this emergent sector. *An International Journal*, 23(2):120 – 136.
- Singh, S., Simpson, R., Mordi, C & Okafor, C. 2011. Motivation to become an entrepreneur: A study of Nigerian women's decisions. *African Journal of Economic and Management Studies*, 2(2):202 – 219.
- Singh, S.K. & Gupta, S. 2015. Entrepreneurship with practical class XI. <http://www.ebooksgate.co/tt/entrepreneurship-author-dr-s-k-singh-sanjay-gupta>. Date of access: 1 Nov 2015.
- Sinha, D.K. 2015. Meaning of entrepreneurial motivation: Nature of motivation. <http://www.yourarticlelibrary.com/entrepreneurship/motivationentrepreneurship/meaning-of-entrepreneurial-motivation-nature-ofmotivation/40687/>. Date of access: 31 Oct 2015.
- Sinkovec, B. 2013. Entrepreneurial Education & Innovation: Developing Entrepreneurial Mindset for Knowledge Economy. <http://www.knowledgeeconomy.net/uploads/documents/2013/workshops/wolverhampton/Wolverhampton%20Workshop%20-%20Analytical%20Compendium.pdf>. Date of access 25 Aug 2014.
- Sivarajah, K. & Achchuthan, S. 2013. Entrepreneurial intention among undergraduates: Review of literature. *European Journal of Business Management*, 5(5):172 – 186.



Sjöstrand, J. & Shadloo, M. 2013. Entrepreneurial intentions. A comparative study of Swedish and Namibian business students. <http://arc.hhs.se/download.aspx?MediumId=1886>. Date of access:19 Mar 2015.

Snijders, J. 2005. Entrepreneurship in an international context. (*In Haane et al. Entrepreneurship in the Netherlands: Business transfer, a new start-up*) <http://www.entrepreneurship-sme.eu/pdf-ez/A200512.pdf>. Date of access:18 Jan 2015.

Snijders, J. & van der Laag, A. 2002. Entrepreneurship in the Netherlands: Innovative entrepreneurship, New policy challenges. The Hague: Ministries of Economic affairs. <http://www.ondernemerschap.nl/pdf-ez/A200112.pdf>. Date of access 5 Feb 2015.

Solesvik, M.Z. 2013. Entrepreneurial motivations and intentions: Investigating the role of education major. *Education and Training*, 55(3):253 – 271.

Solesvik, M.Z., Westhead, P., Matlay, H. & Parsyak, V.M. 2013. Entrepreneurial assets and mindsets: Benefit from university entrepreneurship education investment. *Education and Training*, 55(8 – 9):748 – 762.

South Africa info. 2015. Fast facts. <http://www.southafrica.info/about/facts.htm>. Date of access: 11 Aug 2015.

South Africa info. 2015. <http://www.southafrica.info/about/facts.htm>. Date of access 22 Sep 2015.

Spector, J.M., Merrill, M.D., van Merriënboer, J. & Driscoll, M.P. 2008. Handbook of research on educational communications and technology. 3rd ed. New York, NY: Taylor & Francis group.

Spulber, D.F. 2008. The economic role of the entrepreneur. <http://lawlab.org/EconomicRoleoftheEntrepreneur.pdf>. Date of access: 19 April 2012.

Stamboulis, Y. & Barlas, A. 2014. Entrepreneurship education impact on student attitudes. *The international Journal of Management Education*, 12(3):365 – 373.

Stankiewicz, K. & Wasilcuk, J. 2012. Attitude and self-esteem versus entrepreneurial intentions among young in Poland. [http://www.researchgate.net/profile/Katarzyna\\_Stankiewicz/publication/270586155](http://www.researchgate.net/profile/Katarzyna_Stankiewicz/publication/270586155). Date of access: 2 May 2015.

Statistics South Africa. 2014. Mid-year population estimates: 2014. Key indicators, Statistical release P0302 <http://www.statssa.gov.za>. Date of access 3 Aug 2014.

Stats SA (Statistics South Africa). 2015. Statistical release P0302: 2015 mid-year population estimates. <http://www.statssa.gov.za/publications/P0302/P03022015.pdf>. Date of access: 11 Aug. 2015.

Steenkamp, A.G., van der Merwe, S.P. & Athayde, R. 2011. An investigation into youth entrepreneurship in selected South African secondary schools: An exploratory study. *Southern African Business Review*, 15(3):46 – 75 .

Steers, R.M., Mowday, R.T. & Shapiro, D.L. 2004. Introduction to special topic forum, the future of work motivation theory. *Academy of Management Review*, 29(3):379-387.

Steinberg, S.A. 2014. Promoting Entrepreneurship among millennials. *Center for American Progress, Generation progress*, 1 – 10. <https://cdn.americanprogress.org/wpcontent/uploads/2014/11/MillennialEntrepren.pdf>. Date of access: 13 Apr 2015.

Stel, A., Span, T. & Hessels, J. 2014. Global Entrepreneurship Monitor, The Netherlands 2013. *National Report*. <http://www.entrepreneurship-sme.eu/pdf-ez/H201407.pdf>. Date of access: 10 Nov 2015.

Struwig, F., & Stead, G. 2010. Planning and designing and reporting. Cape Town: Pearson Education South Africa.

Struwig, M. 2004. The business plan. (*In* Nieman, G., Hough, J. & Nieuwenhuizen, C., ed. Entrepreneurship: A South African perspective. Pretoria: Van Schaik. pp. 90 – 110).

Strydom, J., Nieuwenhuizen, C., Antonites, A., de Beer, A., Cant, M. & Jacobs, H. 2007. Entrepreneurship and how to establish your own business. 3rd ed. Cape Town: Juta & Co.

Strydom, J. 2011. Principles of Business Management. 2nd ed. Cape Town: Oxford University Press.

Sullivan, S.E., Forret, M.L., Carraher, S.M. & Mainiero, L.A. 2009. Using the kaleidoscope career model to examine generational differences in work attitudes. *Career Development International*, 14(2-3):284 – 302.

Sweet, S.A. & Martin, K.G. 2002. Data analysis with SPSS: A first course in applied statistics.

Sweida, G.L. & Reichard, R.J. 2013. Gender stereotyping effects on entrepreneurial self-efficacy and high-growth entrepreneurial intention. *Journal of Small Business and Enterprise Development*, 20(2):296 – 313.

Szirmai, A., Naudè, W. & Goedhuys, M. 2011. Entrepreneurship, Innovation and Economic Development. Maastricht: Oxford university press.  
<https://books.google.co.za/books?id=YYr1CfoLGskC&printsec=frontcover&dq=Szirmai+Naudè&hl=en&sa=X&ved=0CBMQ6AEwAGoVChMI2LS0t5eZyQIVy10UCh22yglf#v=onepage&q=Szirmai%20Naudè&f=false>. Date of access: 18 Jan 2015.

Tambunan, T.T.H. 2011. Development of small and medium enterprises in a developing country. *Journal of Enterprising Communities: People and Places in the Global Economy*, 5(1):68 – 82.

Tamizharasi, G. & Panchanatham, N. 2010. Entrepreneurial attitudes among entrepreneurs in small and medium enterprises. *International Journal of Innovation, Management and Technology*, 1(4):354 – 356.

Tang, J. 2008. Environmental munificence for entrepreneurs: Entrepreneurial alertness and commitment. *International Journal of Entrepreneurial Behaviour & Research*, 14(3):128 – 151.

Tanveer, M.A., Gillani, U.A., Rizvi, S., Latif, M., Maqbool, H. & Riswan, M. 2011. Barriers for business students in becoming an entrepreneur in Pakistan. *Journal of Business Management*, 74 – 82.

Taormina, R.J. & Lao, S.K.M. 2007. Measuring Chinese entrepreneurial motivation. *Journal of Entrepreneurial Behaviour & Research*, 13(4):200 – 221.

Thompson, E.R. 2009. Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship, Theory and Practice*, 33(3):669 – 694.

Timmons, J.A. & Spinelli, S. 2009 New venture creation: entrepreneurship for the 21st century. 8th ed. New York: McGraw-Hill.

Tkachev, A. & Kolvereid, L. 1999. Self-employment Intentions Among Russian students. *Entrepreneurship and Regional Development*, 11(3):269 – 280.

Tolbize, A. 2008. Generational differences in the workplace. *Research and training center on community living*, 1 – 21. [http://rtc.umn.edu/docs/2\\_18\\_Gen\\_diff\\_workplace.pdf](http://rtc.umn.edu/docs/2_18_Gen_diff_workplace.pdf). Date of access: 13 Apr 2015.

Trading Economics. 2015. Netherlands Unemployment Rate 2003 – 2015. <http://www.tradingeconomics.com/netherlands/unemployment-rate>. Date of access 22 Sept 2015.

Tshikovhi, N. & Shambare, R. 2015. Entrepreneurial knowledge, personal attitudes and entrepreneurship intentions among South African Enactus students. *Problems and Perspectives in Management*, 13(1):152 – 158.

Tsordia, C. & Papadimitriou, D. 2015. The role of theory of planned behaviour on entrepreneurial intention of Greek business students. *International Journal of Synergy and Research*, 4(1):23 – 37.

Tsyganova, T. & Shirokova, G. 2010. Gender differences in entrepreneurship: Evidence from GEM data. *Organisations and markets in emerging economies*, 1(1):120 – 141.

Uddin, R. & Bose, T.K. 2013. Motivation, success factors and challenges of entrepreneurs in Khulna city of Bangladesh. *European Journal of Business and Management*, 5(16):148 – 157.

Uddin, M., Chowdhury, M.M. & Ullah, M. 2015. Barriers and incentives for youth entrepreneurship start-ups: Evidence from Bangladesh. *Global Journal of Management and Business Research*, 15(4):39 – 49.

Universities South Africa. 2015. <http://www.universitiessa.ac.za/public-universities-south-africa>. Date of access: 23 Sept 2015.

Vadavadagi, P. & Joshi, S.P. 2013. Attitude of management students toward entrepreneurship: A study of selected districts of North Karnataka. *Pacific Business Review International*, 5(8):79 – 87.

Van Aardt, I. 2011. Creativity and generating new business ideas. (In van Aardt *et al.*, ed. Entrepreneurship and new venture management. Cape Town: Oxford University Press. pp. 2 – 45).

Van Aardt, I. & Naidoo, P. 2011. Business cycles and the entrepreneur. (*In van Aardt et al., ed. Entrepreneurship and new venture management. Cape Town: Oxford University Press. pp. 325 – 342*).

Van der Hoeven, M. 2009. Entrepreneurship in the Netherlands. Ten years entrepreneurship policy: A global overview. <http://www.entrepreneurship-sme.eu/pdf-ez/A200903.pdf>. Date of access 5 Feb 2015.

Van der Merwe, M. 2004. The entrepreneur. (*In Nieman, G., Hough, J. & Nieuwenhuizen, C., ed. Entrepreneurship: A South African perspective. Pretoria: Van Schaik. pp. 27 – 44*).

Van der Wiel, H., van der Kroon, H. & Snijders, J. 2014. Entrepreneurship in the Netherlands: Entrepreneurship in the Netherlands: The top sectors. <http://www.entrepreneurship-sme.eu/pdf-ez/A201417.pdf>. Date of access 5 Feb 2015.

Van Gelderen, M., Brand, M., van Praag, M., Bodewes, W., Poutsma, E. & Van Gills, A. 2008. Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6):538 – 559.

Van Gelderen, M., Thurik, R. & Bosma, N. 2005. Success and Risk factors in the Pre-Startup phase. *Small Business Economics*, 24(4):365 – 380.

Van Otterloo, S. 2014. Startup Juncture, Netherlands. <https://startupjuncture.com/2014/12/25/dutch-funding-2014-overview/>. Date of access: 18 Jan 2015.

Van Stel, A., Carree, M. & Thurik, R. 2005. The effect of entrepreneurial activity on national economic growth. *Small Business Economics*, 24(3):311 – 321.

Van Zyl, E.V. 2006. The role of school managers in developing entrepreneurial skills of grade 9 learners. Nelspruit: University of South Africa (Dissertation – Masters).

Veciana, J.M., Aponte, M. & Urbano, D. 2005. University students' attitudes towards entrepreneurship: A two countries comparison. *International Entrepreneurship and Management Journal*, 1(2):165 – 182.

Venesaar, U., Kolbre, E. & Piliste, T. 2006. Students' attitudes and intentions towards entrepreneurship at Tallinn University of Technology. [http://www.researchgate.net/profile/Urve\\_Venesaar/publication/24137730\\_Students\\_Attitudes\\_and\\_Intentions\\_toward\\_Entrepreneurship\\_at\\_Tallinn\\_University\\_of\\_Technology/links/00b7d529f7f16ef1cf000000.pdf](http://www.researchgate.net/profile/Urve_Venesaar/publication/24137730_Students_Attitudes_and_Intentions_toward_Entrepreneurship_at_Tallinn_University_of_Technology/links/00b7d529f7f16ef1cf000000.pdf). Date of access: 16 Aug 2012.

Venter, R., Urban, B. & Rwigema, H. 2008. Entrepreneurship: Theory in Practice. 2nd ed. Cape Town: Oxford University.

Verheul, I., van Stel, A.J. & Thurik, A.R. 2004. Explaining female and male entrepreneurship across 29 countries. *Papers on entrepreneurship, growth and public policy*, no 0804. <http://www.econstor.eu/handle/10419/19953>. Date of access: 19 April 2012.

Vijaya, V., & Kamalanabhan, T. J. 1998. A scale to assess entrepreneurial motivation. *Journal of Entrepreneurship*, 7(2):183 – 198.

Voermans, W.J.M. 2008. The Sisyphus paradox of cutting red tape and managing public risk: The Dutch case, *Utrecht Law Review*, 4:128 – 144. <http://heinonline.org/HOL/LandingPage?handle=hein.journals/utrecht4&div=35&id=&page>.

Vossenberg, S. 2013. Women entrepreneurship promotion in developing countries: What explains the gender gap in entrepreneurship and how to close it. *Maastricht School of Management Working Paper Series*. <ftp://ftp.repec.org/opt/ReDIF/RePEc/msm/wpaper/MSM-WP2013-08.pdf>. Date of access: 29 Apr 2015.

Waasdorp, P. 2002. Innovative entrepreneurship: A Dutch policy perspective (*In Snijders, J. & van der Laag, A. Entrepreneurship in the Netherlands: Innovative entrepreneurship, New policy challenges. Ministries of Economic affairs. pp 27 - 42*). <http://www.ondernemerschap.nl/pdf-ez/A200112.pdf>. 5 Feb 2015.

Wagner, K. & Ziltener, A. 2008. The Nascent entrepreneur at the crossroads: Entrepreneurial motives as determinants for different types of entrepreneurs. *Interdisciplinary European Conference on Entrepreneurship Conference IECER*.

Waite, M. Pocket Oxford English dictionary. 2013. 11th ed. United Kingdom: Oxford University Press.

Wang, C.K. & Wong, P.K. 2004. Entrepreneurial interest of university students in Singapore. *Technovation*, 24(2):163 – 172.

Warmerdam, A., Lewis, I. & Banks, T. 2015. Gen Y recruitment: Understanding graduate intentions to join an organisation using the theory of planned behaviour. *Education and Training*, 57(5):560 – 574.

Warnecke, T., Hernandez, L & Nunn, N. 2012. Female entrepreneurship in China: Opportunity or necessity-based. *Student-Faculty Collaborative Research*, Paper 23. [http://scholarship.rollins.edu/cgi/viewcontent.cgi?article=1023&context=stud\\_fac](http://scholarship.rollins.edu/cgi/viewcontent.cgi?article=1023&context=stud_fac). Date of access: 31 Oct 2015.

Webster's online dictionary. 2015. <http://www.merriam-webster.com/>. Date of access: 1 Nov 2015.

Wiid, J. & Diggins, C. 2013. Marketing research. 2nd ed. Cape Town: Juta.

Wiklund, J., Davidsson, P., Audretsch, D.B. & Karlsson, C. 2011. The future of entrepreneurship research. *Entrepreneurship Theory and Practice*, 35(1): 1 - 9

Williams, C.C. 2008. Tackling undeclared work in the European Union. [http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=colin\\_williams](http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=colin_williams). Date of access: 23 March 2015.

Williams, K.C. & Page, R.A. 2011. Marketing to the generations. *Journal of Behavioural Studies in Business*, 3(1):37 – 53.

World Economic Forum. 2014. <http://www.weforum.org/reports/global-competitiveness-report-2014-2015>. Date of access: 1 Nov 2015.

World Economic Situation and Prospects. 2012. [http://www.un.org/en/development/desa/policy/wesp/wesp\\_archive/2012wesp.pdf](http://www.un.org/en/development/desa/policy/wesp/wesp_archive/2012wesp.pdf). Date of access: 13 Apr 2015.

Xie, C. 2014. Why do some people choose to become entrepreneurs? An integrative approach. *Journal of Management Policy and Practice*, 15(1):25 – 38.

Y Charts. 2015. Netherlands Female Unemployment rate. [https://ycharts.com/indicators/netherlands\\_female\\_unemployment\\_rate](https://ycharts.com/indicators/netherlands_female_unemployment_rate). Date of access 22 Sept 2015.

Yordanova, D. & Davidkov, T. 2009. Similarities and differences between female and male entrepreneurs in a transition context: Evidence from Bulgaria. *Journal of Applied Economic Sciences*, (10):571 – 582.

Yeong, J.C. 2012. The roles of entrepreneurs in the society. *Journal of Arts, Science & Commerce*, 3(4). [http://www.researchersworld.com/vol3/issue4/vol3\\_issue4\\_1/Paper\\_01.pdf](http://www.researchersworld.com/vol3/issue4/vol3_issue4_1/Paper_01.pdf). Date of access: 23 Apr 2015.

Yero, J.L. 2002. Teaching in mind: How teacher thinking shapes education. 2nd ed. Hamilton: MindFlight Publishing.

Yusof, M., Sandhu, M.S. & Jain, K.K. 2008. Entrepreneurial inclination of university students: A case study of students at TUN Abdul Razak University (UNITAR). *Unitar E-Journal*, 4(1):1 – 14. [http://www.researchgate.net/profile/Manjit\\_Sandhu/publication/228804214](http://www.researchgate.net/profile/Manjit_Sandhu/publication/228804214). Date of access: 23 Apr 2015.

Zerihun, A. 2014. Entrepreneurial intention of graduating students: Determinants, challenges, and policy implications. Case study Addis Ababa University. Omaha, NE: Creighton University. (Thesis – PhD).

Zhao, Y. 2012. Tests scores vs. entrepreneurship: PISA, TIMSS and confidence. of <http://zhaolearning.com/2012/06/06/test-scores-vs-entrepreneurship-pisa-timss-and-confidence>. Date of access: 3 Aug 2014.

Zikmund, G.W. & Babin, J.B. 2013. Essentials of marketing research. 5th ed. South-Western, Cengage Learning.



## APPENDIX A

### QUESTIONNAIRE

---



NORTH-WEST UNIVERSITY  
YUNIBESITHI YA BOKONE-BOPHIRIMA  
NOORDWES-UNIVERSITEIT  
VAAL TRIANGLE CAMPUS

#### **Generation Y Female students' inclination towards entrepreneurship: a comparative study between South Africa and the Netherlands.**

I am currently working towards my thesis under the supervision of Dr N. De Klerk as part of the requirements for completing my PhD in Business Management at the North-West University (Vaal Triangle Campus), South Africa.

The purpose of this research project is to determine Generation Y Female students' inclination towards entrepreneurship. This is a comparative study between South Africa and The Netherlands.

It would be greatly appreciated if you could assist me by completing the attached questionnaire. The questionnaire is user-friendly and should take approximately 10 minutes to complete. All responses are confidential and the results will only be used for research purposes, outlined in the form of statistical data.

Thank you most sincerely. Your assistance and contribution will be highly appreciated.

Luzaan Hamilton

Department of Marketing & Business Management

School of Economic Sciences & IT

North West University (Vaal Triangle Campus), South Africa

## Section A: Demographical Information.

Please mark the appropriate box with a cross (X) or write down your answer.

A1	Year of birth:	1988	1989	1990	1991	1992	1993	1994
A2	Gender:	Male		Female				
A3	Country:	South Africa			The Netherlands			
A4	Institution:	A	B	C	D			
A5	Current year of study:	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year			
A6	Subject you are majoring in:							
A7	Mother tongue language:							
A8	Is the idea of entrepreneurship attractive to you?	Yes	No					

## Section B:

Please use a cross (X) to indicate your response.

	Motivations					
	The following factors would <u>motivate</u> me to become an entrepreneur:	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
1.	The freedom of being my own 'boss'	1	2	3	4	5
2.	The freedom to choose my own tasks and duties	1	2	3	4	5
3.	The freedom to choose my own working hours	1	2	3	4	5
4.	Self-generated profit-based income	1	2	3	4	5
5.	Achieving an appropriate target in life in accordance with my own abilities	1	2	3	4	5
6.	Entrepreneurship suits my personality	1	2	3	4	5

	<p>Motivations</p> <p>The following factors would <u>motivate</u> me to become an entrepreneur:</p>	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
7.	My skills and capabilities point to entrepreneurship	1	2	3	4	5
8.	The opportunity to get rich	1	2	3	4	5
9.	The opportunity to work as a superior	1	2	3	4	5
	<p>Personal barriers towards entrepreneurship</p> <p>The following factors <u>prevent/discourage</u> me to become an entrepreneur:</p>	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
10.	Entrepreneurship is excessively binding and time-consuming	1	2	3	4	5
11.	Loss of free time	1	2	3	4	5
12.	Entrepreneurs are excessively at the mercy of their investors	1	2	3	4	5
13.	Society provides no safety net for entrepreneurs	1	2	3	4	5
14.	My professional skills are difficult to commercialise	1	2	3	4	5
15.	Unwillingness or inability to market my professional skills and competence	1	2	3	4	5
16.	Does not suit my personality	1	2	3	4	5
17.	Excessively irregular working hours	1	2	3	4	5
18.	Lack of professional skills and competence	1	2	3	4	5
19.	General negative opinion on entrepreneurship	1	2	3	4	5

	Barriers in the local business environment The following factors, in the local business environment, prevent/discourage me from becoming an entrepreneur:	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
20.	Tough competition	1	2	3	4	5
21.	Procedure for registering the company	1	2	3	4	5
22.	Difficulties obtaining licences and certificates	1	2	3	4	5
23.	Difficulties hiring labour	1	2	3	4	5
24.	Frequently changing or unclear legislation	1	2	3	4	5
25.	Lack of own financial resources	1	2	3	4	5
26.	Difficulties finding customers	1	2	3	4	5
27.	Difficulties getting external financing	1	2	3	4	5
28.	Corruption	1	2	3	4	5
29.	Crime	1	2	3	4	5
30.	South African taxation or Netherland taxation	1	2	3	4	5
31.	Local infrastructure (e.g. availability of business premises)	1	2	3	4	5
	Attitude towards entrepreneurship The following factors reflects my attitude towards entrepreneurship:	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
32.	Entrepreneurs should be appreciated because they provide work for other people	1	2	3	4	5
33.	Entrepreneurial activities provide society with more benefits than disadvantages	1	2	3	4	5
34.	Entrepreneurship is the future form of employment	1	2	3	4	5

	Attitude towards entrepreneurship The following factors reflects my attitude towards entrepreneurship:	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
35.	The government should support young, beginning entrepreneurs	1	2	3	4	5
36.	Entrepreneurs can better utilise their skills in their own businesses than in salaried employment	1	2	3	4	5
37.	Entrepreneurs get rich on other people's work	1	2	3	4	5
38.	People who cannot adapt to conventional jobs end up as entrepreneurs	1	2	3	4	5
39.	Entrepreneurs are often guilty of behaving unethically	1	2	3	4	5
40.	Entrepreneurs do not care enough about environmental issues	1	2	3	4	5
41.	Entrepreneurs are dishonourable and pursue their own self-interest	1	2	3	4	5