

DECLARATION

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TITLE OF PROJECT:

**A DEVELOPMENT TRAINING SUPPORT MODEL FOR ENTREPRENEURS IN
SOUTH AFRICA**

DECLARATION

In accordance with Rule G4.6.3, I hereby declare that the above-mentioned thesis is my own work and that it has not previously been submitted for assessment to another University or for another qualification.

SIGNATURE : _____ **DATE:** ____/____/____

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- To my children, Lisa and Kyle, that should they become entrepreneurs one day, this study may serve as a reference guide.

ABSTRACT

Recent years have seen the decline of entrepreneurial activity in South Africa. This is especially concerning in that, officially, 27.7% of South Africans are unemployed. The unofficial unemployment figures are closer to 50%. The South African economy is battling to recover from the world economic crisis of 2009/10, putting pressure on government to alleviate growing unemployment and curtail social unrest. Furthermore, a South African economy which thrives on entrepreneurial activity will become more competitive from a global perspective. The purpose of this study is to contribute to the promotion and development of entrepreneurship in South Africa, in an effort to combat the problems listed above. In order to achieve this purpose, the objective was to develop and test a model which could be used in the development of entrepreneurs. The rationale is that, if the factors which affect entrepreneurship could be identified and tested, then recommendations could be made which could promote the development of entrepreneurs in South Africa. The approach was as follows:

- Perform a literature review which would cover both global and local (South African) approaches to developmental training for entrepreneurs;
- Develop a theoretical model comprising of identified factors which formed the base for the data collection;
- Develop a measuring instrument to test the relationships described in the theoretical model empirically;
- Empirically test the proposed model and suggested hypotheses by means of sourcing data from entrepreneurs in South Africa and statistically analyse the sourced data;
- Formulate the final theoretical model to support the research objectives; and
- Propose recommendations based on the results of the statistical analysis.

The focus of the literature study was on two main areas: trends in global developmental training, and South African initiatives to stimulate developmental training of entrepreneurs. The literature on global entrepreneurial development highlights two distinct categories for entrepreneurial development: 1) entrepreneurial education and 2) entrepreneurial training. The literature study concerning South African methodologies for developmental training for entrepreneurs, focused on

current methods employed and highlighted areas on which improvements should be concentrated.

From the literature study on both global and South African developmental training methods, ten independent variables (entrepreneurial culture; socio-emotional attributes; acquiring business skills; industry experience; opportunity identification; regulatory barriers; economic barriers; outside advice; formal training and informal training) were identified as factors affecting entrepreneurial developmental training. All the variables were hypothesised as they were perceived to influence significantly the dependent variables: perceived global success as an entrepreneur and perceived individual success as an entrepreneur.

These factors, clearly defined and operationalised, were structured in a questionnaire which was sent randomly to South African business owners. Data were collected from 332 respondents and subjected to various statistical analysis techniques. Firstly, Exploratory Factor Analysis (EFA) was conducted to assess the discriminant validity of the research instrument. Secondly, Cronbach's alpha coefficients were calculated for each of the identified factors to confirm the reliability of the research instrument. The significance of the hypothesised relationships in the revised model were then tested by using the statistical technique known as Structural Equation Modelling (SEM)

This study contributed to this specific field of knowledge as follows:

- New literature contributions were made in the field of developmental training of entrepreneurs in South Africa;
- The research highlighted individual perceptions pertaining to the individual success of entrepreneurs;
- A theoretical model was developed which can be used by various role players to promote entrepreneurial activity in South Africa;
- The findings make recommendations on empirically tested factors which significantly affect the likelihood of entrepreneurship as a choice of career.

Additional knowledge has been gained through the identification and description of how the following individual factors significantly influence entrepreneurial activity in South Africa:

- Entrepreneurial culture;

- Socio-emotional attributes of entrepreneurs;
- Mentoring entrepreneurs;
- Regulatory barriers; and
- Access to start-up finance.

This study was conducted in a time frame where the “entrepreneurship eco-system” is in urgent need of both private and public interventions in order to provide a sustainable solution. The theoretical model is therefore limited to the current “entrepreneurial eco-system” in a specific time cycle and within a specific institutional framework, within South African conditions.

In conclusion, the model and managerial recommendations that are presented may serve as a valuable guideline for public or private institutions that are associated with developmental training of entrepreneurs.

Key words: Entrepreneurial development, Entrepreneurial training, Entrepreneurial education, South African entrepreneurship, Entrepreneurial culture, Entrepreneurial mentorship.

TABLE OF CONTENTS

DECLARATION	i
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
TABLE OF CONTENTS	vi
LIST OF FIGURES	xv
LIST OF TABLES	xvii

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1	BACKGROUND TO THE STUDY	1
1.2	THE RESEARCH PROBLEM	4
1.3	RESEARCH OBJECTIVES	5
1.3.1	Primary research objective	5
1.3.2	Secondary research objectives	6
1.4	CONTRIBUTION OF THE STUDY	7
1.5	BENEFICIARIES OF THE RESEARCH	8
1.6	THE RESEARCH FRAMEWORK	8
1.7	PRELIMINARY LITERATURE REVIEW	11
1.7.1	Definition of entrepreneurship	11
1.7.2	Significance of entrepreneurship	12
1.7.3	Entrepreneurial, developmental training support	13
1.7.4	South African, entrepreneurial, developmental training support	15
1.7.5	Global, entrepreneurial, developmental training support	16
1.8	RESEARCH DESIGN AND METHODOLOGY	18
1.8.1	Secondary research	18
1.8.2	Primary research	19

1.8.2.1	Research paradigm	19
1.8.2.2	Data collection	20
1.8.2.3	Data analysis	20
1.8.2.4	Proposed theoretical model	21
1.8.2.5	Research hypotheses	24
1.9	DELIMITATIONS OF THE STUDY	26
1.10	STRUCTURE OF THE THESIS	26
1.11	DEFINITIONS OF TERMS AND CONCEPTS	28
1.11.1	Entrepreneurial culture	28
1.11.2	Socio-emotional attributes	29
1.11.3	Acquiring business skills	30
1.11.4	Industry experience	31
1.11.5	Opportunity identification	33
1.11.6	Regulatory barriers	34
1.11.7	Economic barriers	35
1.11.8	Outside advice	35
1.11.9	Training	38
1.11.9.1	Formal training	38
1.11.9.2	Informal training	40
1.11.10	Perceived individual success as an entrepreneur	40
1.12	SUMMARY	41

CHAPTER 2

GLOBAL, DEVELOPMENTAL, TRAINING SUPPORT FOR ENTREPRENEURS

2.1	INTRODUCTION	43
2.1.1	Definition of an entrepreneur	44
2.1.1.1	Definition of a social entrepreneur	45
2.1.1.2	Definition of multipreneurship	46
2.1.2	Significance of entrepreneurship	46

2.2	ENTREPRENEURSHIP FROM A GLOBAL PERSPECTIVE	47
2.2.1	Definition of a developed country	48
2.2.2	Characteristics of entrepreneurship in developed countries	48
2.2.3	Entrepreneurial categories	49
2.2.4	Aspects of the entrepreneurial process	50
2.2.5	Measuring entrepreneurial activity	51
2.2.5.1	Perception of societal value related to entrepreneurship	51
2.2.5.2	Individual self-perceptions about entrepreneurship	52
2.2.5.3	Global entrepreneurial activity indicators	55
2.2.5.4	Perceived quality of the entrepreneurship ecosystem	57
2.3	DEFINITION OF DEVELOPMENTAL TRAINING SUPPORT FOR ENTREPRENEURS	61
2.3.1	The education, training and learning of entrepreneurs	62
2.3.2	Classification of entrepreneurship education and training programmes	66
2.3.3	Developmental training support for entrepreneurs in developed countries	68
2.3.4	Factors contributing to successful developmental training support for entrepreneurs in developed countries	71
2.3.5	Objectives of entrepreneurial training programmes	72
2.3.6	Factors hindering successful developmental training support for entrepreneurs in developed countries	73
2.4	A MODEL DEPICTING GLOBAL, DEVELOPMENTAL TRAINING SUPPORT FOR ENTREPRENEURS IN DEVELOPED COUNTRIES	78
2.5	PUBLIC SECTOR INVOLVEMENT TO STIMULATE ENTREPRENEURIAL ACTIVITY	81
2.6	PRIVATE SECTOR INVOLVEMENT TO STIMULATE ENTREPRENEURIAL ACTIVITY	86
2.7	SUMMARY	89

CHAPTER 3
DEVELOPMENTAL TRAINING SUPPORT OF ENTREPRENEURS IN SOUTH AFRICA

3.1	INTRODUCTION	90
3.2	THE SOUTH AFRICAN ENTREPRENEURIAL ENVIRONMENT	92
3.2.1	Environmental factors affecting South African entrepreneurship	93
3.2.2	Entrepreneurial intentions in South Africa	100
3.2.3	Entrepreneurship and employment	102
3.2.4	Factors constraining SMMEs in South Africa	104
3.2.4.1	Access to finance and credit	104
3.2.4.2	Poor infrastructure	105
3.2.4.3	Research and development (R&D)	108
3.2.4.4	Restrictive labour laws	109
3.2.4.5	Inadequately skilled workforce	110
3.2.4.6	Regulatory and economic barriers	111
3.2.4.7	High levels of crime	114
3.2.4.8	Lack of access to markets	115
3.2.4.9	Entrepreneurship culture in South Africa	116
3.2.5	Rural/urban distribution of entrepreneurs in South African provinces	119
3.2.6	Development of entrepreneurs in South Africa	121
3.2.7	Demographic distribution of entrepreneurs in South Africa	123
3.2.8	Entrepreneurship vs. employment in South Africa	125
3.2.9	Participation of female entrepreneurs in South Africa	127
3.3	ENTREPRENEURIAL EDUCATION	130
3.3.1	Scope of entrepreneurship education and training	138
3.3.2	Entrepreneurship at secondary school	138
3.3.3	Entrepreneurship education in higher education	142
3.3.4	Difficulties in entrepreneurship education	144
3.4	ENTREPRENEURIAL TRAINING	145

3.4.1	A model for South African entrepreneurship programmes	149
3.4.2	Formal and informal education	151
3.4.2.1	Informal training	151
3.4.2.2	Formal training	152
3.5	SOUTH AFRICAN DEVELOPMENTAL TRAINING INTERVENTIONS	152
3.5.1	Small enterprise development agency (SEDA) in South Africa	152
3.5.2	Small enterprise finance agency (SEFA) in South Africa	153
3.5.3	National youth development agency (NYDA) in South Africa	153
3.5.4	Technology and innovation agency (TIA) in South Africa	154
3.5.5	National empowerment fund (NEF) in South Africa	155
3.5.6	Other South African funders	155
3.5.7	Sector Educational Training Authority (SETA)	156
3.5.8	Broad-based black economic empowerment (B-BBEE)	162
3.6	SUMMARY	165

CHAPTER 4

A THEORETICAL MODEL FOR THE PERCEIVED SUCCESS OF DEVELOPMENTAL TRAINING SUPPORT FOR ENTREPRENEURS IN SOUTH AFRICA

4.1	INTRODUCTION	166
4.2	THE THEORETICAL MODEL	166
4.3	SUMMARISED DESCRIPTION OF EACH VARIABLE	169
4.3.1	Dependent variable: Perceived global success as an entrepreneur	169
4.3.2	Dependent variable: Perceived Individual Success of entrepreneurs	171
4.3.3	Independent variable 1: Entrepreneurial culture	171
4.3.4	Independent variable 2: Socio-emotional attributes	173
4.3.5	Independent variable 3: Acquiring business skills	173
4.3.6	Independent variable 4: Industry experience	175
4.3.7	Independent variable 5: Opportunity identification	177

4.3.8	Independent variable 6: Regulatory barriers	178
4.3.9	Independent variable 7: Economic barriers	179
4.3.10	Independent variable 8: Outside advice	180
4.3.11	Independent variable 9: Formal training	182
4.3.12	Independent variable 10: Informal training	184
4.4	SUMMARY	184

CHAPTER 5

RESEARCH METHODOLOGY

5.1	INTRODUCTION	186
5.2	RESEARCH DESIGN	187
5.3	QUANTITATIVE TESTING AND ANALYSIS	188
5.3.1	Population studied and sampling frame	189
5.3.2	Sampling and sample unit	191
5.3.3	Sample size	192
5.4	THE EMPIRICAL STUDY	193
5.4.1	Method of data collection	193
5.4.2	The research instrument or questionnaire	194
5.4.3	Questionnaire design (and qualifying questions)	195
5.4.4	Pilot study	196
5.4.5	Administration of the questionnaire	197
5.5	OPERATIONALISATION OF VARIABLES	198
5.5.1	Operationalisation of the dependent variables	199
5.5.1.1	Perceived global success as an entrepreneur	199
5.5.1.2	Perceived individual success as an entrepreneur	199
5.5.2	Operationalisation of the independent variables	199
5.5.2.1	Entrepreneurial culture	199
5.5.2.2	Socio-emotional attributes	200
5.5.2.3	Acquiring basic business skills	200

5.5.2.4	Industry experience	200
5.5.2.5	Opportunity identification	201
5.5.2.6	Regulatory barriers	201
5.5.2.7	Economic barriers	201
5.5.2.8	Outside advice	201
5.5.2.9	Formal training	202
5.5.2.10	Informal training	202
5.6	VALIDITY AND RELIABILITY OF THE DATA	202
5.6.1	Validity of the data	202
5.6.2	Reliability of the data	203
5.6.3	Cronbach's alpha measurement	204
5.7	METHOD OF DATA ANALYSIS	204
5.7.1	The technique of Structural Equation Modelling (SEM)	205
5.7.2	The role of theory in Structural Equation Modelling	205
5.7.3	The stages of a Structural Equation Modelling assessment	207
5.8	SOFTWARE PACKAGES	214
5.9	SUMMARY	214

CHAPTER 6

EMPIRICAL RESULTS

6.1	INTRODUCTION	215
6.2	DEMOGRAPHIC INFORMATION	215
6.3	DISCRIMINANT VALIDITY OF THE RESEARCH INSTRUMENT	220
6.4	RELIABILITY OF THE RESEARCH INSTRUMENT	221
6.5	DISCRIMINANT VALIDITY AND RELIABILITY	222
6.5.1	Dependent variables	222
6.5.2	Independent variables	226
6.6	THE REVISED THEORETICAL MODEL	236
6.7	REFORMULATION OF THE HYPOTHESES	238

6.7.1	Assessment of the normality of the data	240
6.7.2	Assessment of the multivariate normality	240
6.8	EMPIRICAL RESULTS AND INTERPRETATIONS OF THE STRUCTURAL MODELLING ANALYSIS	241
6.9	CONSTRUCTION OF THE PATH DIAGRAMS	241
6.10	CONVERSION OF PATH DIAGRAM INTO A MEASUREMENT MODEL AND A STRUCTURAL MODEL	246
6.10.1	Chi-square (X^2)	247
6.10.2	Root Mean Square Error of Approximation (RMSEA)	247
6.11	ASSESSMENT OF GOODNESS-OF-FIT	248
6.11.1	Sub-Model A: Global success	249
6.11.2	Sub-Model B: Individual success	250
6.11.3	Sub-Model C: Financial success	251
6.12	MEASUREMENT OF THE STRUCTURAL MODELS	251
6.13	ESTIMATIONS OF THE STRUCTURAL MODEL	258
6.14	DISCUSSION OF SIGNIFICANT RELATIONSHIPS	262
6.14.1	Mentorship	262
6.14.2	Socio-Emotional Attributes	263
6.14.3	Entrepreneurial Culture	264
6.14.4	Industry Experience	265
6.14.5	Regulatory Barriers	267
6.14.6	Access to Start-up Finance	268
6.14.7	Acquiring Business Skills	269
6.14.8	Economic Barriers	270
6.15	ASSESSING THE IDENTIFICATION OF THE STRUCTURAL MODEL	271
6.16	MAKING THEORETICALLY JUSTIFIED MODIFICATION TO THE MODEL	272
6.17	SUMMARY	274

CHAPTER 7
SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1	INTRODUCTION	277
7.2	OVERVIEW OF THE STUDY	277
7.3	CONCLUSION FROM THE RESEARCH METHODOLOGY	280
7.4	INTERPRETATION AND CONCLUSIONS ABOUT THE RESEARCH PROBLEM AND RESEARCH QUESTIONS	285
7.4.1	Mentorship	286
7.4.2	Socio-emotional attributes	287
7.4.3	Entrepreneurial culture	288
7.4.4	Industry experience	289
7.4.5	Regulatory barriers	290
7.4.6	Access to start-up finance	291
7.4.7	Acquiring business skills	291
7.4.8	Economic barriers	292
7.5	THE DEPENDENT VARIABLES	293
7.5.1	Perceived global success as an entrepreneur	293
7.5.2	Perceived individual success as an entrepreneur	294
7.5.3	Perceived financial success as an entrepreneur	294
7.6	CONTRIBUTION OF THE STUDY TO THE BODY OF KNOWLEDGE	294
7.7	LIMITATIONS OF THE STUDY	298
7.8	RECOMMENDATIONS FOR FUTURE RESEARCH	298
7.9	CONCLUDING REMARKS	299
	REFERENCES	304
	APPENDIX A: GLOSSARY OF RESEARCH TERMS	336
	APPENDIX B: LETTER AND FLYER	340
	APPENDIX C: QUESTIONNAIRE	342

LIST OF FIGURES

Figure 1.1:	The research framework	10
Figure 1.2:	Theoretical model for developmental training support for entrepreneurs in South Africa	23
Figure 1.3:	Structure of this thesis	26
Figure 2.1:	Domains of the entrepreneurial ecosystem	61
Figure 2.2:	Classification of entrepreneurship education and training programmes	67
Figure 2.3:	Global Entrepreneurship Monitor (GEM) theoretical business/entrepreneurial model	80
Figure 2.4:	Quality of new venture vs. availability of funds	83
Figure 3.1:	Expert ratings of the South African entrepreneurial eco-system (ranking out of 62 countries recorded in brackets)	100
Figure 3.2:	SMMEs by province and GDP in South Africa	121
Figure 3.3:	Formal/informal sector SMMEs by province in South Africa	123
Figure 3.4:	South African SMME ownership by race	124
Figure 3.5:	South African owners of SMMEs by education	125
Figure 3.6:	Differentiation of management and entrepreneurship education as a field	137
Figure 4.1:	A model for developmental training support for entrepreneurs in South Africa	168
Figure 5.1:	Path diagram example indicating structural relationships	210
Figure 5.2:	Structural equation example	210
Figure 6.1:	The revised theoretical model	237
Figure 6.2:	Path diagram of relationships: Revised theoretical model (Sub-model A - Global success)	243

Figure 6.3:	Path diagram of relationships: Revised theoretical model (Sub-model B - Individual success)	244
Figure 6.4:	Path diagram of relationships: Revised theoretical model (Sub-model C - Financial success)	245
Figure 6.5:	Structural model estimation (Sub-Model A - Global success)	253
Figure 6.6:	Structural model estimation (Sub-Model B - Individual success)	255
Figure 6.7:	Structural model estimation (Sub-Model C - Financial success)	257
Figure 6.8:	Structural model estimation (including t-values) Sub-Model A - Global success	259
Figure 6.9:	Structural model estimation (including t-values) Sub-Model B - Individual success	260
Figure 6.10:	Structural model estimation (including t-values) Sub-Model C – Financial success	261
Figure 7.1:	Factors influencing developmental training support for entrepreneurs in South Africa (Sub-Model A - Global success)	282
Figure 7.2:	Factors influencing developmental training support for entrepreneurs in South Africa (Sub-Model B - Individual success)	283
Figure 7.3:	Factors influencing developmental training support for entrepreneurs in South Africa (Sub-Model C - Financial success)	284
Figure 7.4:	Contribution to developmental training support for entrepreneurs in South Africa	297

LIST OF TABLES

Table 1.1:	South African entrepreneurial statistics	2
Table 1.2:	Secondary research questions	5
Table 1.3:	Secondary research objectives	6
Table 2.1:	Economies participating in the 2015 GEM Survey, grouped by geographic region and economic development level	48
Table 2.2:	Aspects of the entrepreneurial process	50
Table 2.3:	Ranking of entrepreneurial activity of 60 countries participating in the 2015 GEM Survey by geographic region	56
Table 2.4:	The experiential learning continuum in entrepreneurship education	65
Table 2.5:	Percentage entrepreneurial subjects offered by schools	68
Table 3.1:	South Africa's relative TEA rankings, GEM 2002-2014	93
Table 3.2:	EFCs influencing the pool of potential entrepreneurs in South Africa, 2005, 2010, 2013 and 2014	94
Table 3.3:	Demographic and environmental factors affecting entrepreneurship in South Africa	94
Table 3.4:	EFCs influencing the early-stage and established business entrepreneurs in South Africa, 2005, 2010, 2013 and 2014	96
Table 3.5:	Entrepreneurship attitudes and intentions in South Africa, 2003-2014	97
Table 3.6:	Opportunity- and necessity-driven TEA rates amongst the adult population of South Africa, 2001 - 2014	98
Table 3.7:	Perceptions of good opportunities in the adult population of South Africa, 2001 - 2014	99
Table 3.8:	South African entrepreneurial statistics	101

Table 3.9:	Unemployment rates of Sub-Saharan countries	101
Table 3.10:	TEA by age group in South Africa, 2001 - 2014	124
Table 3.11:	Entrepreneurial activity in South Africa by gender, 2001 - 2014	127
Table 3.12:	Average expert ratings on education and training for entrepreneurship in South Africa, 2010, 2013 and 2014	140
Table 3.13:	Entrepreneurial developmental interventions	147
Table 3.14:	Comparison of the education models of Van Vuuren and Niemen (1999) and Pretorius (2001)	149
Table 3.15:	Awareness and usage of government initiatives, 2014	156
Table 5.1:	Sampling frame	191
Table 6.1:	Demographic information	216
Table 6.2:	Rotated factor loadings: Dependent variables	222
Table 6.3:	Factor 1 - Perceived individual success as an entrepreneur (INDSUCC)	223
Table 6.4:	Factor 2 - Perceived global success as an entrepreneur (GLBSUCC)	224
Table 6.5:	Factor 3 - Perceived financial success as an entrepreneur (FINSUCC)	226
Table 6.6:	Rotated factor loadings - Independent variables	227
Table 6.7:	Factor 1 - Mentorship (MENTSHIP)	229
Table 6.8:	Factor 2 - Economic barriers (ECOBAR)	230
Table 6.9:	Factor 3 - Socio-emotional attributes (SOCIOEM)	231
Table 6.10:	Factor 4 - Entrepreneurial culture (CULT)	232
Table 6.11:	Factor 5 - Industry experience (INDEXP)	233
Table 6.12:	Factor 6 - Regulatory barriers (REGBARR)	234
Table 6.13:	Factor 7 – Access to Start-up finance (STARTFIN)	235

Table 6.14: Factor 8 - Business skills (BUSKILL)	235
Table 6.15: Revised hypotheses	238
Table 6.16: Goodness-of-fit indices for the measurement and structural models – Sub-Model A	249
Table 6.17: Goodness-of-fit indices for the measurement and structural models - Sub-Model B	250
Table 6.18: Goodness-of-fit indices for the measurement and structural models - Sub-Model C	251
Table 6.19: Structural and measurement model - Sub-Model A	252
Table 6.20: Structural and measurement model - Sub-Model B	254
Table 6.21: Structural and measurement model - Sub Model C	256
Table 6.22: Summary of the hypotheses tested in the revised models (Sub-Model A - Global success)	272
Table 6.23: Summary of the hypotheses tested in the revised models (Sub-Model B - Individual success)	273
Table 6.24: Summary of the hypotheses tested in the revised models (Sub-Model C - Financial success)	274
Table 7.1: Secondary research objectives	280
Table 7.2: Secondary research question addressed	285

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

World economies are recovering from one of the longest financial crises of the last 80 years (Schwab & Sala-i-Martin, 2014). Schwab and Sala-i-Martin (2014) add that policymakers, businesses and civil society leaders must work together to ensure robust economic growth in future. Better resource allocation, talent identification and innovation are considered to be essential to the sustained growth of economies on the path to recovery (Schwab & Sala-i-Martin, 2014). It has been reported that, after greater than normal growth in past years, emerging economies, of which South Africa is one, are likely to grow more moderately in the foreseeable future (Schwab & Sala-i-Martin, 2014). Competing in a global economy requires competitiveness which, in turn, relates to increasing productivity levels (Schwab & Sala-i-Martin, 2014). The most recent Global Competitiveness Report (Schwab, Sala-i-Martin & Brende, 2015) presents evidence that South Africa's competitiveness is improving slowly. The report compares 140 countries, in terms of 12 criteria or "pillars", with South Africa currently ranking 49th in the 2015-16 report, compared with 52nd in the 2012-13 report. This is a modest improvement but the report shows that restrictive labour regulations, government bureaucracy, inadequate infrastructure, an uneducated workforce, crime, theft and corruption are the main barriers restricting South Africa's competitiveness.

In a recent Global Entrepreneurship Monitor (GEM) survey, 42% of working age adults felt there are good opportunities for entrepreneurship (Kelley, Singer & Herrington, 2015). Further the survey found that 21% of working age adults intended to start a business in the following three years (Kelley et al., 2015) and 69% of these entrepreneurs were innovation driven, which is encouraging as innovation is the cornerstone of competitiveness and economic growth (Kelley et al., 2015). However, of the countries surveyed, education as a priority continued to be ranked the lowest within the "entrepreneurship ecosystem", referring to school and post-school education (Kelley et al., 2015).

Between 2009 and 2010, during the worldwide recession, Statistics South Africa (StatsSA, 2016) reported that 806,000 South Africans lost their jobs. Even though there has been a moderate recovery since then, the country still faces an unemployment rate of 24.5% (StatsSA, 2016). The Global Entrepreneurship Monitor found the unemployment rate in South Africa to be far worse than this at about 40% (Herrington & Kew, 2014). Herrington and Kew (2014) add that the alarming decline of early-stage entrepreneurial activity from 10.6% in 2013 to 7.0% in 2014 is of particular concern. Entrepreneurial intentions in South Africa have also dropped by 23% (from 15.4% to 11.8%) when compared with 2013. These statistics were confirmed by the Global Entrepreneurship Monitor Report (Kelley et al., 2015). When South Africa's nascent entrepreneurial activity between the ages of 18 and 64 years in 2014 is compared with that of other African countries, South Africa rates the lowest at 3.2%, with the group average being 14.1% (Herrington & Kew, 2014). Herrington and Kew (2014) found that 7.0% of the adult population in South Africa is engaged in entrepreneurship, while 2.7% already own/manage an established business. Table 1.1 below indicates the entrepreneurial rates amongst the adult population in South Africa for the period 2001-2015:

Table 1.1: South African entrepreneurial statistics

South African Statistics	2001	2005	2009	2013	2014	2015
Nascent entrepreneurial rate	5.3	3.6	3.6	6.6	3.9	5.5
New business ownership rate	1.4	1.7	2.5	4.1	3.2	3.8
Total entrepreneurial activity (TEA)	6.5	5.2	5.9	10.6	7.0	9.2
Established business ownership rate	-	1.3	1.4	2.9	2.7	3.4
Discontinuance of business	-	2.9	3.5	3.9	3.9	4.8

Source: Herrington & Kew, 2014 and Kelley et al., 2015

Some researchers argue that the stimulation of entrepreneurship is a possible solution to the unemployment problem, through business formations and expansions (Mahadea, Ramroop & Zewotir, 2011). It is argued that realistically, if more individuals could be exposed to practical entrepreneurship education at the secondary school level, South Africa's base for entrepreneurial capacity could be improved substantially (Herrington & Kew, 2014). Therefore, entrepreneurial activity and the creation of new ventures is considered to be a major economic force with the potential to reduce unemployment and create economic growth, to create jobs and general prosperity and, to an extent, to enhance national competitiveness in the global business arena (Nicolaidis, 2011).

Timmons (1999) and Kim, Aldrich and Keister (2006) show that 90% of entrepreneurs start their businesses with some form of experience they gained in an industry. It is argued that entrepreneurs have between 8 to 10 years' experience before embarking on a new venture. As indicated above, South Africa's unemployment rate of approximately 40%, therefore poses an alarming problem because, without work experience, potential entrepreneurship is likely to be stunted. Experience in management or supervisory positions is considered to be preferable for entrepreneurship (Kim et al., 2006) and is considered as one of the main criteria for funding from venture capitalists (Baum & Silverman, 2004).

There is consensus that access to education is essential to the emergence of entrepreneurs. Universities are increasingly becoming a major role-player in this development process (Etzkowitz, Webster, Gebhardt & Terra, 2000). For the purposes of a global study, Valerio, Parton and Robb (2014) divided entrepreneurial education into two broad categories as follows:

- Entrepreneurial Education (EE), i.e. entrepreneurial awareness programmes typically of a theoretical nature; and
- Entrepreneurial Education and Training (EET), which focuses more on providing the skills required to start and run a new venture.

Accordingly, given the importance of entrepreneurship in the economy in generating wealth, enhancing social well-being, and reducing unemployment (Ras & Pretorius, 2007; Valerio et al., 2014), this research effort will identify the factors which contribute to the emergence of entrepreneurs, through training and development interventions.

Having identified these factors, a conceptual model has been proposed so that the necessary steps can be taken to address the shortfall of entrepreneurs in South Africa. The model also provides for private and government entities to apply resources in a manner that will create the environment required to speed up the process of developing entrepreneurs and subsequently reduce unemployment, in order for South Africa to become competitive globally. Depending on the grade level and subject choices, effective schooling should and could develop awareness and skills further in areas related more specifically to business, such as entrepreneurship, economics and accounting (Horn, 2006).

1.2 THE RESEARCH PROBLEM

Given the decline in early-stage, entrepreneurial activity in South Africa, as well as the decline in entrepreneurial intentions (Herrington & Kew, 2014), it has become imperative, economically and socially, for South Africa to stimulate entrepreneurship. The growing consensus that entrepreneurship contributes significantly to job creation and income generation, entrepreneurial education would add to the empowerment of South Africans (Ndedi, 2009). The challenge is to combine the curricula of vocational and entrepreneurial training (Nnandi, 2013), whereby students are taught a set of practical and theoretical skills which can be used to start new business ventures.

Thus, the main research problem was stated as follows:

To identify the major contributors to the developmental training support of successful entrepreneurs in South Africa.

The research problem was addressed by formulating a set of research questions. The main research question for this research effort was:

What are the main contributors and variables that positively affect the developmental training support of entrepreneurs in South Africa and in what order of priority should they be applied to the development of entrepreneurial activity?

The main research problem was supported further by the secondary research questions presented in Table 1.2.

Table 1.2: Secondary research questions

RQ ₁	What factors must be considered in the developmental training support for entrepreneurs?
RQ ₂	What is the current methodology employed in South Africa for the developmental training support for entrepreneurs?
RQ ₃	What landscape would best suit the South African environment in order to stimulate entrepreneurial activity?
RQ ₄	What role could the private sector undertake to assist with developmental training support for entrepreneurs?
RQ ₅	What role could the public sector undertake to assist with developmental training support for entrepreneurs?
RQ ₆	What priority should be given to the various factors affecting the developmental training support for entrepreneurs to maximise impact?
RQ ₇	How can a conceptual model representation provide a detailed description so that this research can be understood and reproduced in the future?
RQ ₈	How can the proposed model be validated by empirical evaluation for the South African sector?
RQ ₉	What interpretations and conclusions can be drawn from the empirical findings?

1.3 RESEARCH OBJECTIVES

1.3.1 Primary research objective

The primary objective of this research, therefore, was to **investigate the contributing factors which influence developmental training support for entrepreneurs in**

South Africa, and subsequently to develop a theoretical, developmental training support model for entrepreneurial growth in South Africa.

A key focus of the research therefore, was on reviewing successful global entrepreneurial initiatives with a view to applying a similar methodology in the South African context. While it can be argued that comparative research might stem from other countries with varied levels of growth, economic prosperity, education etc., the aim of this research was to create a model of developmental training which could be applied in the South African environment.

The various factors (independent and dependent variables) were identified, investigated and tested as part of this research. The research study confirmed the existence of relationships between the independent variables and their influence was measured. The following research design objectives were also identified to address the primary objective:

- To develop a proposed theoretical model consisting of the factors that positively influence developmental training support for entrepreneurs in South Africa;
- To develop an appropriate measuring instrument to test the relationships as described in the theoretical model proposed above;
- To test the proposed theoretical model and the suggested hypotheses empirically by sourcing data from responses to questionnaires;
- To analyse the sourced data statistically; and
- To propose recommendations based on the results of the statistical data.

1.3.2 Secondary research objectives

The primary research objective was supported further by the secondary research objectives listed in Table 1.3.

Table 1.3: Secondary research objectives

RO ₁	To undertake an in-depth re-assessment of developmental training support for entrepreneurs globally.
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RO ₂	To undertake an in-depth re-assessment of the methods used in South Africa for developmental training support for entrepreneurs.
RO ₃	To analyse the specific requirements of the South African environment.
RO ₄	To analyse the role the South African private sector might have in developmental training support for entrepreneurs.
RO ₅	To analyse the role the South African public sector might have in developmental training support for entrepreneurs.
RO ₆	To construct a theoretical model that will describe the relationships between the independent and dependent variables.
RO ₇	To prioritise the factors affecting developmental training support for entrepreneurs.
RO ₈	To test empirically the proposed theoretical model amongst the main factors contributing to the developmental training of entrepreneurs in South Africa.
RO ₉	To analyse the results and interpretations of the research, and to make appropriate and meaningful recommendations based on the results of the statistical analysis.

1.4 CONTRIBUTION OF THE STUDY

The focus of this research effort was to develop a proposed theoretical model for developmental training support for entrepreneurs in South Africa. The research also attempted to identify and prioritise the factors relevant to the promotion of entrepreneurship in South Africa, which will contribute towards economic growth, social well-being and reduce the growing unemployment. The findings will contribute towards Point 7 of the South African Government's Nine-Point Plan, presented by President Jacob Zuma during his national speech in 2015. This research effort prioritises the factors which contribute to developmental training support for entrepreneurs, enabling stakeholders to prioritise the factors which could make a short-term, medium-term and long-term impact on entrepreneurial activity in South Africa. In addition, the study highlights the role that both private and public entities

could undertake in strengthening South Africa's local economy through wealth creation and reducing unemployment as well as positioning the country to compete better in the global markets.

A further contribution of the study is that it made use of an advanced statistical technique called Structural Equation Modelling (SEM) to analyse multiple independent relationships simultaneously against the dependent variable of developmental training support for entrepreneurs. Given the multi-functional nature of the topic, which is global in scale, the expected contribution of the SEM technique is significant.

1.5 BENEFICIARIES OF THE RESEARCH

Given the anticipated scope of the study, the following groups will benefit from the research:

- Public and private training institutions seeking to offer entrepreneurial, developmental training support programmes.
- The following South African ministerial departments:
 - Basic and Higher Education and Training;
 - Economic Development;
 - Labour;
 - Public Enterprises;
 - Skills Development and Entrepreneurship;
 - Social Development; and
 - Trade and Industry.
- Other countries or institutions seeking to implement a theoretical model to train and develop entrepreneurs.

1.6 THE RESEARCH FRAMEWORK

The research framework consists of an in-depth literature study, which is followed by the development of an appropriate research methodology to test the proposed theoretical model. The literature study was conducted by focusing on global trends in entrepreneurial, developmental training support, then analysing the South African

approach to the subject. The chapter outline is: Global, developmental training support for entrepreneurs (Chapter 2); Developmental training support of entrepreneurs in South Africa (Chapter 3); A theoretical model for the perceived success of developmental training support for entrepreneurs in South Africa (Chapter 4); Research methodology (Chapter 5); Empirical results (Chapter 6); and Summary, conclusion and recommendations (Chapter 7). The research framework is presented graphically in Figure 1.1.

1.7 PRELIMINARY LITERATURE REVIEW

In this section, a brief literary review has been provided for the definition of an entrepreneur, the significance of entrepreneurship, the global trends towards developmental training support for entrepreneurs, as well as, the current state of South African entrepreneurial development.

1.7.1 Definition of entrepreneurship

Entrepreneurship is the process of conceptualising, organising, launching and nurturing a business venture into a significant growth venture in a complex, unstable environment (Nicolaidis, 2011). From this definition, it is clear that entrepreneurship involves management of processes, adds new value to the market, and is opportunity driven (Morris & Kuratko, 2001). While confidence in entrepreneurship is growing among the youth in South Africa, it should be recognised that not all young, educated people can become entrepreneurs (Mahadea et al., 2011). Mahadea et al. (2011) add that while the positive value of education in entrepreneurship at secondary schools cannot be ignored, a stronger base for self-employment can be created if this positive mind-set is extended to tertiary education learners with possibilities for business incubators and strategic alliances among learners and institutions. Gouws (2002) affirms that the main aim of education in entrepreneurship in South Africa ought to be to develop a cadre of entrepreneurs who will boost economic growth and create employment to meet the rising economic expectations of all South Africans (Tengeh et al., 2015).

Entrepreneurs falls under two distinct categories: (1) Opportunism and (2) Necessity (Nicolaidis, 2011; Matthews, Dalglish & Tonelli, 2012; Valerio et al., 2014). Those falling into the category of opportunism are innovators who have seen an opportunity, while those in the necessity category start a new venture because of unemployment (Valerio et al., 2014). An individual is considered to be a nascent entrepreneur if he or she is between the ages of 18 and 64 and has taken some action towards starting a business in the last year, and expects to own or share the business they are starting, which must not have paid any wages or salaries for more than 3 months (Reynolds, Bosma, Autio, Hunt, De Bono & Servais, 2005; Islam, 2015). Self-employment is also

a form of entrepreneurship, offering a potential solution to unemployment faced in many countries (Bruhn & Zia, 2013).

In recent years, there has been a trend towards “social entrepreneurialism” (Gundlach & Zivnuska, 2010). Gundlach and Zivnuska (2010) state that these entrepreneurs have a deep passion for work. Social entrepreneurs are individuals who “develop economically sustainable solutions to social problems” (Tracey & Phillips, 2007: 264; Gundlach & Zivnuska, 2010). Wright and Louw-Potgieter (2010) write that social enterprises are growing worldwide and are becoming a major employer and contributor to economic activity. In countries, such as South Africa, where it has not yet received significant policy recognition or support, the implication is that social enterprise could represent a new growth area (Wright & Louw-Potgieter, 2010).

1.7.2 Significance of entrepreneurship

Entrepreneurial activity is particularly significant in the development of innovation, competitiveness, job creation and economic growth (Blasco, Guijarro & Perez-De-Lama, 2012) as well as social equity (Valerio et al., 2014). The study of entrepreneurship is one of the fields that is growing fast in the social sciences (Katz, 2003) and is even being considered as an area of knowledge (Toledano, 2005). Typically, large firms are more innovative, investing more in research and development and in launching new products and services (Valerio et al., 2014). By fostering entrepreneurship, a society promotes the competitiveness of businesses (Nicolaidis, 2011). Timmons (1999: 4) writes that “entrepreneurship is the engine that drives the economy of most nations”. Timmons (1999) refers to entrepreneurship as America's secret weapon and argues its value as the main contributor to the superior position that the USA holds as part of the global economy. Timmons (1999) continues by stating that, in the American culture, 37% of the population are involved somehow in their own ventures apart from their regular jobs. Foxcroft, Wood, Kew, Herrington and Segal (2002) go on to say that, in developing countries, the need for entrepreneurial development is emphasised by the extremely high levels of unemployment.

Competitiveness can be defined as the drive to win against others and obtain some form of dominance over them through winning. This drive was identified by

Schumpeter as being one of the major motivations of the entrepreneur (Suddle, Beugelsdijk & Wennekers, 2010). It is noted by Klapper and Parker (2011) that there are fewer female owned entrepreneurial enterprises and the problem remains significant in wealthier countries. In a study conducted in Latin America, Bruhn and Zia (2013) found that firms owned by women are smaller than their male counterparts. Researchers report that only one in ten firms that grows beyond 15 employees is female owned (Campos, Goldstein, McGorman, Maria, Boudet & Pimhidzai, 2015). Women have played a more limited role as owners and managers in the formal sector, although they are increasing in numbers and business levels (Spring & Mcdade, 2009). Snyder (2000) agrees that despite women's activism and positive impacts, there is a tendency for gender disparities.

1.7.3 Entrepreneurial, developmental training support

No single definition has been agreed upon and researchers are contributing to develop an evolving definition (Charney & Libecap, 2000; Menzies, 2003; Isaacs, Visser, Friedrich & Brijlal, 2007; Dickson, Solomon & Weaver, 2008). Taken together, entrepreneurial education and training (EET) generally reflects both the activity of transmitting specific mind-sets and skills associated with entrepreneurship; as well as education and training programmes that seek to engender various entrepreneurship outcomes. As a working definition for this study, EET represents academic education or formal training interventions that share the broad objective of providing individuals with the entrepreneurial mind-sets and skills to support participation and performance in a range of entrepreneurial activities (Valerio et al., 2014). While education programmes are aimed at different target markets and levels of education, they all have as their core the concept of stimulating entrepreneurial activity in some or other way. Solomon, Duffy and Tarabishy (2002) confirm the positive role of teaching entrepreneurial and small business management skills for new venture creation and success. There have also been issues with the way the teaching of entrepreneurship should be conducted. Isaacs et al. (2007) hold that education in entrepreneurship is the meaningful intervention by an educator in the life of the learner to provide entrepreneurial qualities and skills to enable the learner to start-up and operate a business. It is apparent from the foregoing definition that entrepreneurship, or certain

features of it, can be taught, dispelling the myth that entrepreneurs are born and not made (Kuratko, 2005).

Nieuwenhuizen and Groenewald (2008) found that the essence of education in entrepreneurship is to encourage creativity, innovation and self-employment, and might include: the development of personal attributes and skills that form the basis of an entrepreneurial mind-set and behaviour (not limited to leadership, creativity, initiative-taking, risk-taking, self-confidence and team spirit); exposing students to the possibility of self-employment and entrepreneurship as a career option; working on real-life enterprise projects; providing specific business skills and knowledge of how to start-up and run a business successfully.

The entrepreneurial performance education model (E/P model) is concerned with the elements that drive entrepreneurial performance and was developed to guide syllabus and curriculum development (Nieman, 2000). Researchers argue that entrepreneurial performance is a function of motivation, entrepreneurial skills and business skills (Nieman 2000; Ras & Pretorius, 2007). Nieman (2000) explains that motivation is associated with the development of achievement imagery; entrepreneurial skills refer to creativity, risk-taking and opportunity identification; and business skills are financial, marketing, operational, human resource, legal, communication, management and business planning skills. Furthermore, entrepreneurial education considers not only the content of programmes but also the context in which such programmes are operated by the facilitators and the approaches that they use (Pretorius, 2000a & Pretorius, 2000b). In the process of increasing start-ups, Pretorius (2000a) and Pretorius (2000b) offer the following five constructs relevant to the education process: entrepreneurial success themes; business knowledge and skills; business plan utilisation; learning approaches; and the facilitator. The “business plan competition” method of ET (Neupert & Krueger, 2000) is now seen as inadequate in its method of preparing entrepreneurs. Recent studies have shown that an action-oriented approach stimulates an individual’s action rationality and capability (Rasmussen & Sorheim, 2006). Rasmussen and Sorheim (2006) go on to say that student involvement is high, with an emphasis on exploring entrepreneurial opportunities. It is noted that the requirements of a start-up process and an action-oriented approach do not fit perfectly into the timetable of university studies and might require university management to be flexible (Rasmussen & Sorheim, 2006). ET programmes target a range of potential

and practising entrepreneurs, who are not part of formal, degree-granting programmes. Potential entrepreneurs targeted by ET programmes can include vulnerable, unemployed, inactive individuals or necessity-driven entrepreneurs at one extreme and highly skilled, innovation-led, or opportunistic entrepreneurs at other extreme (Valerio et al., 2014). By contrast, entrepreneurial education (EE) programmes are targeted at two groups in particular: secondary education students and higher education students, the latter including graduate and undergraduate students enrolled in formal degree programmes.

1.7.4 South African, entrepreneurial, developmental training support

As stated above, entrepreneurial activity declined from 10.6% in 2013 to 7.0% in 2014, while entrepreneurial intentions in South Africa have dropped by 23% (from 15.4% to 11.8%) when compared with 2013 (Herrington & Kew, 2014). South Africa achieved positive economic growth rates since the advent of democracy in 1994. However, the formal business sector has not been able to provide the necessary employment for the increasing number of job-seekers (Mahadea et al., 2011). Whilst a modest recovery in jobs has occurred since the worldwide recession between 2009 and 2010, South Africa still faces relatively high rates of unemployment with more than a quarter of the population being unemployed (Herrington & Kew, 2014). Entrepreneurial activity and the creation of new ventures is a major economic force with the potential to reduce unemployment and create economic growth, job creation and general prosperity and, to an extent, to enhance the national competitiveness of the nation in the global business arena (Nicolaidis, 2011). Research by the Global Entrepreneurship Monitor (Herrington & Kew, 2014) shows that a low level of overall education and training is still the biggest challenge facing South Africa. Improving education levels has to become a priority if the promotion of entrepreneurship has to be a viable option (Herrington & Kew, 2014). Kim et al. (2006) conclude that the promotion of entrepreneurship should focus on developing an individual's managerial skills and advanced education. Kim et al. (2006) found that a person with ten years of managerial experience is twice as likely to start a new venture. The quandary is that the rising unemployment rate in South Africa means that fewer individuals will be given the opportunity to gain the necessary experience required to start a venture on their own.

It is possible that this will create a negative spiral effect, generating fewer entrepreneurs than South Africa requires for economic survival in a global economy (Kim et al., 2006).

1.7.5 Global, entrepreneurial, developmental training support

Competitiveness has been defined by Porter et al. (2002) according to a country's economic development, distinguished by three specific stages: (1) factor-driven stage, (2) efficiency-driven stage, and (3) innovation-driven stage. Countries in the factor-driven stage are typically driven by sole proprietorships, i.e. the self-employed, who probably account for most small manufacturing firms and service firms. These countries neither create knowledge for innovation nor use knowledge for exporting (Porter et al., 2002). In the efficiency-driven stage, countries must increase their production efficiency and educate the workforce to be able to adapt to technological developments. Efficient production techniques are important to compete in large markets, enabling companies to exploit economies of scale. Industries in this stage are manufacturers or provide basic services (Syrquin, 1988). The efficiency-driven stage is marked by decreasing rates of self-employment. As firms become bigger, effective management skills are required to capitalise on economies of scale to create wealth. In this stage, the relationship between entrepreneurial activity and economic development would be negative. That is, as the economy becomes more developed, fewer people should be pursuing entrepreneurial activity. The innovation-driven stage is marked by an increase in entrepreneurial activity. Empirical evidence clearly shows that during this phase, firm size distribution in developed countries begins to shift away from larger corporations and towards entrepreneurial activity. There are three reasons for this: an increase in service oriented firms; a tendency to reduce the required size of the firm; and an increase in technologically based firms (Jorgenson, 2001). Examples of such industries include express mail services, photocopying services, personal computers, the internet, web services and mobile phone services, all of which make it less expensive and less time consuming for geographically separate individuals to exchange information. Aquilina, Klump and Pietrobelli (2006) also came to the conclusion that more per capita capital makes it easier for an individual to become an entrepreneur and for smaller firms to exist.

In recent years, economists have come to recognise the significant contribution of innovation and growth to prosperity and economic welfare (Acs & Armington, 2006; Schramm, 2006; Audretsch, 2007). In particular, since innovation contributes to competitive advantage in foreign markets (Roper & Love, 2002), developed economies are better integrated globally (UNCTAD, 2006) and tend to have higher levels of export-oriented entrepreneurship than developing economies (De Clercq, Hessels & Van Stel, 2008). In order for economies to move into the innovation-driven stage, it is necessary for them to develop environmental conditions conducive to entrepreneurship. Several countries have achieved this in the past decade, including Korea, Ireland, Israel and Taiwan to name a few (Acs & Szerb, 2008). High-income countries, such as Germany, France, Belgium, Italy and Finland, have relatively low levels of entrepreneurial activity. Two countries are outliers: Japan, with one of the lowest levels of entrepreneurial activity, and the United States, with one of the highest levels of entrepreneurial activity.

Recent studies confirm that, during the last two decades, the development of new technologies and the emergence of new business models has shifted from large corporations to small and new ventures (Jorgenson, 2001; Audretsch & Thurik, 2001). A country's proportion of export-oriented new ventures is a source of knowledge spin offs that positively influence the total level of entrepreneurial activity. Also, export-oriented new ventures can act as role models; following the premises of institutional theory, individual economic actors may imitate the behaviour of highly visible and successful peers. Such imitation might then provide support and legitimacy to entrepreneurship as a career choice, resulting in the creation of more new businesses within the country. Three insights emerge into the role exports can play in an economy: firstly, countries at the efficiency-driven level need to reduce necessity-driven entrepreneurship; secondly, export-oriented entrepreneurs have a negative effect in developing countries but a positive effect in developed countries, suggesting that exports in the efficiency-driven stage come from large firms and multinationals and not small firms; thirdly, high-impact firms operate more in the innovation-driven stage and not the efficiency-driven stage (Acs, Desai & Hessels, 2008).

1.8 RESEARCH DESIGN AND METHODOLOGY

This research can be described as a theoretical, model-building research effort. Factors were identified from literature with the objective of proposing a theoretical model of developmental training support for entrepreneurs. As many factors as possible were identified from available literature in order to propose the theoretical model. In order to test the propositions that were formulated in this research study, the proposed model was tested empirically. The Structural Equation Modelling (SEM) technique was used in a real life situation by means of quantitative data gathering and analysis in a format compatible with the proposed theoretical research model (Hair, Black, Babin, Anderson & Tatham, 2006; Savalei & Bentler, 2010). SEM allows for both exploratory and confirmatory modelling. This means it is suited to both model testing and model development (Wothke, 2010).

SEM is a multivariate technique that combines aspects of multiple regression and factor analysis to estimate a series of interrelated relationships simultaneously (Hair et al., 2006). There are typically two main elements to SEM: the structural model showing potential causal dependencies between endogenous and exogenous variables, and the measurement model showing the relations between the latent variables and their indicators (Hair et al., 2006).

According to Hair et al. (2006), SEM has been used widely in almost every conceivable field of study as a technique for evaluation. There are two main reasons for the attractiveness of the technique: firstly, it provides a straight forward method of dealing with multiple relationships simultaneously while providing statistical efficiency and, secondly, it has the ability to assess the relationships comprehensively and provide a transition from exploratory to confirmatory analysis. This corresponds to greater efforts in all fields of study towards developing a more systematic and holistic view of problems (Hair et al., 2006).

1.8.1 Secondary research

Secondary data, according to Zikmund (2003), are data that have been previously collected for some project other than the one at hand and includes books, periodicals, government sources, media sources and commercial sources. In order to identify as

many factors as possible which could influence developmental training support for entrepreneurs in South Africa, a comprehensive literature study was done to assist in dealing with the problem statement and to assess problem situations that might be similar to the one presented in this research. According to Leedy and Ormrod (2005), a literature review can also help researchers to see their own study from a historical and associational perspective, and also in relation to earlier approaches to the same or similar problems. Both national and international databases were used, including those of the United Nations, African Union and the World Bank. As some research has been conducted by South Africans on the topic, an attempt was made to supplement key findings of this research with the findings made by South African researchers whilst developing a model for South Africa. The research also included a comprehensive scoping of the South African government's regulatory conditions in the promotion of potential entrepreneurs in South Africa.

1.8.2 Primary research

Primary data, according to Zikmund (2003), are data that are gathered and assembled specifically for the research project at hand. The survey technique, which was chosen to collect raw data for this research study, based on the factors identified as influencing the proposed developmental training support model for the perceived success of entrepreneurs in South Africa, therefore, can be defined as a method of gathering primary data based on communication with a representative sample of individuals.

1.8.2.1 Research paradigm

Given the nature of the problem statement and the research objectives in question, a positivistic research paradigm was proposed. A positivistic research paradigm is described by Collins and Hussey (2003) and Leedy and Ormrod (2005) as a quantitative, objectivist, scientific, experimentalist or traditionalist research paradigm. The normal process under a positivistic paradigm is to study the literature to establish an appropriate theory or theoretical model and construct and test hypotheses, which will be presented in Chapters 2, 3 and 4. The ultimate objective of this process is to quantify and assess the relationship between the independent variable/s and the

dependent or outcome variable in a population (Collins & Hussey, 2003). The process usually ends with confirmation or rejection of the hypotheses that were tested (Leedy & Ormrod, 2005).

1.8.2.2 Data collection

The sampling unit in this study refers to responses to a single questionnaire received from an individual person in the South African business-owner sector. The sampling method used for this study is referred to as snowball sampling (non-probability sampling), with sample units that were selected on the basis of a degree of personal judgment (Zikmund, 2003). In order to try and maximise the legitimacy of the findings of this research study, an estimated 350 respondents were used in the sample. The targeted respondents were existing business-owners in South Africa. A preliminary sample of 25 respondents was selected from the sample to test the questionnaire for adequacy and accuracy before sending it out to the remaining business-owner respondents.

Based on the literature study presented in Chapters 2 and 3, a structured questionnaire was developed to source the primary data to test the hypothesised relationships depicted in the theoretical model. Self-administered, structured questionnaires are common to a positivistic research paradigm (Collins & Hussey, 2003). The final questionnaire consisted of worded statements linked to the variables that influence the perceived success of the proposed, theoretical model, which is described in Chapter 4. A seven-point Likert scale was used for the respondents to rank their response to the questions relating to the dependent and independent variables. Invitations to participate were made by direct telephone calls, personal visits and e-mails to the target population. The questionnaires were then distributed to all identified respondents. A detailed description of the procedures used in the development and administration of the questionnaire is presented in Chapter 5.

1.8.2.3 Data analysis

After the reliability of the measuring instrument had been confirmed, the conceptual model was subjected to statistical testing. In this regard Welman and Kruger (2001)

highlight that, if the research indeed finds a relationship between the variables appearing in a research hypothesis, it is expected that the research hypothesis and chosen statistical method will bring this relationship to light. The objective of the data analysis phase of the research is thus to make statistically valid conclusions.

Cronbach's alpha coefficients were calculated for each of the factors to evaluate the internal consistency between the items measuring each construct in the theoretical model and to confirm the reliability of the measuring instrument. Structural Equation Modelling (SEM) was adopted to test the network of relationships between the set of identified variables. Structural equation modelling is especially appropriate for testing theory and incorporates multiple independent and dependent variables, as well as, latent hypothetical constructs that clusters of observed variables might represent (Savalei & Bentler, 2010). The software application, LISREL version 8.8 (Jöreskog & Sörborn, 2006) was used to test the relationships among the factors that influence the perceived success of developmental training support for entrepreneurs in South Africa.

When a representative group of entrepreneurs was studied, the characteristics of this particular group first had to be defined to ensure sufficient focus of the research effort (Collins & Hussey, 2003). Questionnaires were then sent to the target sample and qualified in four phases:

- To determine whether the person was an entrepreneur or the company an entrepreneurial business;
- To verify the demographic location of the population in the survey;
- To determine the validity and accuracy of the survey by means of a pilot study; and
- To conduct a final survey using the identified target population.

Goodness-of-fit indices were assessed for the overall model and then separately for the measurement and structural models. A detailed explanation of the data analysis phase of the research is presented in Chapter 5.

1.8.2.4 Proposed theoretical model

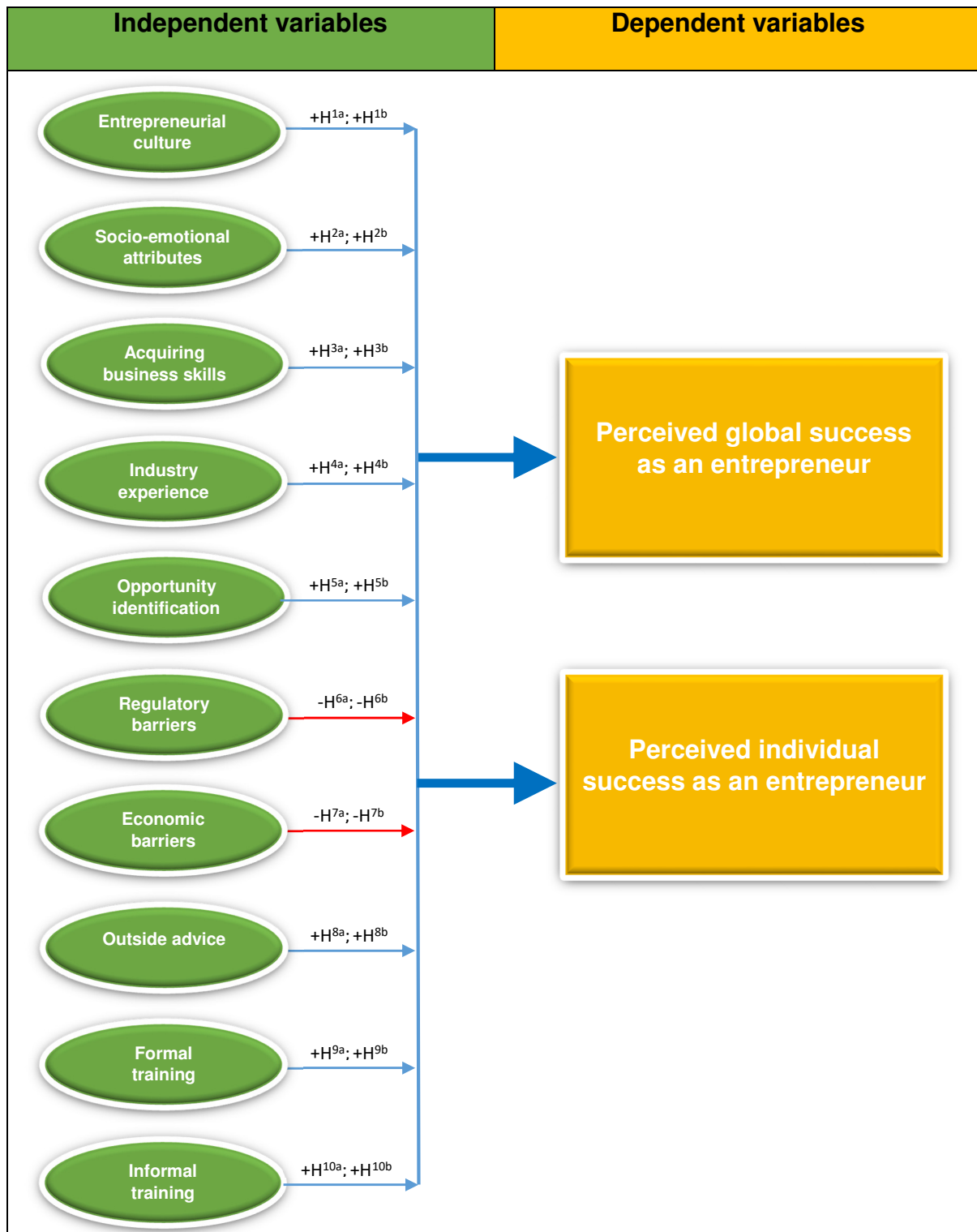
According to Buys and Mbewana (2006), the research process of building a theoretical model can be divided into three phases, namely: 1) data collection, 2) data analysis

and 3) the inference of a new hypothesis. Secondary research was used to develop a theoretical model of the perceived success of developmental training for entrepreneurs in South Africa. The literature review highlighted the multi-dimensionality of developmental training support for entrepreneurs and also a number of inter-related factors that can influence the success of developmental training support for entrepreneurs. The secondary research was used to build a theoretical model indicating the factors which influence the perceived success of entrepreneurial, developmental, training support in South Africa.

The main objective of the empirical research was to prove the inter-dependence of, and qualify the relationships between, the factors of the proposed theoretical model (Collins & Hussey, 2003). Figure 1.2 illustrates the theoretical model. The model illustrates how the independent variables are expected to inter-relate with the intervening variables and how these intervening variables are expected to inter-relate with the dependent variable which is: the perceived success of developmental training support for entrepreneurs in South Africa. The perceived independent variables include: (1) entrepreneurial culture; (2) socio-emotional attributes; (3) acquiring business skills; (4) industry experience; (5) opportunity identification; (6) regulatory barriers; (7) economic barriers; (8) outside advice; (9) formal training and (10) informal training.

The perceived hypotheses are indicated. SEM was conducted to determine what factors significantly affect entrepreneurial, developmental, training support in South Africa. The revised model is presented in Chapter 6.

Figure 1.2: Theoretical model for developmental training support for entrepreneurs in South Africa



Source: Researcher's own construction, 2017

1.8.2.5 Research hypotheses

- H^{1a} There is a positive relationship between entrepreneurial culture and the perceived global success of entrepreneurs.
- H^{1b} There is a positive relationship between entrepreneurial culture and the perceived individual success of entrepreneurs.
- H^{2a} There is a positive relationship between developing socio-emotional attributes and the perceived global success of entrepreneurs.
- H^{2b} There is a positive relationship between developing socio-emotional attributes and the perceived individual success of entrepreneurs.
- H^{3a} There is a positive relationship between acquiring business skills and the perceived global success of entrepreneurs.
- H^{3b} There is a positive relationship between acquiring business skills and the perceived individual success of entrepreneurs.
- H^{4a} There is a positive relationship between industry experience and the perceived global success of entrepreneurs.
- H^{4b} There is a positive relationship between industry experience and the perceived individual success of entrepreneurs.
- H^{5a} There is a positive relationship between opportunity identification and the perceived global success of entrepreneurs.
- H^{5b} There is a positive relationship between opportunity identification and the perceived individual success of entrepreneurs.

- H^{6a} There is a negative relationship between regulatory barriers and the perceived global success of entrepreneurs.
- H^{6b} There is a negative relationship between regulatory barriers and the perceived individual success of entrepreneurs.
- H^{7a} There is a negative relationship between economic barriers and the perceived global success of entrepreneurs.
- H^{7b} There is a negative relationship between economic barriers and the perceived individual success of entrepreneurs.
- H^{8a} There is a positive relationship between outside advice and the perceived global success of entrepreneurs.
- H^{8b} There is a positive relationship between outside advice and the perceived individual success of entrepreneurs.
- H^{9a} There is a positive relationship between formal training and the perceived global success of entrepreneurs.
- H^{9b} There is a positive relationship between formal training and the perceived individual success of entrepreneurs.
- H^{10a} There is a positive relationship between informal training and the perceived global success of entrepreneurs.
- H^{10b} There is a positive relationship between informal training and the perceived individual success of entrepreneurs.

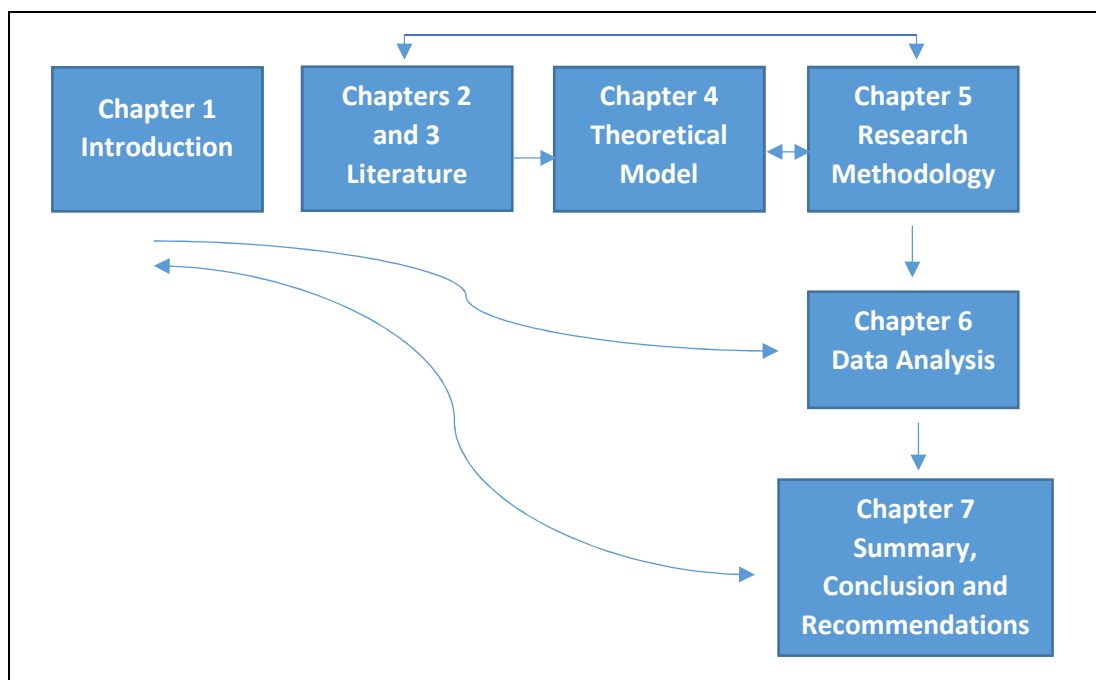
1.9 DELIMITATIONS OF THE STUDY

The objective of this research is to evaluate the contributing factors which influence developmental training support for entrepreneurs in South Africa. Therefore, an important emphasis of this research effort rests on the knowledge, opinions and experience of individual, active entrepreneurs who responded to the survey questions relating to the independent variables and, therefore, cannot be generalised.

1.10 STRUCTURE OF THE THESIS

This study comprises of seven chapters and their links outlined in Figure 1.3

Figure 1.3: Structure of this thesis



Source: Researcher's own construction, 2017

Chapter 1: Introduction to the study.

Chapter 1 provides an overview of the topic of the thesis that includes a brief outline of the objectives of the research, a brief literature overview, the research and design methodology that was used, and a brief definition of the independent variables perceived to affect developmental training support for entrepreneurs.

Chapter 2: Global, developmental, training support for entrepreneurs.

Chapter 2 provides an in depth literature review about developmental training support provided by countries other than South Africa. The chapter concludes with the most significant methods used to stimulate entrepreneurial activity.

Chapter 3: Developmental training support of entrepreneurs in South Africa.

Chapter 3 provides a literature review detailing the developmental training support provided for potential entrepreneurs in South Africa. The chapter concludes with the most contemporary methods used in South Africa.

Chapter 4: A theoretical model for the perceived success of developmental training support for entrepreneurs in South Africa

Chapter 4 contains a model based on the findings of the literature research in Chapters 2 and 3 for use in the South African context. Variables hypothesised to influence developmental training support for entrepreneurs in South Africa are identified. The variable relationships are based on the discussion of the factors that influence developmental training support for South Africans presented in the previous chapters.

Chapter 5: Research methodology.

In this chapter, the research methodology for the study is discussed. The research objectives are addressed and the methods and techniques used to obtain the results and findings in Chapter 6 are discussed in this chapter.

Chapter 6: Empirical results.

In Chapters 2 and 3, the literature study is discussed and the factors believed to influence the dependent variable are identified. In Chapter 4, a theoretical model is proposed and hypotheses are discussed. Hence the empirical results derived from the questionnaire developed in Chapter 5 are reported in Chapter 6.

Chapter 7: Summary, conclusion and recommendations.

Chapter 7 is the final chapter of this thesis and contains an overview of the study and the interpretations of the empirical results are discussed. The research questions are addressed in this chapter.

1.11 DEFINITIONS OF TERMS AND CONCEPTS

1.11.1 Entrepreneurial culture

Culture can be defined as a cultural group's characteristic way of perceiving its social environment (Hopp & Stephan, 2012). Two measures of culture currently seem to dominate cross-cultural research: cultural values and cultural practices or norms. Contrary to popular belief, the distinction between cultural values and norms is important as they have been found to be only weakly or even negatively related to each other (Fischer, 2006; Javidan, House, Dorfman, Hanges & Sully De Luque, 2006). Cultural norms, also called cultural practices, are more directly linked to actual entrepreneurial behaviour (Stephan & Uhlaner, 2010). Social and cultural norms of a country are considered to be one of the most important factors that affect a person's intention to become an entrepreneur (Herrington & Kew, 2014), which might be viewed as the first step in an evolving, long-term entrepreneurial process. Entrepreneurial culture has a focal concern with opportunities, and the culture develops around that interest. Wong and Morse (2014) reason that entrepreneurial culture is a pattern of values, assumptions, and practices shared within an organisation that is centrally concerned with opportunities, where opportunity is the creation of new value to society in part or in whole. Adendorff (2004) states that, in family business, cultural values and

the values of the family business need to be appropriately aligned. Crant (1996) refers to the finding that being raised in a family that is entrepreneurial significantly influences individuals' intentions to start their own businesses. In addition, parental role modelling of entrepreneurial values, such as autonomy and perseverance, provides a valuable cultural resource for future entrepreneurs (Hout, 1984; Miller & Swanson, 1958; Kim et al., 2006).

Kazela (2009) adds that the culture of dependence is very high in South Africa, hence the people expect government to do everything for them. This attitude influences the consideration of entrepreneurship by young people. Fatoki (2010) reports that a lack of entrepreneurial culture, particularly among black South Africans, is a societal problem. Fatoki (2010) adds further that all stakeholders (government, corporate business and non-governmental organisations) need to play a role in creating a culture where a platform of black job-creators is created and sustained. As stated previously, in the American culture, 37% of the population are involved somehow in their own ventures apart from their regular jobs (Timmons, 1999).

Failure as an entrepreneur can also have socio-cultural affects as an individual might be unwilling to start another venture. Kim et al. (2006) found that approximately 50% of entrepreneurs who have failed on the first attempt at a new venture are less likely to attempt another new venture.

1.11.2 Socio-emotional attributes

The term "socio-emotional skills" refers to a distinct set of skills that enable individuals to navigate interpersonal and social situations effectively (Guerra, Modecki & Cunningham, 2014). These skills encompass behaviours and attitudes that are consistent patterns of thoughts, feelings and conduct (such as commitment, discipline, or the ability to work in a team) and personality traits (such as self-confidence, perseverance, and emotional stability) that are relatively stable over time (Borghans, Duckworth, Heckman & ter Weel, 2008; Almlund, Duckworth, Heckman & Kautz, 2011). Some entrepreneurial socio-emotional skills are difficult to develop in people, but there is evidence that others, such as opportunity recognition, can be taught (Detienne & Chandler, 2004; Henry, Hill & Leitch, 2005a). Research indicates that there is a relationship between labour market outcomes and socio-emotional skills

such as creativity, teamwork, leadership, and self-control (Heckman & Rubinstein, 2001; Jacob, Lundqvist & Hellsmark, 2003; Heckman, Stixrud & Urzua, 2006; Becker & Woessmann, 2007; Borghans et al., 2008; Heineck & Anger, 2010). Students who possess considerable knowledge of finance, marketing, management, and human resources, but have little understanding of self (their own strengths and weaknesses, personal preferences, and behaviour patterns) might not succeed in an entrepreneurial venture (Mattare, 2008).

1.11.3 Acquiring business skills

A distinction is made between business skills and entrepreneurial skills required of an entrepreneur. Business skills refer to the completion of a business plan, communication skills, general management skills, financial management skills, marketing skills, operational skills, HR skills and legal skills. Cole and Fernando (2008) write that governments and private organisations alike are investing heavily in financial literacy programmes throughout the world. In contrast to business skills, entrepreneurial skills refer to creativity and innovation, risk propensity, opportunity identification and role models (Ayer, 2010).

Research conducted in Ghana (Valerio et al., 2014; Herrington, Kew & Kew, 2013) found that most participants felt that entrepreneur education and training (EET) programmes were successful in providing critical, general business skills (management, marketing, sales, human resources) and financial skills (accounting, budgeting, capital structure), but less successful in terms of thinking and problem-solving skills and soft skills (communication, leadership, presentation, negotiation). Valerio et al. (2014) found that there is consensus that training in business management is a must in any EET programme. In a South African study conducted by Tengeh et al. (2015), they report that many universities encourage self-employment by providing students with entrepreneurial skills necessary to run their own businesses.

Entrepreneurial incubatees have identified that amongst others, poor business skills were one of the key challenges they faced before joining the incubation programme (Masutha, 2014). Engineers who find that they lack the business skills to build a firm around their inventions or consulting skills are another example (Katz, 2003). There

must be a transfer of both technical and business skills to entrepreneurs to enable them to participate in the mainstream activities of the economy (Herrington et al., 2013).

Business skills are also imparted to entrepreneurs through the experience and skills of mentors (Ayer, 2010). The skills include entrepreneurial skills, technical skills, business planning, general business skills etc. (Watson, 2004; Botha, Nieman & Van Vuuren, 2006; Mahadea et al., 2011; McKenzie & Woodruff, 2012). Obtaining key business skills occurs most easily through direct exposure to an entrepreneurial environment thus individuals with family business backgrounds might have an advantage over others (Kim et al., 2006). However, in a study in India, research found modest evidence that business skills yielded better profits or increased sales (Honorati & Mcardle, 2013; Field, Jayachandran & Pande, 2010). The main impediments for small business survival have been identified as lack of access to finance, infrastructure and business skills (World Bank Group, 2011). Nicolaidis (2011) emphasises that practical components requiring innovation and creativity, new idea-generation and practical action are business skills essential to emerging entrepreneurs.

1.11.4 Industry experience

Subjective entrepreneurial knowledge and perception is also shaped by managerial experiences within a specific industry. Industry-specific experience involves interactions with buyers, suppliers, distributors, and other stakeholders, which produces knowledge about the opportunities, threats, competitive conditions, and governmental regulations that are unique to each industry (Mosakowski, 1993; Spender, 2000; Eckhardt & Shane, 2003). Kor, Mahoney and Michael (2007) continue, stating that experience-based knowledge of the industry can be useful for perception and evaluation of new entrepreneurial opportunities and provides knowledge regarding how an industry works. Industry experience often embeds goodwill with certain customers, suppliers, and industry stakeholders. Experienced managers can capitalise on this goodwill by initiating and securing new business relationships for their current firm and it is this experience which might contribute to the success of a new business venture because the experienced entrepreneur secures resources and business orders for the firm more easily through previous industry connections (Kor et

al., 2007). Managers with different levels of industry experience will have varying levels of commitment to historical industry trends. Such differences are likely to spur healthy conversations and debates concerning new strategic directions for the firm. Also, when managers are exposed to inter-industry differences in technology, distribution, marketing, and pricing, they are more likely to be innovative in formulating and implementing new strategies and to position current and future products and services creatively (Kor et al., 2007).

Studies have indicated that 90% or more of founders start their companies using the same technology in the same market-place or industry in which they have been working (Timmons, 1999). Timmons (1999) adds that other research has shown that founders are likely to have from 8 to 10 years of experience, and that they are likely to be well educated. Entrepreneurs should gain related industry experience, develop business skills, and seek to achieve success (Sluis, Praag & Vijverberg, 2004). Furthermore, the more educated an entrepreneur (Osborn & Slomczynski, 2005), the more likely that he/she will be able to identify more favourable employment opportunities (Osowska, 2010). Baycan, Sahin and Nijkamp (2012) found that there is a pulling effect to become an entrepreneur as a result of previous experience, through employment and/or entrepreneurship and, moreover (in 69% of cases), as a result of the actual way in which this experience was obtained as an employee and entrepreneur in the same sector (Baycan et al., 2012).

Kim et al. (2006) categorise work experience into four categories:

- General full-time work experience;
- Managerial experience;
- Previous start-up experience; and
- Current self-employment.

Full-time work experience provides two important learning opportunities. If such work experience occurred within the industry of the new venture, individuals can rely on the knowledge of their industry to identify potential opportunities and other industry-related conditions (Eckhardt & Shane, 2003; Kim et al., 2006). Previous managerial experience can give people the skills needed to co-ordinate and administer diverse activities in the early phases of a start-up (Boden & Nucci, 2000). Kalleberg and Leicht (1991) found that prior start-up experience and current self-employment are two

additional ways in which nascent entrepreneurs develop relevant planning and managerial experience for a new start-up. Rider, Thompson, Kacperczyk and Tåg (2013) confirm that individuals of moderate experience are most likely to make the transition to entrepreneurship. However, people who start small businesses in trades such as construction or carpentry, have little need for advanced formal education. Instead, they draw on their acquired technical skills and on-the-job experience (Kim et al., 2006).

1.11.5 Opportunity identification

In addition to entrepreneurial action, identifying a business opportunity is a pre-requisite for starting a new business: “To have entrepreneurship, you must first have entrepreneurial opportunities” (Shane & Venkataraman, 2001: 13-16).

Although there is not enough empirical evidence yet that opportunity identification is related to new venture creation (Ucbasaran, Westhead & Wright, 2008), there are strong theoretical arguments for this relationship. Ucbasaran et al. (2008) have argued that identifying more opportunities should be related to identifying an opportunity which entrepreneurs consider to be sufficiently innovative for starting a new venture (Gielnik, Frese & Kahara-Kawuki, 2015). Of significance, is the conceptual overlap between intentions and opportunity identification. Intentions represent a useful vehicle for gaining new insights into the processes by which we identify opportunities and threats and how we formulate and implement resulting action (Krueger, Reilly & Carsrud, 2000).

While there is no empirical proof at this stage, it is likely that the variance in unemployment rates for graduates of different universities, departments and disciplines can be attributed to real and perceived differences in the quality of their qualifications (Center for Enterprise & Development, 2013). However, Ndedi (2009) argues that opportunity recognition is not a privilege for entrepreneurship/business-oriented students only, but students from other disciplines as well and, indeed, the prerogative of every active youth (Tengeh et al., 2015). In a report by Valerio et al. (2014) it was noted that the rate at which the South African youths can perceive and capitalise on business opportunities is only 39%, the lowest of the Sub-Saharan African countries that participated in the study (Tengeh et al., 2015).

According to Tobergte and Curtis (2013), entrepreneurship can only be brought to fruition if potential entrepreneurs can perceive good opportunities, believe that they have the necessary skills to start a business, and are willing to take action after expressing their intentions. Opportunities originate as perceptions of what individuals believe can be done to earn a profit and the source of such opportunity might be through individual and/or collective effort (Tengeh et al., 2015). Isaacs et al. (2007) argue that, for this to develop, deliberate efforts are required such as integrating entrepreneurial education into non-business disciplines in higher institutions of learning. Isaacs et al. (2007) agree that the key to the success of establishing a culture of entrepreneurship in South Africa is education and that this depends on all stakeholders including the state, educators and learners themselves.

1.11.6 Regulatory barriers

Given the potential, beneficial spin-offs of entrepreneurship, governments around the world have taken an interest in interventions that promote and facilitate entrepreneurial success through required support systems and the removal of barriers to entrepreneurship (McKernan, 2002; Paulson & Townsend, 2004; McKenzie & Woodruff, 2012). Political factors can manifest as specific policy actions that reduce bureaucratic barriers and corruption, ensure fair practices, or provide grants and funding to support entrepreneurial opportunities and promotional programmes (Valerio et al., 2014). Governments can also promote entrepreneurship through an explicit promotional framework or strategy. Moreover, political contexts can be shaped by local actors, including schools and various community-based organisations (Valerio et al., 2014). The authors add that barriers include each country's legal and regulatory frameworks and infrastructure, while issues of corruption and insecurity, particularly in the informal sector, remain endemic. The labour market itself poses a problem when countries suffer from very high youth unemployment (Valerio et al., 2014). In all countries, governments need to remove barriers to competition, review the provision of services with respect to efficiency and effectiveness, promote fiscal responsibility, and ensure transparency of the law and a clear legal framework for property rights and regulatory oversights (Minniti, Arenius & Langowitz, 2005).

1.11.7 Economic barriers

Economic studies from around the globe consistently link entrepreneurship, particularly the fast-growth variety, with rapid job creation, GDP growth and long-term productivity increases (Isenberg, 2011). Isenberg (2011) continues to add that Governments would be better advised to remain sector neutral and to unleash rather than harness people's entrepreneurial energies. They should observe which direction entrepreneurs take and "pave the footpath" by gently encouraging supportive economic activity. Isenberg (2011) suggests that engaging the private sector, modifying cultural norms, removing regulatory barriers, encouraging and celebrating successes, passing conducive legislation, being judicious in emphasising clusters and incubators, subjecting financing programmes to market rigours and, above all, approaching the entrepreneurship ecosystem as a whole, will enable governments to create economic growth by stimulating self-sustaining venture creation.

Tobergte and Curtis (2013) argue that government should incentivise entrepreneurship aggressively through greater development of specialised economic zones, providing tax breaks for businesses below certain revenue thresholds and lowering barriers to entry in certain industries.

1.11.8 Outside advice

As CEOs work to acquire additional perspectives on strategic issues, they will tend to reach outside the regular circles of advisers upon which they routinely rely. Research on social networks, as well as, other behavioural research, has indicated that the advice contacts that CEOs rely upon most routinely are particularly likely to be executives with whom they share friendship ties or a common professional background (McDonald, Khanna & Westphal, 2008). As they seek less routine sources of advice, CEOs will almost inevitably end up soliciting more information and advice from others with whom they lack such associations.

Onyango (2013) reports that entrepreneurial success revolves around receiving sound advice from experienced individuals, family, and friends. Entrepreneurs might also act as role models by offering advice and wise counsel to a new entrepreneur as he or she attempts to accomplish difficult entrepreneurial tasks (St-Jean & Audet, 2009;

Onyango, 2013). Onyango (2013) adds further that entrepreneurs who valued and trusted their mentors' advice, were more willing to follow and discuss issues with their mentors before making a final decision.

Kelley et al. (2015) report in the Global Entrepreneurship Monitor (GEM) that outside advice used by nascent entrepreneurs falls typically within the following five, broad categories:

- The private sphere of family and friends, who are likely to give support or discouragement;
- The job sphere of managers and work colleagues, who might serve as sounding boards;
- The experience sphere of established entrepreneurs, business people and people with expertise, who might convey tacit knowledge;
- The professional sphere of bankers, lawyers and accountants, who offer codified knowledge; and
- The market sphere of competitors, collaborators, suppliers and customers, who might provide knowledge about the market.

Bosma, Acs, Autio, Coduras and Levie, (2008) in their Global Entrepreneurship Monitor Report indicate that education, training and getting advice from others are three sources of learning that appear to reinforce one another. Much more remains to be discovered about how entrepreneurs use advisers (including the number, not just type of advisers) and the nature and quality of advice received (Martínez, Levie, Kelley, Sæmundsson & Schøtt, 2010; Stanger, 2004). Botha et al. (2006) report further that women are more likely than men to consult multiple sources of advice at start-up. Botha et al. (2006) add that 74% of female entrepreneurs required advice on marketing, advertising and managing a business and 80% wanted advice on financial and cash flow planning. When it comes to legal advice, it is common for incubators to offer legal assistance and advice to nascent entrepreneurs (Scaramuzzi, 2002).

Family members were used to: (1) promote entrepreneurship, (2) identify opportunities, (3) provide financial support, (4) offer practical assistance, (5) provide specialised advice, and (6) act as sounding boards. Entrepreneurs emphasise the reliability of family members (Adendorff, 2004; Jack, Dodd, Anderson & Alistair, 2004). Jack et al. (2004) comment that other entrepreneurs who had experienced the same

type of problems faced by nascent entrepreneurs were able to give very practical advice on problem solving. Ardichvilia, Cardozob and Ray (2003) report that while experience from working at a specific job is paramount to starting a business, advice received from other people (family, friends, mentors etc.) is a second source which enables entrepreneurs to discover and capitalise on a new opportunity.

Mentorship is an important element that could enhance entrepreneurs' motivation in the long haul. Raffo, Lovatt, Banks and O'Connor (2000) state that entrepreneurs seem to value the opportunity of having someone, a specific expert or mentor figure, to support them in their daily problem-solving needs. It is evident that some form of mentoring appears to have a positive effect on the performance of most, if not all, entrepreneurs (Sullivan, 2000). This view is supported by Churchill (1983), who pointed out that a mentoring programme had a direct or indirect impact on the performance of entrepreneurs. Since it appears that mentoring does add value, it is important that it be defined and discussed in order to understand its importance as a learning tool.

Sullivan's (2000) definition of mentorship is best suited to the context of support for start-up entrepreneurs being: a protected relationship in which learning and experimentation can occur, potential skills can be developed and in which results can be measured in terms of competencies gained rather than curricular territory covered. Nieman (2000) defines business mentoring as an ongoing, long-term, business counselling relationship between an experienced business adviser (or corporate executive) and an entrepreneur, which covers a diverse range of topics as a business develops over time towards an agreed set of objectives. Business counselling is further defined by Stone (1999) as a process whereby business problems are diagnosed and resolved in such a way that the clients learn not only how to overcome their current difficulties, or exploit their opportunities, but also how to tackle similar situations in future. Sullivan (2000) mentions that while a mentor cannot effectively "lecture" to an individual entrepreneur's prior experience, he or she might be in a position to give meaning to, or aid understanding of, that experience. The role of a mentor is to enable the entrepreneur to reflect on actions and, perhaps, to modify future actions as a result; it is about enabling behavioural and attitudinal change. Sullivan (2000) finds that the significance of intervention is thought by clients to be greatest in terms of achieving objectives, ability to learn and the ability to cope with

problems. It is interesting that the transference of skills or “ability” is rated highly as opposed to the act of “doing for” or of being more directive (Botha et al., 2006).

1.11.9 Training

Three types of learning can be discerned: formal learning, non-formal learning and informal learning (Lans, Wesselink, Biemans & Mulder, 2004). Formal and non-formal learning can be recognised by the specific intention to learn. Formal learning takes place in education and training institutions, leading to official diplomas and qualifications. Non-formal learning takes place alongside the mainstream systems of education and training and does not typically lead to formalised certificates. Non-formal learning may be provided in the workplace and by activities of civil society organisations and groups (such as youth organisations, trade unions and political parties). It can also be provided through organisations or services that have been set up to complement formal systems (such as arts, music and sports classes or private tutoring to prepare for examinations). Informal learning, on the other hand, is defined as unstructured, unintentional, implicit learning that occurs, for example, during work or during co-operation with others (Tjepkema, 2002; Lans et al., 2004).

1.11.9.1 Formal training

Formal training includes any course that is part of an official education programme, whether compulsory or voluntary. This includes primary or secondary education and tertiary-level certificate, diploma or degree programmes (Herrington et al., 2013).

In Germany, Finland, Republic of Korea, Ireland, Spain and the United States, experts tend to agree that public and/or private agencies outside the formal education system provide adequate entrepreneurship education and training. Experts in other participating GEM countries are less positive. A large majority of those who received start-up training did so as part of their formal education in school, college or university. On average, around 80% of those who have received training have done so during their formal education. This high proportion of formal training reveals the important role the formal education system plays in entrepreneurship training (Herrington et al., 2013).

Slightly more than 60% of those who have received training, on average, have received informal training, either exclusively or in addition to formal training. This high level of informal training suggests that, despite having obtained formal entrepreneurship education or training, people may also want focused, “not for credit, but for real” training. The most frequent source of informal training in most of the countries is self-study, followed by informal university programmes and courses offered by business associations (Herrington et al., 2013).

Start-up training rates vary according to an individual’s age, gender, education and income. In all three economic groups, younger individuals are more likely to have received training in starting a business. This probably reflects the recent rise in entrepreneurship training offered in the formal education system. People from wealthier households and better-educated people are also more likely to have received training. Such individuals might have more opportunities to access training. In most countries, men are more likely than women to have volunteered for training. In less well-developed countries, women tend to have had fewer opportunities for compulsory training than men (Herrington et al., 2013).

Firstly, some research suggests that early, formal, entrepreneurship education affects the attitudes of students which, in turn, direct them towards certain future careers (Do Paco, Ferreira, Raposo, Rodrigues & Dinis, 2008). Furthermore, according to Kourilsky and Walstad (1998), the early stimulation of these attitudes can even encourage entrepreneurship (Steenekamp, Van der Merwe & Athayde, 2011) add that attention should be paid to formal learning, informal learning and practical experience.

Unfortunately, the literature attempting to connect much entrepreneurial, formal or traditional education systematically to entrepreneurial activity or performance is virtually non-existent (Bosma et al. 2008; Honig & Karlsson, 2004).

Researchers in one study of nascent entrepreneurs found no relationship between profitability and those that had written a formal business plan two years after starting up (Honig & Karlsson, 2004).

Formal education can affect the likelihood of entrepreneurial entry through: (1) the acquisition of skills, (2) credentialing, and (3) sorting people by ambition and assertiveness (Kim et al., 2006). Kim et al. (2006) add that formal education can give individuals access to social networks and also that educational achievements can be

linked to ambition. Formal education thus enables individuals to gain knowledge and skills, earn credentials valued by others in the business community, and sorts people by ambition and assertiveness (Kim et al., 2006).

Advanced, formal education has a positive association with being a nascent entrepreneur. College graduates are twice as likely to be nascent entrepreneurs as people with high school degrees or less, but post-college education makes no additional contribution to being a nascent entrepreneur (Kim et al., 2006).

1.11.9.2 Informal training

Informal training operates outside formal programmes, for example, non-credit bearing courses at a university, local business organisation or a government agency.

Informal training and pre-market experiences are cultural capital resources that might increase interest in a start-up project (Lentz & Laband, 1990; Kim et al., 2006). In fact, suggestions are that entrepreneurial education improves entrepreneurial capability and a nation's ability to spot and capitalise on entrepreneurial opportunities. Essentially, a major approach to achieving a nation's entrepreneurial capability is to increase the entrepreneurial intentions and capabilities of university students (Tengeh et al., 2015). Embedding entrepreneurship into the formal education system at all levels requires a strong commitment from the government in terms of policy and resources, since most schools, universities and training programmes are overseen by the government (Tengeh et al., 2015).

Informal learning is defined as unstructured, unintentional, implicit learning that occurs, for example, during work or during co-operation with others (Tjepkema, 2002; Lans et al., 2004). Powerful forms of informal learning are: learning on-the-job, learning from more experienced colleagues and working as a member of a team.

1.11.10 Perceived individual success as an entrepreneur

According to Gree and Thurnik (2003), entrepreneurship has been recognised as one of the tools that drives the economy of a country. Turker and Selcuk (2009) point out that entrepreneurial activities are not only the incubator of technological innovation,

but they also provide employment opportunities and increase competitiveness. According to Maas and Herrington (2006), entrepreneurship is a significant component of the solution to South Africa's development issues. Entrepreneurship is fundamental to the growth of the South African economy and its future socio-political stability. Without the creation of new business, South Africa risks economic stagnation. In the Global Entrepreneurship Monitor South African Report, Herrington et al. (2013) note that given the failure of the formal and public sector to absorb the growing number of job seekers in South Africa, increasing attention has focused on entrepreneurship and new firm creation and its potential for contributing to economic growth and job creation (Fatoki, 2010).

Robichaud, McGraw and Roger (2001) argue that motivation falls into four categories: (1) extrinsic rewards, (2) independence/autonomy, (3) intrinsic rewards, or what the entrepreneur wants to achieve with a new venture, and (4) family security. Extrinsic motives are the economic reasons that entrepreneurs work, whereas intrinsic motives are related to self-fulfilment and growth.

Ashley-Cotleur, King and Solomon (2009) agree that extrinsic motivators for a nascent entrepreneur will include expected monetary rewards reflected in salary and benefits. Intrinsic rewards will centre on the satisfaction of being one's own boss, being more in control of your own destiny, and having ultimate responsibility for the success of the venture.

1.12 SUMMARY

Chapter 1 contained an overview of the research study including background to the research problem which is: to identify the major contributors which can positively influence developmental training support for entrepreneurs in South Africa. An overview of entrepreneurship was provided, including its significance, global trends and, briefly, South Africa's entrepreneurial outlook. The literature highlighted ten main areas affecting the encouragement of entrepreneurship: 1) entrepreneurial culture, 2) socio-emotional attributes, 3) acquiring business skills, 4) industry experience, 5) opportunity identification, 6) regulatory barriers, 7) economic barriers, 8) outside advice, 9) formal training and 10) informal training.

Chapter 2 provides an in-depth review of global, entrepreneurial, developmental, training support initiatives, followed by Chapter 3 with an in-depth review of South African, entrepreneurial, developmental, training support methods.

CHAPTER 2

GLOBAL, DEVELOPMENTAL, TRAINING SUPPORT FOR ENTREPRENEURS

2.1 INTRODUCTION

Chapter 1 provided the introduction to this research study. This chapter contains a literature study relating to global, developmental, training support for entrepreneurs in which research questions RQ₁, RQ₄ and RQ₅ and research objective RO₁ are addressed.

In recent years, increased attention has been paid to investigating the factors relating to entrepreneurship and new venture creation in a global economic context (Blisson & Nelson, 2004). Of particular interest has been the increasing entrepreneurial activity through the creation of new ventures in a bid to enhance regional and economic development and growth (Levesque & Minniti, 2006). The development of small and medium-sized enterprises (SMEs) has focused even further attention on the development of entrepreneurs (Dickson et al., 2008).

The United States has achieved its highest economic performance during the last ten years by fostering and promoting entrepreneurial activity. According to Kuratko and Hodgetts (2004) the USA success has at least three entrepreneurial components. Firstly, large firms that existed in mature industries have adapted, downsized, restructured and reinvented themselves during the 1990s and are now thriving. Large businesses have adapted and learned to become more entrepreneurial. As large firms have become leaner, their sales and profits have increased sharply. For example, General Electric cut its work force by 40%, from more than 400,000 to fewer than 240,000 workers in 1996, while sales increased four-fold, from less than \$20 billion to nearly \$80 billion over 20 years since then. This goal was accomplished in many cases by returning to the firm's core competencies and by contracting out other functions, formerly done in-house, to small firms (Kuratko, 2003). Secondly, while these large companies have been transforming themselves, new entrepreneurial companies have been blossoming. Twenty years ago, Nucor Steel was a small steel manufacturer with a few hundred employees. It embraced a new technology called thin slab casting,

enabling it to thrive while other steel companies were stumbling. Nucor grew to 59,000 employees, with sales of \$3.4 billion and a net income of \$274 million (Kuratko, 2003). Thirdly, thousands of smaller firms have been founded, including many established by women, minorities, and immigrants. These new companies have come from every sector of the economy and every part of the country. Together these small firms make a formidable contribution to the economy, as many firms have hired one or two employees to create all together more than 1 million net new jobs during the decade of the 1990s (Kuratko, 2003). With increasing globalisation and the liberalisation of markets, entrepreneurial activity is being promoted throughout the world (e.g. South America, Eastern Europe, China and Russia, among others). Entrepreneurship is popular partly because it is perceived as an engine of socio-economic growth and development, providing new job opportunities and diverse goods and services to the population (Reynolds et al., 2005). Thus, enhanced entrepreneurship in a country leads to greater national prosperity and competitiveness (Zahra, Ireland, Gutierrez & Hitt, 2000; Hitt, Ireland, Camp & Sexton, 2001). Effective training programmes must show students how to behave entrepreneurially and should also introduce them to people who might be able to facilitate their success (Kuratko, 2003).

2.1.1 Definition of an entrepreneur

The word “entrepreneur” has French origins dating back to the 1700s and, since then, has evolved to mean someone who “undertakes a venture”. Jean-Baptiste Say, a French economist of the 1800s, stated that: “...an entrepreneur shifts economic resources out of an area of low productivity into an area of higher productivity and greater yield” (Herrington et al., 2013). The Oxford Dictionary defines an entrepreneur as: “...one who organises, manages and assumes the risk of a business enterprise”. Herrington et al. (2013) provide other attributes of entrepreneurs which include: opening up new markets, creating new venture firms, defining new opportunities, value creation and leadership, to mention a few. Typically, the pursuit of profit underlies a new venture’s sustainability and success (Herrington et al., 2013). Timmons and Spinelli (2004) agree, stating that entrepreneurship is the ability to set up and build something out of virtually nothing; it is therefore described as an elementary human, creative act. People often ascribe a particular “mind-set” to entrepreneurs that exhibit

common traits such as single-mindedness, drive, ambition, creative problem solving, practicality and goal-orientation (Davies, 2002).

2.1.1.1 Definition of a social entrepreneur

William Drayton is thought to have coined the term “social entrepreneur” several decades ago (Davies, 2002). Davies (2002) identified that “social entrepreneurs” have the same industry-creating, core mind-set as other entrepreneurs and the term “social enterprise” implies a business with a social purpose, or a business that generates profit that is donated to a social venture or purpose. The essence, however, is the same. Both types of entrepreneurs are able to recognise an imbalance in society and rectify it (Davies, 2002). Dess and Lumpkin (2005) define social entrepreneurs as change agents who:

- Adopt a mission to create and sustain social value (not just private value);
- Recognise and relentlessly pursue new opportunities to serve that mission;
- Engage in a process of continuous innovation, adaptation, and learning;
- Act boldly without being limited by resources currently in hand; and
- Exhibit a heightened sense of accountability to the constituencies served and for the outcomes created.

Entrepreneurs identify business opportunities to create and deliver value for stakeholders in prospective ventures. While elements of opportunities might be “recognised,” opportunities are made, not found. Careful investigation of, and sensitivity to, market needs, as well as, an ability to spot sub-optimal deployment of resources might help an entrepreneur to begin to develop an opportunity, which might or might not result in the formation of a business (Ardichvilia et al., 2003). Opportunity development also involves entrepreneurs’ creative work. Therefore, “opportunity development” rather than “opportunity recognition”, should be the focus of a successful entrepreneur (Ardichvilia et al., 2003).

2.1.1.2 Definition of multipreneurship

In his recent book on multipreneurship titled: *Diversification in times of crisis*, Harkiolakis (2014: 47) defines multipreneurship as: the initiation and the creation by an individual of more than one distinct and diverse business that reached maturity and co-existed for some period of time under his management and control. Harkiolakis (2014) excludes venture capitalists from his definition. A multipreneur is the primary owner of the uncertainty arising from the operation and establishment of the ventures in which they are involved (Harkiolakis, 2014). Harkiolakis (2014) motivates that one of the key driving forces for multipreneurs is boredom, which is a condition endemic to most entrepreneurs. However, most do not progress to become multipreneurs. Harkiolakis (2014) adds that behavioural characteristics of entrepreneurs who progress to become multipreneurs are at the core of their success. A multipreneur has stakes and, in some cases, majority ownership in multiple businesses. Harkiolakis (2014) finds that “corporate multipreneur”, although an unusual term, refers to those entrepreneurial employees and executives who are faced with the challenge of continually looking for opportunities and developing new ventures within their organisations.

Harkiolakis (2014) makes the point that multipreneurs should be given special consideration by governments. He adds that the very nature of entrepreneurship is probable failure and thus the business ventures of mutipreneurs typically cover large spectrums of industries and the effect of their failure could have a far more negative impact than that of single-tier entrepreneurs. Thus, when making or implementing policies, governments are advised to include the dimension of multipreneur accordingly (Harkiolakis, 2014).

2.1.2 Significance of entrepreneurship

Van Praag and Versloot (2007) emphasise the importance of entrepreneurial activity in a healthy economy. Entrepreneurs create employment, contribute to growth and productivity and are responsible for innovations and inventions. Minniti and Lévesque (2008) report that entrepreneurs appear to be more satisfied than employees at an individual level. Entrepreneurial activity and economic activity are proven to have a link – which explains the desire to encourage start-up businesses and stimulate

entrepreneurship (Minniti & Levesque 2008; Acs & Armington, 2006; Fritsch, 2004). Osowska (2016) indicates that the model they propose shows the significance of entrepreneurs, who introduce entrepreneurial activities through their behaviour.

Today's younger generation is sometimes referred to as Generation X because they feel "X-ed" out of traditional opportunities. This generation of the 21st century should become known, however, as Generation E because they are becoming the most entrepreneurial generation since the Industrial Revolution. As many as 5.6 million Americans, younger than age 34, are actively trying to start their own businesses. One-third of new entrepreneurs are younger than age 30, more than 60% of 18- to 29-year-olds say they want to own their own businesses, and nearly 80% of would-be entrepreneurs in the United States are between the ages of 18 and 34 (Kuratko, 2003).

2.2 ENTREPRENEURSHIP FROM A GLOBAL PERSPECTIVE

There is a distinction between the development of entrepreneurs in factor-driven countries, efficiency-driven countries and innovation-driven countries (Kelley et al., 2015). Kelley et al. (2015) define the different economic types as follows:

- 1) **Factor-driven economies:** Basic factor conditions such as low-cost labour and unprocessed natural resources are the dominant basis of competitive advantage and exports. Factor driven economies are highly sensitive to world economic cycles, commodity prices, and exchange rate fluctuations.
- 2) **Efficiency-driven economies:** Producing more advanced products and services highly efficiently become the basis of a country's advantage. Heavy investment in efficient infrastructure, business friendly government administration, strong investment incentives, improving skills and better access to investment capital allow major improvements in productivity.
- 3) **Innovation-driven economies:** The ability to produce innovative products and services at the frontier of global technology using the most advanced methods becomes the dominant source of competitive advantage. An innovation-driven economy is characterised by distinctive producers and a high share of services in the economy and is quite resilient to external shocks.

2.2.1 Definition of a developed country

In addition to the different economic categories, countries are said to be in different stages of development. Schwab et al. (2015) report that a developed country is a country with a lot of industrial activity and where people generally have high incomes. Such countries generally have high standards, a good infrastructure, and stable economy with very high per capita income. The degree of development, industrialisation and general standard of living for its citizens is very high. According to The Global Competitive Report (Schwab et al., 2015), the five most competitively advanced economies in 2007–2008 were the United States, Switzerland, Denmark, Sweden and Germany. The five least competitive economies were Slovenia, Portugal, Italy, Cyprus and Greece. Data are given as the simple average of growth rates (Schwab et al., 2015).

2.2.2 Characteristics of entrepreneurship in developed countries

According to Kelley et al. (2015) in their 2015, Global Entrepreneurship Report, of all the geographic regions, the entrepreneurship ecosystem is the most developed in North American economies and the least developed in the African economies.

The 2015 Global Entrepreneurship Monitor (GEM) survey has tracked rates of entrepreneurship across multiple phases and assessed the characteristics, motivations and ambitions of entrepreneurs and the attitudes societies have toward this entrepreneurial activity. Kelley et al. (2015) surveyed over 60 countries. Table 2.1 below indicates the economic stage of each country in the survey (with South Africa highlighted in red).

Table 2.1: Economies participating in the 2015 GEM Survey, grouped by geographic region and economic development level

Continent	Factor-driven	Efficiency-driven	Innovation-driven
Africa	Botswana Burkina Faso Cameroon Egypt Senegal Tunisia	Morocco South Africa	
Asia and Oceania	India Iran Philippines Vietnam	China Indonesia	Australia Israel Japan

Continent	Factor-driven	Efficiency-driven	Innovation-driven
		Kazakhstan Lebanon Malaysia Thailand Turkey	Republic of Korea Taiwan
Latin America and Caribbean		Argentina Barbados Brazil Chile Colombia Ecuador Guatemala Mexico Panama Peru Puerto Rico Uruguay	
Europe		Bulgaria Croatia Estonia Hungary Latvia Poland Romania Macedonia	Belgium Finland Germany Greece Ireland Italy Luxembourg The Netherlands Norway Portugal Slovakia Slovenia Spain Sweden Switzerland UK
North America			Canada United States

Source: Adapted from Kelley et al., 2015

2.2.3 Entrepreneurial categories

Entrepreneurial activity encompasses multiple phases of the business process (Wright & Louw-Potgieter, 2010; Kelley et al., 2015) as follows:

- **Nascent:** An individual is considered a nascent entrepreneur if he or she is between the ages of 18 and 64 and has taken some action towards starting a business in the last year, and expects to own or share in the business they are starting, which must not have paid any wages or salaries for more than 3 months (Reynolds et al., 2005).
- **New business owners:** Those which have paid salaries for more than three months but less than 42 months; and they own and manage an established business that has been in operation for more than 42 months.

When grouped together, nascent entrepreneurs and new business owners may be viewed as indicators of early-stage entrepreneurial activity in a country.

- **Established business owners:** Business owners who have paid salaries and wages for more than 42 months. Their businesses have survived the liability of newness. Much can be learned from comparing early-stage and established business owners.
- **Discontinuation:** The closure of the business venture.

2.2.4 Aspects of the entrepreneurial process

Table 2.2 below details the aspects of the entrepreneurial process. Although these phases proceed progressively, no one stage is dealt with in isolation or is totally completed before work on another phase occurs. For example, to identify and evaluate an opportunity successfully (phase 1), an entrepreneur must have in mind the type of business desired (phase 4). The entrepreneurial process, as indicated by Shane and Baron (2005), consists of four elements: the entrepreneur; opportunity; resources; and organisation. The entrepreneur forms the hub and core element in any entrepreneurial process. Shane and Baron (2005) state that there is growing consensus in the field that viewing entrepreneurship as a process that unfolds over time and moves through distinct but closely inter-related phases is both useful and accurate. They identify the key phases in the process to be: recognition of an opportunity; deciding to proceed and assembling the essential resources; launching a new venture; building success; and harvesting the rewards (Botha et al., 2006).

Table 2.2: Aspects of the entrepreneurial process

Identify and evaluate the opportunity (Entrepreneurial skills)	Develop a feasibility study and business plan (Timmons & Spinelli, 2004) (Entrepreneurial skills and business skills)	Resources required (People and Team) (Technical skills)	Manage the enterprise (Business skills)
<ul style="list-style-type: none"> • Opportunity assessment • Creation and length of opportunity • Executive summary 	<ul style="list-style-type: none"> • Cover page • Opportunity assessment • Creation and length of opportunity 	<ul style="list-style-type: none"> • Determine resources needed • Business plan • People (Team) 	<ul style="list-style-type: none"> • Develop management style

Identify and evaluate the opportunity	Develop a feasibility study and business plan (Timmons & Spinelli, 2004)	Resources required	Manage the enterprise
(Entrepreneurial skills)	(Entrepreneurial skills and business skills)	(People and Team) (Technical skills)	(Business skills)
<ul style="list-style-type: none"> • Industry analysis – describe products/services and growth plan • Market research • Real and perceived value of opportunity • Risk and returns of opportunity • Economics of the business • Marketing plan • Design and developmental plan • Manufacturing and operational plan • Opportunity versus personal skills and goals • Competitive environment 	<ul style="list-style-type: none"> • Executive summary • Industry analysis – describe products/services and growth plan • Market research • Real and perceived value of opportunity • Risk and returns of opportunity • Economics of the business • Marketing plan • Design and developmental plan • Manufacturing and operational plan • Opportunity versus personal skills and goals • Competitive environment • Management plan • Financial plan • Action plan • The offering • Addendum 	<ul style="list-style-type: none"> • Capital • Other stakeholders • Determine existing resources • Identify available suppliers • Develop access to needed resources 	<ul style="list-style-type: none"> • Understand key variables for success • Identify problems and potential problems • Implement control systems • Develop growth strategy • Planning, organising, and leading

Source: Adapted from Hisrich and Peters, 1998

2.2.5 Measuring entrepreneurial activity

Policy makers are of the view that more entrepreneurship (engagement in entrepreneurial activity) is essential to attain higher levels of innovation and economic growth (Oosterbeek, Van Praag & Ljsselstein, 2010). Kelley et al. (2015) measure the following factors which contribute to the likelihood of entrepreneurial activities:

2.2.5.1 Perception of societal values related to entrepreneurship

These refer to:

- Entrepreneurship as a good career choice;
- High status for successful entrepreneurs; and

- Media attention for entrepreneurship.

In general, the idea of cultural aspects that are based on values and influence entrepreneurial behaviour goes back to Max Weber (Noseleit, 2008). Weber (1920) argued that entrepreneurial activities are influenced by cultural and religious factors. Some scholars agree that social values affect the intentions and motivation to pursue entrepreneurship as a choice of career (Davidsson & Honig, 2003). Numerous authors, such as Gnyawali and Fogel, (1994), Liñán (2004) and Shane (2003), stress the importance of social acceptance of, and wide support for, entrepreneurial activities. Furthermore they add that consideration should be given to the concept of a suitable environment for entrepreneurship (Osowska, 2016). This includes aspects such as the extent to which society values entrepreneurship as a good career choice; whether entrepreneurs have high social status; and the extent to which media attention to entrepreneurship contributes to the development of a positive entrepreneurial culture (Herrington & Kew, 2014). The greater the importance placed by the society on entrepreneurial values and behaviours, the larger the proportion of experienced entrepreneurs and role models, and the higher the societal recognition of entrepreneurial performance, the greater the propensity will be to start a new enterprise (Gnyawali & Fogel, 1994). Some researchers have argued that social values and beliefs regarding entrepreneurship will affect the motivational antecedents of intention (Davidsson & Honig, 2003; Liñán, 2004) and add that, when the potential entrepreneur's environment is highly supportive of entrepreneurial activity, it is plausible that he/she will feel more inclined towards this career option.

2.2.5.2 Individual self-perceptions about entrepreneurship

These refer to: perceived opportunities; perceived capabilities; entrepreneurial intentions; and fear of failure rate.

- **Perceived opportunities**

Entrepreneurs identify business opportunities to create and deliver value for stakeholders in prospective ventures. While elements of opportunities might be "recognised," opportunities are made, not found (Ardichvilia et al., 2003).

Opportunities arising from under-utilised or unemployed resources, from technology or other types of proprietary knowledge or abilities may be labelled “value creation” capability (Ardichvilia et al., 2003). Ardichvilia et al. (2003) found that there are a number of factors that influence the way opportunities are identified and developed by entrepreneurs. Among the major factors discussed in the literature are: 1) entrepreneurial alertness; 2) information asymmetry and prior knowledge; 3) discovery versus purposeful search; 4) social networks; and 5) personality traits including risk-taking, optimism, self-efficacy, and creativity. De Koning (1999) shows that entrepreneurs evolve opportunities by pursuing three cognitive activities: a) information gathering, b) thinking through talking, and c) resource assessing through active interaction with an extensive network of people. Entrepreneurs who are better educated or have more working experience on average than the rest of society tend to identify better employment or business opportunities (Gardawski, 2001; Osborn & Slomczynski, 2005). However, Tenenge et al. (2015) point out that the likelihood of a successful business venture is hampered by the graduate’s lack of having the necessary skills to capitalise on business opportunities.

- **Perceived capabilities**

According to Herrington & Kew (2014) and Kelley et al. (2015), in their reports on Global Entrepreneurship, entrepreneurship can only be brought to fruition if potential entrepreneurs can perceive good opportunities and believe that they have the necessary skills to start a business and are willing to take action after expressing their intentions. It is significant to note that, when levels of per capita income are low, the entrepreneurial sector provides job opportunities and scope for the creation of new markets. As per capita income increases, the emergence of new technologies and economies of scale allows larger and established firms to satisfy the increasing demand of growing markets and to increase their relative role in the economy (Herrington & Kew, 2014). According to Herrington and Kew 2014, opportunities originate as perceptions of what individuals believe can be done to earn a profit and the source of such gain might be through individual and/or collective effort. Bosma et al. (2008) report that necessity entrepreneurs are more likely to select business opportunities with less positive outlooks simply because they lack better alternatives.

Both early-stage entrepreneurs and established business owners in middle-income countries claim to be using technologies that were not available a year ago more often than their counterparts in high-income countries. This leads to more opportunities in middle-income countries (Bosma et al., 2008). In general, individuals who are involved in entrepreneurial activity at any stage tend to be more confident in their own skills, are more likely to know other entrepreneurs, are more alert to the existence of unexploited opportunities and are less likely to let fear of failure prevent them from starting a new venture (Bosma et al., 2008). Individuals living in countries with a diversified labour market and high unemployment are more likely to choose business opportunities with favourable prospects. New capabilities for creating and delivering value might differ in the ways in which they think about the new capability and its potential applications. These individual differences might come from variations in individual's genetic makeup, background and experience and/or in the amount and type of information they possess about a particular opportunity (Ardichvilia et al., 2003).

In particular, external networks can be valuable because they provide the opportunity to learn new capabilities (Anand & Khanna, 2000; Dussauge, Garrette & Mitchell, 2000; Hitt et al., 2001). Furthermore, Hitt et al. (2001) state that a new venture's internal capabilities are the primary determinants of the venture's performance. As stated by Kor et al. (2007), entrepreneurship involves possessing subjective visions about business opportunities and then mobilising resources and capabilities to turn entrepreneurial visions into business reality (Choi & Shepherd, 2004; Shepherd & DeTienne, 2005; Sorenson & Stuart, 2001). Kelley et al. (2015) found in their study that, in factor-driven economies, more than half the population believe they have the capabilities to succeed as entrepreneurs.

- **Entrepreneurial intentions**

Self-efficacy refers to "people's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances" (Vazquez, Lanero, Gutierrez & Maríia, 2011: 29). In other words, self-efficacy is an attribute of personal competence and control in a given situation. It is linked to initiating and persisting in behaviour under uncertainty, to setting higher goals, and reducing threat-

rigidity and learned helplessness (Vazquez et al., 2011). More specifically, entrepreneurial self-efficacy is defined as the degree to which a person believes that he or she is able to start a new business venture successfully. Krueger et al. (2000) write that intentions are the single, best predictor of any planned behaviour, including entrepreneurship. Krueger et al. (2000) add that intentions and their underlying attitudes are perception-based, which should mean they are learned. Role models affect entrepreneurial intentions only if they affect attributes such as self-efficacy (Krueger et al., 2000). Krueger et al. (2000) found instead that perceived social norms might serve to moderate or even mediate the effect of the other attributes on intentions. Martin, McNally and Kay (2013) found significant relationships among entrepreneurial education and training, entrepreneurship related human capital assets (entrepreneurial knowledge and skill, positive perception of entrepreneurship, and intentions to start a business) and entrepreneurship outcomes (nascent behaviours, start-up behaviours, and financial success). Izquierdo and Buelens (2008) support this, arguing that changes in behaviour and perceptions are possible because attitude mediates the relationship between self-efficacy and intentions. Creativity is, in terms of academic resilience, an important antecedent of entrepreneurial intentions and an important characteristic of an entrepreneur, which should be developed (Hamidi, Wennberg & Berglund, 2008).

It should be noted that entrepreneurial intentions might not always yield profits, but might result in entrepreneurial losses as well, thereby resulting in diverging forces. In their study of action-oriented entrepreneurship, the authors find that there is a gap between intentions and actions (Gielnik et al., 2015). Action regulation theory suggests that intentions are the starting point of actions but other action-regulatory factors are necessary to translate intentions into actions (Gielnik et al., 2015).

2.2.5.3 Global entrepreneurial activity indicators

Global entrepreneurial activity is measured using the following indicators:

- Total Early-stage Activity (TEA);
- Motivational index (ratio of TEA improvement driven opportunity to TEA necessity);
- Established business ownership rate;

- Business discontinuation rate; and
- Entrepreneurial Employee Activity (EEA).

Kelley et al. (2015) state that the TEA (Total Entrepreneurial Activity) refers to the rate of individuals in the working age population who are actively involved in business start-ups, either in the phase of starting a new firm (nascent entrepreneurs) or in the phase spanning 42 months after the birth of the firm (new firms). Table 2.3 shows the ranking of entrepreneurial activity of each participating country by geographic region.

Table 2.3: Ranking of entrepreneurial activity of 60 countries participating in the 2015 GEM Survey by geographic region

Continent	Country	Nascent	New	TEA	EEA	Est. Bus.	Discont.
Africa	Botswana	3	6	3	35	47	1
	Burkina Faso	4	7	5	51T	1	9
	Cameroon	6T	10	7	48T	12	5
	Egypt	46T	37T	43	38	56	14
	Morocco	58	40T	58	55T	41T	46T
	Senegal	2	2	1	29T	5	2
	South Africa	35	32T	38T	57T	53	19
	Tunisia	36	25T	33	34	44	10T
Asia and Oceania	Australia	24	20	24T	2	20	22
	China	26	17T	24T	36T	55	39T
	India	22	40T	30T	57T	38	43T
	Indonesia	31T	5	13T	60	8	27T
	Iran	21	22	23	43T	10	12T
	Israel	18	34	28	6T	51	21
	Kazakhstan	20	40T	29	46T	58	35T
	Korea	40	29	36T	27T	28T	49T
	Lebanon	12T	1	4	25T	6	4
	Malaysia	60	55	60	57T	45T	59
	Philippines	23	9	16	29T	26T	3
	Taiwan	54	27	44T	20T	16T	25T
	Thailand	43T	13	20T	48T	2	30T
	Vietnam	59	4	20T	51T	3	27T
Latin America and Caribbean	Argentina	10	17T	13T	27T	18	16
	Barbados	11	8	10T	41T	9	25T
	Brazil	27	3	10T	43T	4	12T
	Chile	6T	11T	6	15	21	7
	Colombia	9	16	8	29T	41T	10T
	Ecuador	1	11T	2	46T	7	8
	Guatemala	12T	15	13T	39T	22	24
	Mexico	8	24	10T	39T	30	15
	Panama	38	14	24T	54	49T	46T
	Peru	5	25T	9	48T	31	6
	Puerto Rico	28	57T	40	51T	60	60
Uruguay	14	32T	18	19	59	20	
Europe	Belgium	43T	56	51	12	52	51T
	Bulgaria	57	60	59	55T	39	58
	Croatia	39	53T	42	16	57	37
	Estonia	16	28	22	10T	23T	49T

Continent	Country	Nascent	New	TEA	EEA	Est. Bus.	Discont.
	Finland	46T	48T	50	13	14	39T
	Germany	53	57T	57	18	45T	53T
	Greece	49	48T	49	43T	11	30T
	Hungary	29T	45T	36T	5	32T	35T
	Ireland	37	52	41	33	37	38
	Italy	50T	59	56	36T	48	51T
	Latvia	17	19	19	25T	16T	30T
	Luxembourg	25	40T	32	8T	54	23
	Macedonia	52	44	52	29T	34T	43T
	Netherlands	45	45T	46T	10T	15	48
	Norway	55	39	54T	1	32T	56T
	Poland	33	36	38T	22T	34T	39T
	Portugal	34	30T	35	22T	28T	34
	Romania	31T	23	30T	17	25	33
	Slovakia	29T	37T	34	24	36	17
	Slovenia	50T	48T	53	14	49T	53T
	Spain	56	35	54T	41T	23T	56T
	Sweden	41	53T	46T	8T	41T	39T
	Switzerland	42	48T	44T	6T	13	55
United Kingdom	46T	47	48	20T	40	43T	
North America	Canada	15	21	17	3	19	18
	USA	19	30T	27	4	26T	29
T = Tied							

Source: Adapted from Kelley et al., 2015

Since this study focuses on the South African need to stimulate entrepreneurial activity, South Africa has been highlighted in red in the table above to indicate its status. The data show that South Africa's TEA rate ranks significantly low (38 out of 60 countries surveyed) when compared with other Sub-Saharan countries (Tengeh et al., 2015). This is concerning considering that the South African economy is one of the strongest in Africa. The countries highlighted in yellow, are those countries rating within the top three countries for the sector under review.

2.2.5.4 Perceived quality of the entrepreneurship ecosystem

According to Kelley et al. (2015), the quality of the entrepreneurship ecosystem is prioritised according to the following criteria:

- Entrepreneurial finance;
- Government policies: support and relevance; government policies: taxes and bureaucracy;
- Government entrepreneurship programmes;

- Entrepreneurship education at school age; entrepreneurship education at post-school stage;
- R&D transfer;
- Commercial and legal infrastructure;
- Internal market dynamics;
- Internal market barriers or entry regulation;
- Physical infrastructure; and
- Cultural and social norms.

Kelley et al. (2015) find in their report on Global Entrepreneurship that Entrepreneurial Employee Activity (EEA) is highest in the innovation-driven economies (1% for factor-driven, 2% for efficiency-driven and 5% for innovation-driven). Norway, Australia and the United Kingdom report the highest EEA rates, at 8% or more of their adult populations and that discontinuance is highest in the factor-driven economies (8% for factor-driven, 5% for efficiency-driven and 3% for innovation-driven). A lack of profit or finance explains half or more of the exits in the factor-driven and efficiency-driven economies.

The innovation-driven group shows equal proportions of exits owing to unprofitability compared with the other two development stages, but entrepreneurs in these economies are less than half as likely to name financial problems as a reason for business exits. Both the efficiency-driven and innovation-driven economies show four times the rate of exits owing to bureaucracy compared with the factor-driven group (Kelley et al., 2015). Most entrepreneurs around the world are opportunity-motivated. In the factor- and efficiency-driven economies, 69% of entrepreneurs stated that they chose to pursue an opportunity as a basis for their entrepreneurial motivations, rather than starting out of necessity. The innovation-driven economies show a higher proportion of opportunity-motivated entrepreneurs at 78%. Among entrepreneurs with opportunity-driven motives, a portion of these seek to improve their situation, either through increased independence or through increased income (versus maintaining their income). Kelley et al. (2015) refer to these as improvement-driven, opportunity (IDO) entrepreneurs. To assess the relative prevalence of IDO entrepreneurs versus those motivated by necessity, Kelley et al. (2015) has created the Motivational Index. This index reveals that, on average, there are one and a half times as many IDO

entrepreneurs as there are necessity-driven entrepreneurs in the factor-driven economies and twice as many in the efficiency-driven economies. In the innovation-driven economies (IOD), there are 3.4 times as many IDO entrepreneurs as there are necessity-motivated entrepreneurs.

In terms of development levels, the factor-driven economies have the highest average female TEA rates relative to men. Among these entrepreneurs, however, women are nearly one-third more likely to start businesses out of necessity than men. In six economies (Vietnam, Philippines, Thailand, Malaysia, Peru and Indonesia), women show equal or higher entrepreneurship rates than men. The overall age pattern for entrepreneurship shows the highest participation rates among 25–34 and 35–44 year olds i.e. people in their early and mid-careers (Kelley et al., 2015).

Nearly half or more of the entrepreneurs in the factor- and efficiency-driven groups operate wholesale or retail businesses, while nearly half of the entrepreneurs in the innovation-driven group started businesses in information and communications, and financial, professional, health, education and other service industries. An emphasis on particular sectors can be seen in several economies, for example: agriculture in India, mining in Tunisia, manufacturing in Egypt, wholesale/retail in the Philippines, information and communications technology in Sweden and Belgium, finance in Slovakia and professional services in Norway (Kelley et al., 2015).

The innovation-driven economies have, on average, the highest proportion of prospective, non-employer entrepreneurs (40% for factor-driven, 39% for efficiency-driven and 45% for innovation-driven). The frequency of medium-to-high growth oriented entrepreneurs (those who expect to employ six or more people) is similar across all economic development levels (18% for factor-driven, 21% for efficiency-driven, and 20% for innovation-driven). According to Kelley et al. (2015), in the Global Entrepreneurship Monitor Report, the highest rates of medium-to-high growth entrepreneurs can be found in economies in Latin America and the Caribbean (Colombia and Chile), Asia and Oceania (Taiwan, China and Kazakhstan), Africa (Tunisia) and Europe (Romania and Ireland).

Average innovation levels increase with development level (21% for factor-driven, 24% for efficiency-driven and 31% for innovation-driven). Within the individual economies,

the highest levels can be seen in Chile and India, where over half of the entrepreneurs in these economies state that they have innovative products or services.

Across 60 economies around the world, 68% of working-age adults, on average, perceive that entrepreneurs have a high status in their societies, and 61% believe they receive positive media attention. In the factor-driven and efficiency-driven economies, two-thirds of adults, on average, think entrepreneurship is a good career choice. In the innovation-driven economies, 53% have this belief (Kelley et al., 2015).

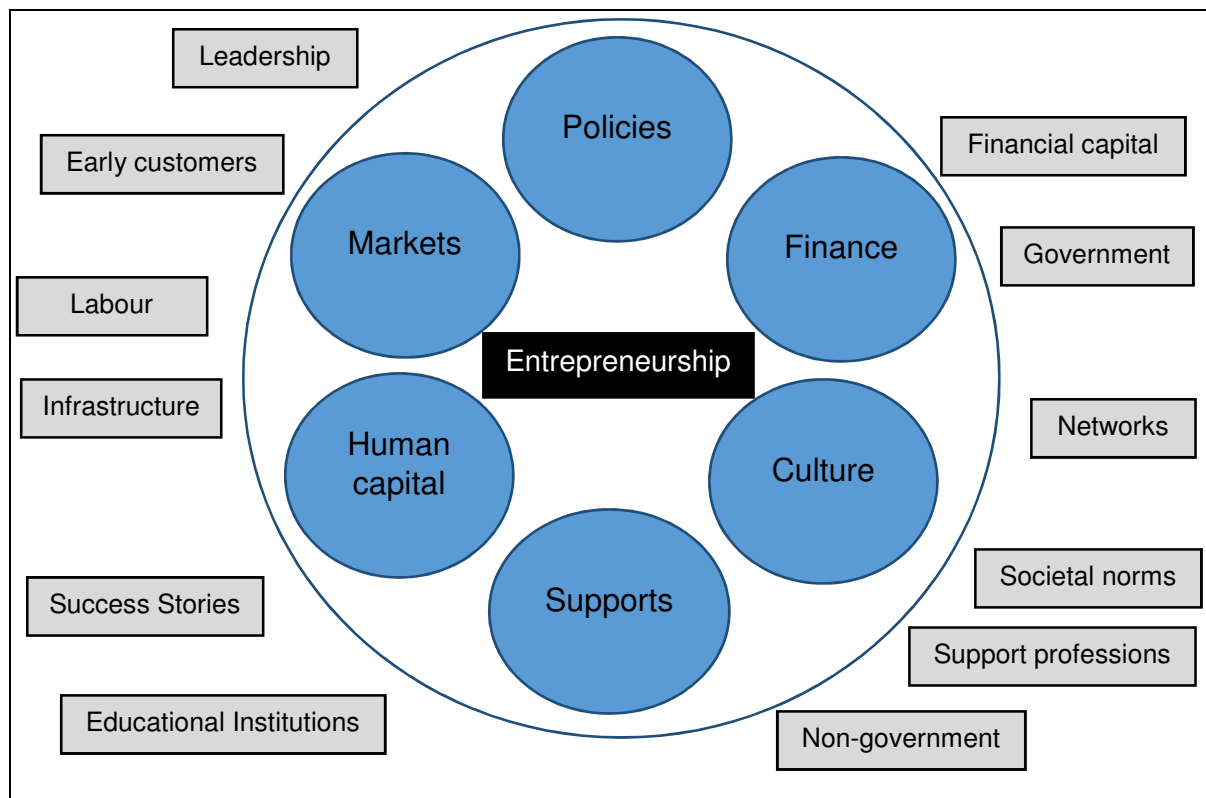
Isenberg (2011) writes that for entrepreneurship to be self-sustaining, it requires an ecosystem and an ecosystem requires proximity so that the different domains can evolve together and become mutually reinforcing. Entrepreneurship education can support capital formation and capital formation can support government reform. The cornerstones of the ecosystem referred to by Isenberg (2011) are represented graphically in Figure 2.1 below.

Isenberg (2011) implies that a new organisation is formed within a country which has the mandate, competence and motivation to enhance the entrepreneurship ecosystem in order to achieve a self-sustaining amount of entrepreneurship. Isenberg (2011) suggests the following are basic requirements for such an organisation:

- It has the public mandate, the perspective, the training and the resources to impact all elements of the entrepreneurship ecosystem;
- It is independent, not owned by any ministry, university, or organisation;
- It is accountable for the delivery of entrepreneurs;
- It has a temporary mandate period of existence – typically five years; and
- It knows how to experiment, learn, re-orient, scale and create spinoff programmes.

On the following page, figure 2.1 graphically depicts the domains of the entrepreneurial ecosystem referred to by Isenberg (2011). The model has six core elements: policies, finance, culture, supports, human capital and markets.

Figure 2.1: Domains of the entrepreneurial ecosystem



Source: Adapted from Isenberg, 2011

2.3 DEFINITION OF DEVELOPMENTAL TRAINING SUPPORT FOR ENTREPRENEURS

When defining developmental training support for entrepreneurs, the underlying question is “whether entrepreneurs can be trained or created at all” (Katz, 2003). Katz (2003) adds that, in the USA, larger and larger numbers of students are taking entrepreneurship courses – ultimately contributing to over one million businesses being created annually. Additional support for this view comes from a ten-year (1985-1994) literature review of enterprise, entrepreneurship and small business management education that reported that most of the empirical studies surveyed indicated that entrepreneurship can be taught, or at least encouraged, by entrepreneurship education (Gorman, Hanlon & King, 1997; Kuratko, 2003). Entrepreneurial development and training programmes seek to develop the attitudes, knowledge and skills associated with the practice of entrepreneurship. They are based on research indicating that some entrepreneurial behaviours can be taught and learned, starting in people’s youth and culminating in their young adult or adult years,

or when they are potential or practising entrepreneurs (Hegarty, 2006; Souitaris, Zerbinati & Al-Laham, 2007; Walter & Dohse, 2009; Valerio et al., 2014). Training programmes include formal, academic, education programmes and stand-alone training programmes (Valerio et al., 2014). Cho and Honorati (2013) caution that, while programmes can improve knowledge, this does not necessarily lead to related gains in performance and status outcomes. Most of the university centres for entrepreneurship have focused on three major areas:

- Entrepreneurial education;
- Outreach activities with entrepreneurs; and
- Entrepreneurial research.

These centres have been and will most likely continue to be the leaders in developing entrepreneurial research. Today, the trend in most universities is to develop or expand entrepreneurship programs and design unique and challenging curricula specifically designed for entrepreneurship students (Kuratko, 2003).

2.3.1 The education, training and learning of entrepreneurs

Experience and practical skills used by entrepreneurs are possibly not something that can be acquired through conventional teaching methods (Steenekamp et al., 2011). Cooper, Bottomley and Gordon (2004) agree, arguing that a skills-based programme requires a teaching and learning philosophy that encourages the development and practice of entrepreneurial skills. Education, training and learning are often used interchangeably, thus it is important for this study to distinguish between them as follows:

- **Education:** is defined in the Oxford Dictionary (2017) as the theory and practice of teaching, or information about, or training in, a particular subject. Van Heerden (1994) states that education is the act or process whereby knowledge is provided, especially through formal teaching and instruction of mainly the theory of a specific concept. The education approach mostly involves the cognitive domain, which refers to the mental process of learning. This process is often carried on within a system, and many people speak of education as if it were that system, for example, when saying that the government spends money on

education. The system itself is not education; it is a system designed to promote the process of education (Botha et al., 2006).

- **Training:** by contrast is defined in the Oxford Dictionary (2017) as the action of teaching a person or animal a particular skill or type of behaviour. Therefore, a training approach would offer a more appropriate option for the development of entrepreneurs as it involves aspects such as coaching or imparting a skill or behavioural trait. For the purposes of this study, Stanger's (2004) definition has been used, that is: training is assumed to mean an educational class or course imparting business or vocational (trade) knowledge and skills to entrepreneurs in any stage of the business life cycle. According to Botha et al. (2006), entrepreneurial training acts as a facilitator for entrepreneurial activities, with the main focus being on stimulating entrepreneurial activity and performance. For the purposes of this study, the training programmes for entrepreneurs can be referred to as interventions. The trainability of entrepreneurs is accepted and supported by McClelland (1961), Gibb (1993), Welsch (1993), Van Vuuren (1997), Hisrich and Peters (1998), Kuratko and Hodgets (1998), Nieman (2000), Pretorius (2001), Van der Merwe (2002), as well as, Antonites (2003).

According to Nieman (2000), the main areas of concentration in entrepreneurial training should be business skills, technical skills and entrepreneurial skills, where:

- Business skills training covers all the conventional management training areas in business.
- Technical skills training should address the ability to use knowledge or techniques of a particular discipline to attain certain ends.
- Entrepreneurial training involves the birth and growth of a business enterprise and should foster, among other entrepreneurial traits, creativity and innovation, risk propensity and need for achievement. Entrepreneurial skills are defined by Wickham (1998) as the skills which enhance entrepreneurial performance. Wickham (1998) adds that a skill is simply knowledge which is demonstrated by action.

- **Learning:** is defined in the Oxford Dictionary (2017) as the acquisition of knowledge or skills through study, experience, or being taught. This implies that learning individuals acquire the necessary knowledge and skills to perform the act they have been taught. In contrast, learning is a social process by which knowledge is created through the transformation of experience (Corbett, 2005; Kolb, Rabin & McIntyre, 1974).
- **Action-based learning:** is a theory of management learning in which a manager learns by reflecting on the actions being taken in solving a real organisational problem with managers of similar position who are also experiencing challenging situations (Rasmussen & Sorheim, 2006; Leitch & Harrison, 1999). The model of action learning was proposed by a Cambridge physicist, Revans, in 1971 (Honig & Karlsson, 2004). Howell (1994: 15) defines the role of action learning in creating an “inter-relationship” between the learner and his/her environment in order to become “active partners” in producing their reality. Action learning can only take place in an environment where not only teaching takes place but also learning. Leitch and Harrison (1999) acknowledge the effectiveness of management and entrepreneurial training, in the action learning context, by referring to Porter et al. (2002). Howell (1994) likewise provides empirical evidence in terms of actual and significant increases in work performance after the completion of an action learning process.
- **Outcome-based learning:** According to Pretorius (2001), outcome-based learning changes the learning culture by radically changing the ways in which knowledge, skills and values are mastered, and how learning processes are adapted and adjusted to achieve the chosen end product. Shepherd and Douglas (1996) point out that many entrepreneurship educators are teaching logical thinking when they should, in fact, be teaching entrepreneurial thinking and argue that logical thinking can lead to incorrect and unworkable answers. They suggest a movement from teaching to learning, arguing that an individual learns only when he or she performs the particular skill in an environment as close to real life as possible.

The introduction of various teaching and learning techniques to facilitate entrepreneurial learning has helped to create bridges between theoretical knowledge and experience generated through practice (Botha et al., 2006). The literature indicates that the learning methods employed in entrepreneurship education and training programmes vary considerably from lectures, presentations and hand-outs to learning based on videos and case-studies with group discussion and role-plays (Henry, Hill & Leitch, 2005b; Botha et al., 2006).

Table 2.4: The experiential learning continuum in entrepreneurship education

Educational technique	Degree of interaction	Proximity to entrepreneur as source of learning	Opportunity for questioning entrepreneurial situation	Involvement and depth of learning
In-company project	Intense	“On the spot”	Very high	High, extremely active
Company visit guided by the entrepreneur	Medium	There, but only fleetingly	High	Moderate, active
Case study, with entrepreneur in class	Medium	As a visitor	Medium	Modest, active
Interactive class sessions	Medium	Remote	Medium	Modest, active
Case study, text/video only	Low	Remote	Low	Low, active
Lectures	Low, non-existent	Extremely remote	Low, non-existent	Low, passive

Source: Adapted from Botha et al., 2006

Table 2.4 details the different approaches to entrepreneurial learning and education. At one extreme is the traditional, low-involvement lecture, during which the student is passive and the transfer of knowledge is one way. Attempts to engage students in more active participation or learning through case studies mark a position further along the scale, while in-company projects are at the high-involvement end of the spectrum.

The challenge for entrepreneurship teachers and trainers, therefore, is to find innovative learning methods that coincide with the requirements of potential entrepreneurs (Botha et al., 2006).

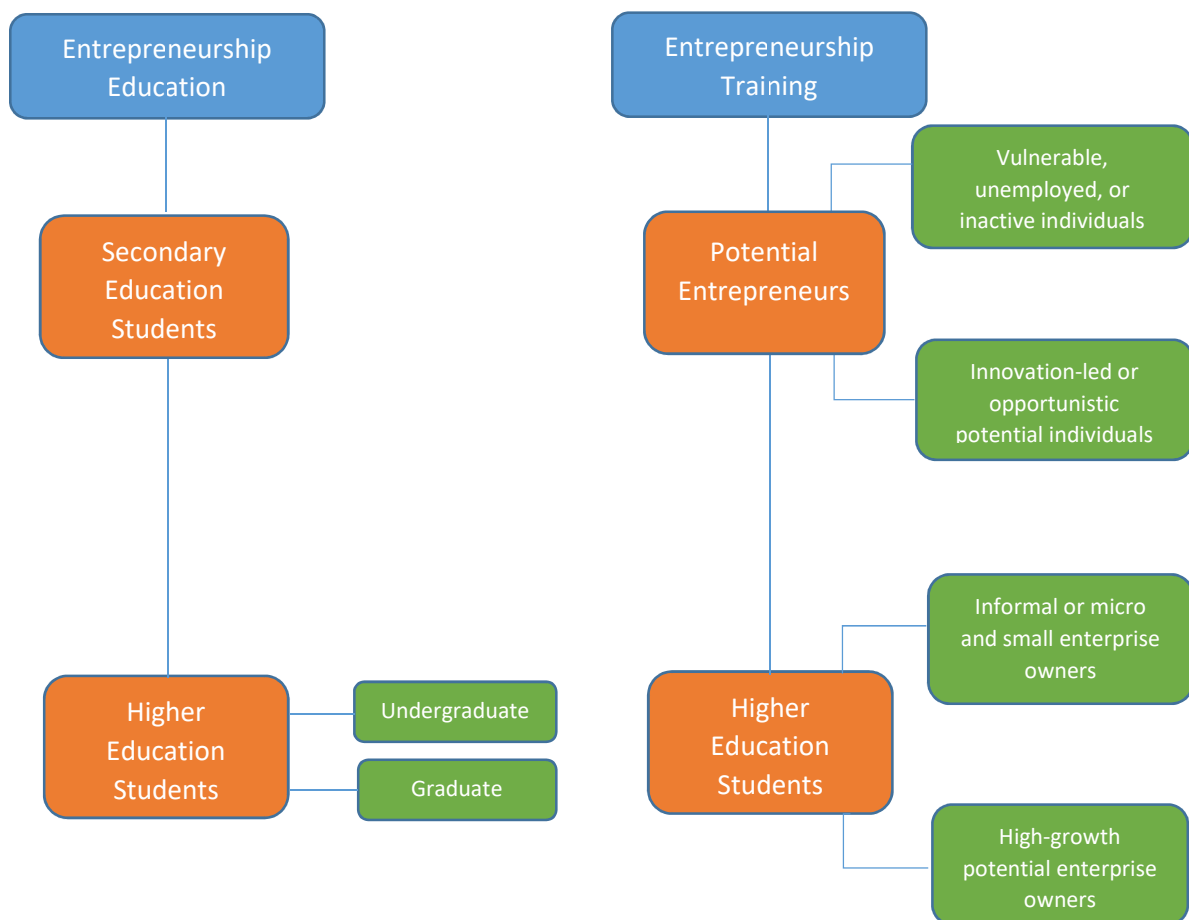
Mattare (2008) concludes that entrepreneurs must also be leaders and so a different approach must be taken in the entrepreneurship classroom than is taken in other business school classrooms. The entrepreneurship student must learn to do, to act, to self-reflect and learn from mistakes by quickly regrouping, attempting and re-attempting an action. The entrepreneurship student needs to have a good understanding of self, tools for self-improvement, strong self-efficacy, and the ability to deal constructively with failure, get up, and try again. These needs demand not only different approaches in course design, but a much greater focus on the individual potential for full “use of self” (Mattare, 2008). Research by Menzies (2003) found similar results where 87% of students at Swinburne University in Australia, having undertaken an entrepreneurship programme, started their own businesses. Kolvereid and Moen (1997) found that graduates with a degree in entrepreneurship were found to have a higher venturing rate as opposed to other disciplines.

2.3.2 Classification of entrepreneurship education and training programmes

Entrepreneurial education and training (EET) is recognised as an established field of study (Mwasalwiba, 2010). EET generally reflects both the activity of transmitting specific mind-sets and skills associated with entrepreneurship, as well as, education and training programmes that seek to engender various entrepreneurship outcomes. Valerio et al. (2014: 12) offer a definition for entrepreneurial education by stating that: “EET represents academic education or formal training interventions that share the broad objective of providing individuals with the entrepreneurial mind-sets and skills to support participation and performance in a range of entrepreneurial activities”. Valerio et al. (2014) add that there are a diverse set of programmes and a wide range of economic conditions under which these programs operate. Entrepreneurship education has been promoted as a key way to improve the performance of developed countries in Europe and North America, as well as, in rapidly developing countries such as Brazil, China and India. Higher levels of entrepreneurship and more effective

innovation are perceived to be the key engines of economic growth (Holcombe, 2006; Sternberg & Wennekers, 2005; Lourenço & Jones, 2006). As shown in Figure 2.2, EET programmes can be classified under two related but distinct categories: entrepreneurial education programmes and entrepreneurial training programmes. Broadly speaking, both aim to stimulate entrepreneurship but they are distinguished from one another by their variety of programme objectives or outcomes. While differing from programme to programme, entrepreneurship education (EE) programmes tend to focus on building knowledge and skills about, or for, the purpose of entrepreneurship (Valerio et al., 2014). Entrepreneurship training (ET) programmes, by contrast, tend to focus on building knowledge and skills explicitly in preparation for starting or operating an enterprise (Valerio et al., 2014).

Figure 2.2: Classification of entrepreneurship education and training programmes



Source: Adapted from Valerio et al., 2014

2.3.3 Developmental training support for entrepreneurs in developed countries

Mattare (2008) finds that the offering of entrepreneurial leadership courses in the undergraduate curriculum is infrequent. The courses that are offered focus primarily on entrepreneurial leaders in a case-based format. Furthermore, Mattare (2008) adds that none of the courses are theory-based, such as more typical business leadership courses that review key leadership theories and applications. Lastly, few of the courses seem to be focused on developing students' individual skills (Mattare, 2008).

A nationwide survey conducted by McKeown, Millman, Sursani, Smith and Martin (2006) examined different approaches to teaching entrepreneurship in enterprise programmes offered by UK higher education institutions. The survey indicated that at least 86 of the 123 higher education institutions provided programmes at the undergraduate and/or the postgraduate level (21 institutions did not respond). In terms of teaching approaches, the majority of institutions claimed they offered practical courses (57%), a very small proportion offered theoretical courses (5%) and 25% claimed to offer a mixture of theory and practice (Lourenço & Jones, 2006). Lourenço and Jones (2006: 132) add that less than 3% of HEIs made use of action/experiential learning which is regarded as “the most effective route to entrepreneurship education” (McKeown et al., 2006; Pittaway & Cope, 2006; Lourenço & Jones, 2006).

McKeown et al. (2006) found that, of Entrepreneur Magazine's (2006) top 25 undergraduate programmes in entrepreneurship, the most frequent subject areas offered were: introductory entrepreneurship, finance, followed by marketing, then business plan development and selling. Table 2.5 below shows the subject areas offered and the percentage of schools offering them:

Table 2.5: Percentage entrepreneurial subjects offered by schools

Subject areas offered	Percent of schools that offer subject area
Introduction to entrepreneurship	44%
Finance	44%
Marketing	28%
Business plan development	16%
Selling	16%

Subject areas offered	Percent of schools that offer subject area
Strategy	12%
Family business	8%
Digital or e-commerce	8%
Consulting for small businesses	8%
Legal issues	8%
Risk management	4%
Minority and women-owned businesses	4%
New product development	4%
Opportunity development	4%
Leadership/personal development	4%

Source: Adapted from Mattare, 2008

Almeida, Behrman and Robalino (2012) focus their research on pre-employment, technical and vocational education and training (TVET), which is on-the-job training (Honorati & Mcardle, 2013). Honorati and Mcardle (2013) focused their attention on the various types of training programmes that can be designed to address skills constraints, depending on the diversity of skills that matter to get better jobs, specifically referring to 1) literacy and numeracy; 2) vocational and technical skills; 3) life skills; 4) basic job readiness skills; and 5) entrepreneurial skills. Support is also required in the form of professional services and research and development transfer, as well as the support Governments may provide nascent entrepreneurs, through policy making and socially driven financial development initiatives (Harkiolakis, 2014).

However, receiving business training increased both the probability of starting a new business for potential entrepreneurs and the probability of expanding an existing business for existing entrepreneurs in El Salvador, Guatemala and Nicaragua, especially among women (Klinger & Schündeln, 2007; Honorati & Mcardle, 2013). Strong collaboration with the private sector, both in selecting the training contents and in providing workplace internships, seems to be a critical factor of success (Honorati & Mcardle, 2013). Experimental evidence in Tunisia shows that business training and business plan competitions were effective in fostering self-employment among university students. It was estimated that the programme contributed to a three percentage point increase in the likelihood of being self-employed, with results being driven mainly by men (Honorati & Mcardle, 2013).

There are several terms commonly used to refer to a training programme conducted in the workplace. For the purpose of this study, three kinds of on-the-job training are defined:

- **Apprenticeship:** is generally understood to be a firm providing training to a learner referred to as an apprentice, who exchanges his or her low-cost labour (although receiving wages) in return for training in a particular trade from a highly skilled, master practitioner (Honorati & Mcardle, 2013).
- **Work experience:** involves programmes aimed at giving new entrants to the labour force both job experience and the opportunity to learn a particular job rather than a trade (Honorati & Mcardle, 2013).
- **Internships:** sometimes referred to as traineeships, are shorter in duration and follow completion of a technical training programme and, in this sense, are not purely on-the-job training. In his study, internships are treated as part of “comprehensive” training programmes (Honorati & Mcardle, 2013).

It is common for training provision to equip disadvantaged people with the right skills for jobs, which are the ones demanded by employers, hence reducing the mismatch between skills demand and supply. Another argument for supporting training interventions is that training is seen by employers as a signal of higher productivity (Honorati & Mcardle, 2013).

Publically financed, vocational and technical training programmes are the most popular activation programmes in most middle-income countries. In the early 2000s, training represented the largest category (36%) of total expenditure in active labour market programs (Honorati & Mcardle, 2013).

The principal entrepreneurial framework conditions (EFCs) recognised by Global Entrepreneurship Monitor (GEM) are: 1) financial support for entrepreneurs, 2) public policy support, 3) bureaucracy and taxes, 4) government programmes, 5) entrepreneurship education and training, 6) R&D transfer, 7) access to professional and commercial infrastructure, 8) internal market dynamics and barriers, 9) access to physical infrastructure and services and 10) cultural and social norms (Kelley et al., 2015).

2.3.4 Factors contributing to successful developmental training support for entrepreneurs in developed countries

The past decade has witnessed the powerful emergence of entrepreneurial activity in the United States. Many statistics illustrate this fact. For example, during the past ten years, new United States business incorporations averaged 600,000 per year. Although many of these incorporations may have previously been sole proprietorships or partnerships, the trend still demonstrates the popularity of venture activity, whether it was through start-ups, expansions, or development (Kuratko, 2003). Kuratko (2003) adds that 15% of the fastest-growing new firms (referred to as “gazelles”) accounted for 94% of the net job creation, and less than one-third of these gazelles were involved in high technology. Small businesses (those with fewer than 500 employees) employed 53% of the private work force and accounted for 47% of sales and 51% of private sector gross domestic product (Kuratko, 2003). Kuratko (2003) concludes that people, including women, minorities, and immigrants, wish to access the American Dream. The greatest source of USA strength has always been the American Dream of economic growth, equal opportunities, and upward mobility. In this evolutionary process, entrepreneurship plays the crucial and indispensable role of providing the “social glue” that binds together both high-tech and “Main Street” activities (Kuratko, 2003).

In contrast to the USA, it is estimated that more than half of Europe’s students at the higher educational level do not have access to entrepreneurial education. This means that approximately 11 million students have no opportunity to engage in curricular or extra-curricular activities that can stimulate their entrepreneurial spirit (Directorate General Enterprise and Industry, 2008). The survey by the Directorate General Enterprise and Industry (2008) also leads to the conclusion that, whereas more and more European universities nowadays have some institutional system to disseminate the entrepreneurial culture and give support to new venture creation, entrepreneurship education at curricular level seems to be influenced by the type of institution, years of experience and geographic location. As expected, European students are more likely to obtain access to entrepreneurial education if they attend either a business school or a multidisciplinary institution with a business school department. In general, students in the countries of the EU have better access to entrepreneurial education than students in non-member countries or in those which have recently joined the EU.

More resources seem to be allocated to entrepreneurship education in institutions in Western Europe than in Eastern Europe (Vazquez et al., 2011).

In this context, the Spanish educational system has begun to take the first steps towards the fulfilment of the purposes identified by the European Commission with regard to entrepreneurship education. To this end, most public universities have developed and implemented specific extra-curricular actions to give support to potential entrepreneurial initiatives emerging from the heart of the universities' own fellowships, in the form of an increasing number of university/enterprise foundations, business chairs, spin-off programmes or specific institutional programmes and centres for entrepreneurship (Directorate General of Small and Medium Enterprise Policy, 2006; National Agency for Quality Assessment and Accreditation, 2007). Vazquez et al. (2011) add that in Spain, for example, only 7.3% of new enterprises created in 2009 were initiated by entrepreneurs younger than 25 years old, and the average age of entrepreneurs was nearly 40 years old.

In the United States, 84.1% of venture capital is invested in high-technology companies compared with only 20% in Europe. Much of the explanation for this big difference is that the European Venture Capital Association includes buy-out capital in its overall statistics for venture capital, whereas the US National Venture Capital Association excludes buy-out capital (Minniti et al., 2005).

2.3.5 Objectives of entrepreneurial training programmes

According to Alberti, Sciascia and Poli (2004), for effective entrepreneurship education there should be a relationship between the goals of the entrepreneurship programme, the audiences to which the programme is delivered, the contents of the entrepreneurship courses or modules, the method of delivery or pedagogy and finally the assessment that will be used.

Hills (1988) conducted a survey on 15 leading entrepreneurship educators in the USA and identified two important objectives of entrepreneurship education programmes. These were to: 1) increase the awareness and understanding of the process involved in initiating and managing a new business; and 2) to increase students' awareness of small business ownership as a serious career option. According to Garavan and

O'Kinneide (1994), the following are the most commonly cited objectives of entrepreneurship education and training programmes:

- To acquire knowledge germane to entrepreneurship;
- To acquire skills in the use of techniques, in the analysis of business situations and in the synthesis of action plans;
- To identify and stimulate entrepreneurial drive, talent and skills;
- To undo the risk-averse bias of many analytical techniques;
- To develop empathy and support for all unique aspects of entrepreneurship;
- To devise attitudes towards change; and
- To encourage new start-ups and other entrepreneurial ventures.

2.3.6 Factors hindering successful developmental training support for entrepreneurs in developed countries

Krueger and Brazeal (1994) state that we can teach self-management skills, we can teach skills at coping with adversity, and we can visibly reward initiative taking. In each instance the new venture undertaken might be successful or not (Steenekamp et al., 2011). McKenzie and Woodruff (2012) state that, if training leads to the survival of relatively unsuccessful firms which would otherwise have closed, then a straight comparison of profits or sales by treatment status would disclose the impact of training. Krueger and Brazeal (1994) note that, even if training has no impact on the rate of business survival or start-up, it may still affect the characteristics of which business survives (McKenzie & Woodruff, 2012). Gorman et al. (1997) found that, among the training and education processes deemed to be failures, were those requiring students to engage in introspective or reflective activities or to develop "case-lets". On the other hand, programmes requiring development of business plans for products (as opposed to services) tended to be successful. Gorman et al. (1997: 12) concluded that "it appears that the more 'hands-on' the teaching method is, the greater its chance of success". In contrast to this, Honig and Karlsson (2004) found that entrepreneurs write business plans as though they were a rite of passage, a symbolic act to gain legitimacy. Sometimes this has a negative consequence when the entrepreneur follows a mimic strategy (Leffel & Hallam, 2008).

Peredo and McLean (2006) add that, by the very definition of entrepreneurship, any developmental training support received must allow for unsuccessful entrepreneurs, given that it is generally agreed that there are many cases deserving that description. Kim et al. (2006) agree with this statement adding that the study of entrepreneurship encompasses a much larger population of small and often unsuccessful start-ups. Kim et al. (2006) argue that the following factors contribute to the success and, therefore, the possible failure of nascent entrepreneurial activities:

- **Household wealth**

According to this theory, business start-ups often require substantial start-up capital. A nascent entrepreneur makes two evaluations: prospects for additional income from a start-up relative to present income, and prospects for future income from current employment. At lower income levels, individuals may find the opportunity cost so low that they lose little or nothing by pursuing the uncertainties of income from a new venture. Failure for these individuals is of little consequence.

- **Education**

Formal education can affect the likelihood of entry into entrepreneurship through (1) the acquisition of skills, (2) credentialing, and (3) sorting people by ambition and assertiveness. General business and technical skills can guide nascent entrepreneurs in setting up basic business functions and avoiding common mistakes. Individuals are more likely to learn these in specialised courses and training, rather than in typical high school and college courses. Certain courses, such as vocational programmes, enable students to learn specific trade and business skills. In other courses, students develop critical thinking, communication, teamwork and other general skills that will be necessary as an entrepreneur.

There are always factors that will influence the outcome of training, whatever the subject might be (Pretorius, 2001). Timmons and Spinelli (2004) refer to some attributes that would be hazardous to the success of entrepreneurs. The factors listed below may act either to enhance or to hinder the success of the entrepreneur. Pretorius (2001) continues by stating that the aim of any training programme should

thus be to focus on the factors that might enhance the chances of success, while eliminating factors that might hinder success (Botha et al., 2006) such as:

- **Invulnerability** - A thought pattern of people who feel nothing disastrous could happen to them. They are likely to take unnecessary chances and unwise risks.
 - **Machismo** - Foolish head-to-head competition and irrational take-over battles, as well as over-confidence, in order to prove superiority and/or impress others.
 - **Anti-authoritarian** - Resenting control and an attitude of “no one can tell me what to do”.
 - **Impulsivity** - Facing a moment of decision, certain people feel they must do something, do anything and do it quickly. They act without exploring the consequences.
 - **Outer control** - This is the opposite of the internal locus of control characteristic. People with the outer-control trait feel they can do little, if anything, to change circumstances.
 - **Perfectionism** - Described as the enemy of the entrepreneur. The time and cost implications of attaining perfection invariably result in the opportunity window being slammed shut by more decisive and nimble competitors. (Being a perfectionist and having high standards are not the same).
 - **Knowing it all** - Entrepreneurs who think they have all the answers usually have very few and would not obtain assistance from other people.
 - **Counter-dependency** - An extreme and severe case of independence that negatively impacts on progress. These entrepreneurs often end up accomplishing very little.
- **Work experience**

Without sufficient work experience, individuals might encounter difficulties in taking the first steps towards becoming an entrepreneur. It is believed that individuals might be influenced to pursue entrepreneurship through multiple forms of work experience (Parker, 2004). In particular, work experience is typically divided into four types: general full-time work experience, managerial experience, previous start-up experience, and current self-employment. If such work experience occurs within the new venture’s industry, individuals can rely on the knowledge of their industry to identify potential opportunities and other industry-related conditions (Shane, 2003).

Furthermore, individuals gain access to various social networks for market information, access to capital, hiring employees, establishing reputations and developing supplier and customer relationships. Previous managerial experience can give people skills needed to co-ordinate and administer diverse activities in the early phases of a start-up (Boden & Nucci, 2000). Individuals with prior experience in starting a new business might develop confidence in their ability to identify promising opportunities (Shane, 2003). The success of their earlier ventures might further enhance their confidence.

- **Socio-cultural influence**

McKenzie and Woodruff (2012) suggest that when it comes to training programmes, there is some weak evidence of a positive effect on male-owned businesses. However, for female-owned businesses, training is found to have either zero or a slightly negative effect on survival. Stronger results have been found regarding the effects of training programmes on new business start-ups. McKenzie and Woodruff (2012) add that all the training programmes studied that had content specifically intended to help people to start a new business helped the start-up of firms.

Pretorius and Van Vuuren (2003) suggest further that the culture within a society can either support entrepreneurial orientation or be detrimental to its visible outcomes in the society. Pretorius and Van Vuuren (2003) propose that entrepreneurial development should be a feature of school programmes. These findings support those of Swanson and Webster (1992) where, in the Czech and Slovak Republics, negative public attitudes discouraged entrepreneurs. The negative attitudes are shaped by a lack of successful entrepreneurial role models and a high failure rate amongst entrepreneurs. Living in a poor community was, however, noted to influence the mindset of an entrepreneur negatively (Cloete, 2012). Cloete (2012) adds that a lack of support from family members also affects entrepreneurial participation negatively, and was caused largely by a lack of understanding of entrepreneurial education.

Legoabe (2007) concluded that the high dropout rates in new venture creation programmes could be attributed to a general lack of interest and motivation (Cloete, 2012). The effect of education level does not appear to be linear. It is those with the lowest education who deviate in the negative direction; a result that concurs with

American findings (Reynolds, 1995; Adendorff, 2004). In addition, Pete (2010) found that gender, age, fear of failure and work status or occupation have a negative impact on the start-up of new ventures.

Social security in general might be expected to affect entrepreneurial activity positively by creating a safety net in case of business failure. In fact however, empirical studies suggest a negative relationship between social security and entrepreneurial activity (Sternberg & Wennekers, 2005; Davies, 2002; Parker & Robson, 2004; De Clercq et al., 2008).

Age is also a factor that, all else being equal, influences business start-ups negatively, as people above the age of 50 are less likely to be involved in new entrepreneurial activities than people below the age of 35. As this is relevant in many EU countries, greater attention should be paid to entrepreneurship opportunities for people aged 50 and above (Acs & Szerb, 2008).

- **Economy and politics**

The economic crisis in Europe negatively affected the continued development of business incubators after 2005. The decline in the rate of establishment of business incubators continues to limit the growth and impact of SMMEs on the European economy (Goddard & Chouk, 2006). Masutha (2014) adds that challenges including, inter alia, high school dropout rates, entrepreneurs who are job seekers, non-compliance, lack of procurement opportunities, financial mismanagement, a lack of demand for local products, a lack of government demand for local products, lack of entrepreneurial discipline, as well as, the impacts of recession and the negative effects of cheap imports contribute to the lack of entrepreneurial activity in South Africa.

It could be argued that individuals make their decision to create a new enterprise based on three motivational factors: personal preference or attraction towards entrepreneurship, perceived behavioural control, and perceived subjective norms (Liñán, 2004). Personal attraction or attitude towards entrepreneurship refers to the attractiveness of the proposed behaviour or degree to which the individual holds a positive or negative personal valuation about being an entrepreneur (Ajzen, 2002; Kolvereid, 1996). "... If entrepreneurs find themselves in circumstances where their

sense of self-determination is undermined...they may well begin to cognitively and emotionally disengage from the specific problems to be solved, and their creativity may decline” (Amabile, 1997: 24). In this sense, personal attraction is an important element concerning the perception of desirability that affects entrepreneurial intention. The second motivational factor is perceived behavioural control or self-efficacy, i.e. the perceived easiness or difficulty of becoming an entrepreneur (Ajzen, 2002). The importance of this variable in the new-firm creation process resides in its predictive capacity, as it reflects the perception that the individual will be able to control that behaviour (Ajzen, 2002).

Although South Africa's economy was growing between 1998 and 2009, the country was adversely affected by the global financial crisis, resulting in a negative growth rate for the first time in 2008 (Department of Trade and Industry, 2013). In addition, South Africa is a small country that does not have a huge domestic customer base. The country's poor rate of savings also contributes to the low confidence of the private sector to invest, which stunts the country's economic growth. A shortage of skilled labour, as well as, infrastructure with inherent bottlenecks contributes to instability and does not create an environment conducive to a constant flow of entrepreneurial activity. The Department of Trade and Industry (2013) adds further that, in the latter part of the decade from 2000 to 2010, less than half of all working-age South Africans had income-earning employment, compared to an international norm of almost two-thirds. This adds to the quandary that the rising unemployment rate in South Africa means that fewer individuals will be given the opportunity to gain the necessary experience required to venture on their own. It is possible that this will create a negative spiral effect generating fewer entrepreneurs than South Africa requires for economic survival in a global economy (Kim et al., 2006; Adendorff, 2004).

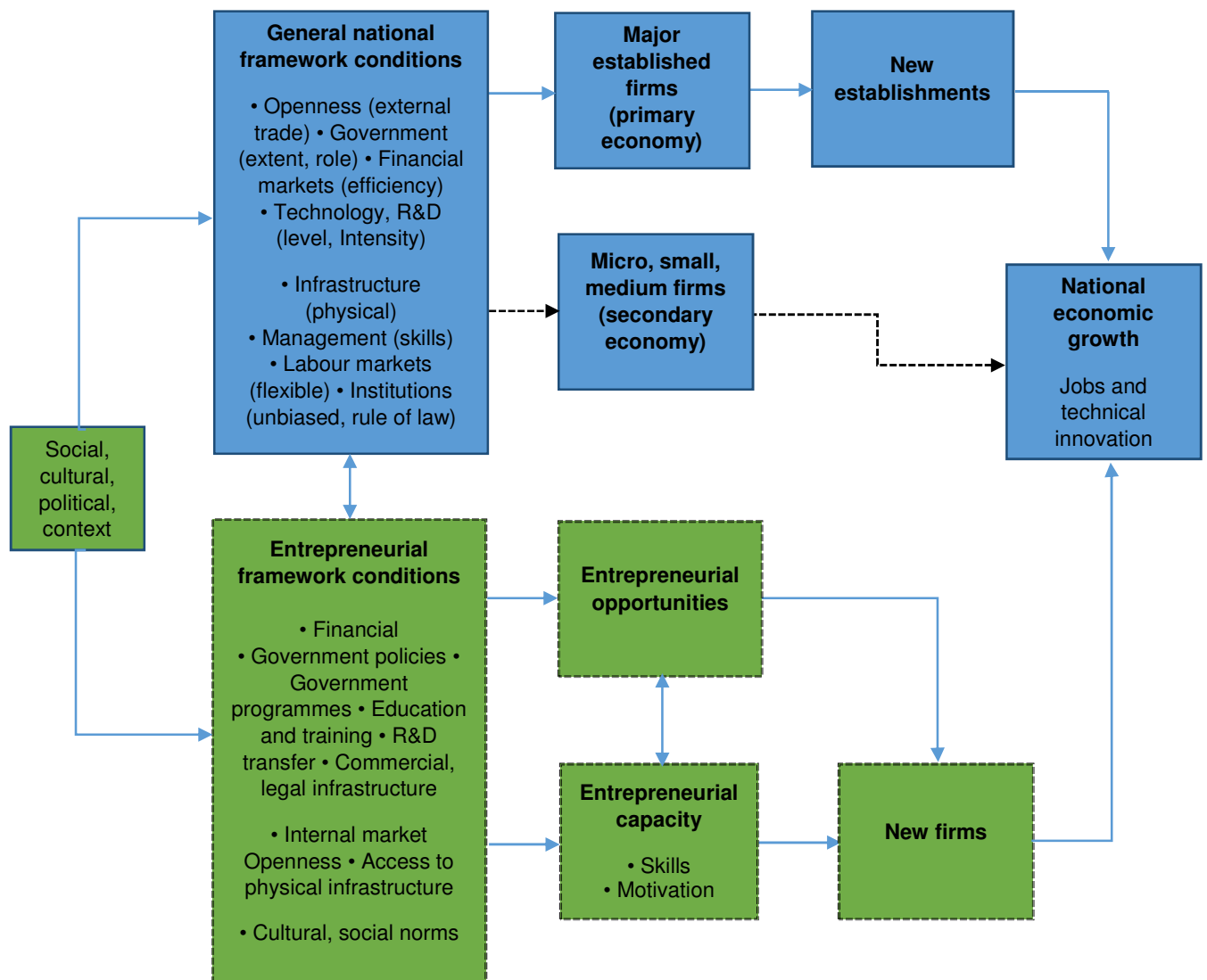
2.4 A MODEL DEPICTING GLOBAL, DEVELOPMENTAL TRAINING SUPPORT FOR ENTREPRENEURS IN DEVELOPED COUNTRIES

The relationship between entrepreneurship, corporations, and economic growth is complex in that the economic health of a nation depends on successful entrepreneurship and the force of existing corporations (Acs, Arenius, Hay & Minniti,

2004). Acs et al. (2004) provide the following business/entrepreneurial model, shown in Figure 2.3 below.

An analysis of the above model indicates that the start-up of new firms is related to an individual's skills, motivation and opportunities identified by a new business owner. However, the rate of new business ventures is relative to outside influences such as access to finance, government policies, the legal infrastructure, internal market conditions, physical infrastructure, cultural and social norms, as well as, access to education and training (Acs et al., 2004). Acs et al. (2004) show that, in their study of 34 countries representing a total labour force of 566 million, 73 million adults were either starting a new business or managing a young business of which they were also an owner. On average, one in eleven people was pursuing entrepreneurial activities. Acs et al. (2004) also point out that the GDP, or macro conditions of a country, is related to entrepreneurial activity. The lower the GDP per person, the higher the amount of entrepreneurial activity.

Figure 2.3: Global Entrepreneurship Monitor (GEM) theoretical business/entrepreneurial model



Source: Adapted from Acs et al., 2004

Acs et al. (2004) deduced that entrepreneurial activity is also related to the structural characteristics of the country. In addition, Acs et al. (2004) found that short-term measures taken by governments to stimulate entrepreneurship will typically have no long-term effects. Policies that succeed in one country might fail in others. However, countries within the same national income groups can learn from one another, taking into account their particular circumstances and the need to tailor adopted policies,

successful in another country, to their own national conditions. In short Acs et al. (2004) state that:

- Policies must be appropriate to the average income level pertinent to the specific economy; and
- Inappropriate policies with regard to entrepreneurship might adversely affect the level of economic growth within the country.

In low-income countries, most people who contemplate starting a business have not completed secondary level education. On the other hand, in high-income countries, education seems to be positively related to business start-ups. Of those who start-up a business in high-income countries, 57% have a post-secondary degree as compared with 38% in a middle-income country and 23% in low-income countries (Acs et al., 2004).

2.5 PUBLIC SECTOR INVOLVEMENT TO STIMULATE ENTREPRENEURIAL ACTIVITY

In Singapore, the 2002 sub-committee on Entrepreneurship and Internationalisation under the Economic Review Committee has recommended setting up a single public agency that co-ordinates efforts to develop entrepreneurship in Singapore. This has led to the formation of the Action Community for Entrepreneurship (ACE) with four programmes in the areas of culture, financing, internationalisation and regulations (Bosma et al., 2008).

As in high-income countries, the lack of a common mind-set between public servants and entrepreneurs is often one of the causes of government's ineffectiveness in middle-income countries (Bosma et al., 2008). In recent decades, Iran has witnessed and shown an increasing interest in various entrepreneurship fields in higher educational settings, policy making and business. The Iranian Government is spending more than ever to promote and encourage entrepreneurship and innovation. Accordingly, measures and mechanisms have been proposed to develop entrepreneurship in the public and private sectors, as well as, universities (Karimi, Chizari & Biemans, 2010).

Over half of the entrepreneurs in the United States described positive aspects of entrepreneurship education and training in the country, compared with 2% in Germany, 5% in South Africa, 6% in Iran and 7% in Turkey (Bosma et al., 2008).

The level of in-school training in the adult population varies across countries: from 2% of the adult population in Turkey to approximately 25% in Belgium, Chile and Slovenia. Non-school training ranges from 4% in Egypt and Turkey to 40% in Finland. Only 30% of trained individuals in Japan and Serbia received in-school training, compared to approximately 75% in Ecuador, Jamaica and Belgium (Martínez et al., 2010).

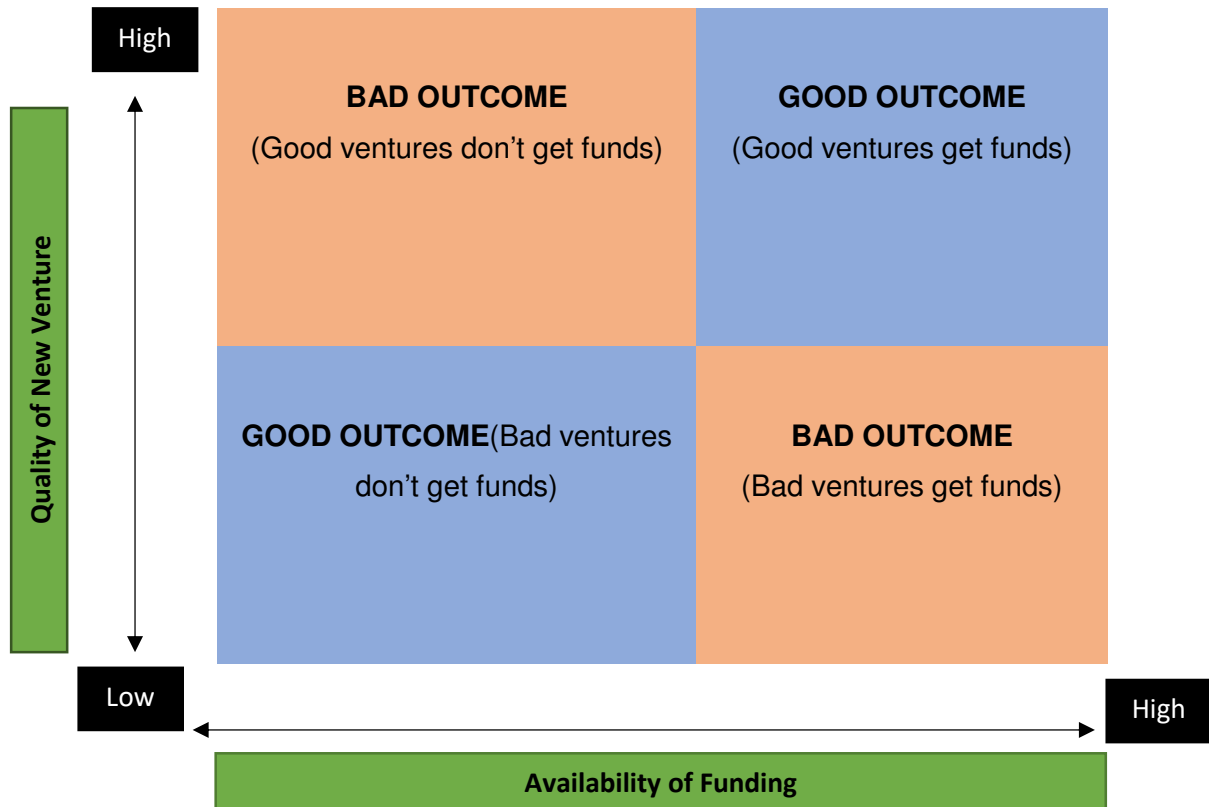
Within the context of this public awareness, different prescriptive and best practices reports have been published as reference guidelines to include entrepreneurship teaching and support as specific missions of educational institutions. Among them, the report titled: Education for entrepreneurship, deserves special attention (Enterprise Directorate General, 2002; Vazquez et al., 2011). Vazquez et al. (2011) add that, in Spain, most public universities have developed and implemented specific extra-curricular actions to give support to potential entrepreneurial initiatives.

The most significant spin-offs stem from the fact that most successful entrepreneurs like to create more entrepreneurship. When successful, it turns out that entrepreneurship becomes like a hobby or sport which entrepreneurs pursue for a mixture of motives, often for the challenge or thrill long after their material needs have been met many times over. It becomes a positive addiction where entrepreneurs become angel investors, advisers, venture capitalists, board members or a combination, feeding back their experience and wealth to generate more entrepreneurship. They become public speakers or guest lecturers inspiring others to follow in their footsteps. They lobby the government for reform. In sufficient quantities, such activities make an indelible impression on a region (Isenberg, 2011). Ironically, there are strong political pressures for policy makers to do the exact opposite of what is required. What is required is a system in which deserving ventures get resources and, equally as important, in which non-deserving ventures are denied them.

In Figure 2.4 below, policy makers frequently focus on the upper right-hand quadrant and ignore the necessary, lower left-hand quadrant. Furthermore, it is not unusual to see the opposite where because of misplaced agendas, resources are denied to the deserving because “they are elites”, “they don’t need the help”, and are given to the

undeserving because “we need to distribute public goods equitably” (Isenberg, 2011: 4).

Figure 2.4: Quality of new venture vs. availability of funds



Source: Isenberg, 2011

Ironically, a third policy implication is that sector-based approaches, in certain respects, are antithetical to entrepreneurship where the operative word is contrarian, and not innovative. There are numerous examples of entrepreneurship that is not innovative, such as generic drugs. This is important for policy because it is the role of the entrepreneur to demonstrate continually that conventional wisdom is wrong, that the market is wrong in a sense. Furthermore, anyone who can define a priority where opportunities lie can be shown to be wrong. One of the unrecognised problems of sectorial cluster strategies is that picking sectors for preferable attention by a top-down analysis of comparative advantage, actually dulls the entrepreneurial spirit and depletes the region's reserves of this precious resource (Isenberg, 2011).

One of the underpinnings of Israel's successful cultivation of broad-based entrepreneurship is that the government has been explicitly sector agnostic for four decades. A top-down analysis of Iceland's comparative advantages would highlight geothermal energy, natural beauty and fish. Yet successful Iceland ventures are in generic pharmaceuticals, online gaming and medical prosthetics. Entrepreneurs do not need to be told where the opportunities are; their job is to identify them and the very process of trying, failing and regrouping sharpens and enhances entrepreneurship. It is possible that the top-down way in which Chile spawned the very successful salmon industry led to prosperity in the medium term, but at the expense of entrepreneurship, and it is one of the reasons the country is struggling to move up the value chain into biotechnology based on entrepreneurial initiative. Government is indeed critical in many ways but, in creating the framework conditions, there is a big difference between building a highway system and telling people where to drive (Isenberg, 2011).

From a policy perspective, whereas all entrepreneurs are created equal, not all entrepreneurship is created equal. At its heart, effective policy has an interest in democratising entry, but also in fostering an enlightened Darwinist approach to resource allocation. People should be allowed to test their wits but, if they are protected from the markets, either product or financial, the entrepreneurial "gene pool", as it were, is weakened, as well as, the markets. Entrepreneurship is an equal opportunity employer because it is based on merit but, to be sustainable, the opportunity must go hand-in-hand with the opportunity to fail. From a societal perspective, entrepreneurial failure is crucial because it redeploys people, money and other resources (Isenberg, 2011).

Isenberg (2011) states that support for entrepreneurship is often low because public leaders do not fully understand the benefits or spin offs. When the confusion between business ownership per se and entrepreneurship is added, it is understandable that funding for entrepreneurship becomes diluted. In addition, there is a near-universal lack of understanding of how to use the funds so that, for example, when funds are allocated, they are simply given away rather than used as a stimulus to create a self-sustaining ecosystem. As a general rule, a municipality should be allocating between 0.5% and 1.0% of its operating budget (not capital) to entrepreneurship development. A billion dollar municipal budget, for example, should allocate \$5 million per year to

support high potential entrepreneurship. Barcelona Activa spends approximately \$14 million annually. Start-up Chile costs \$50 million for a 3-5 year period. Medellin spends \$17 million annually (Isenberg, 2011).

Buenos Aires is becoming an island of entrepreneurship because of concentrated and sustained effort supported by a broad-based coalition of public and private entities and has, among many other things, passed an entrepreneurship day law. Chicago is part of the trend following Groupon's visibility. Hsinchu Science City in Taiwan is another excellent example. Cape Town now has its own Entrepreneurship Week in recognition of the fact (Isenberg, 2011).

Isenberg (2011) suggests that, in order for an environment of entrepreneurship to be established, an independent organisation should be set up which has the mandate, competence and motivation to enhance the entrepreneurship ecosystem in order to achieve a self-sustaining amount of entrepreneurship. Isenberg (2011) proposes that such an organisation should:

- Have the public mandate, the perspective, the training, and the resources to impact all elements of the entrepreneurship ecosystem;
- Be independent and not owned by any ministry, university, or organisation;
- Be accountable for reaching the tipping point;
- Be temporary with a life span of no more than five years; and
- Know how to experiment, learn, re-orient, scale, and generate spin-off programmes.

The organisation should not be owned by the government, by a university, or by an incubator or support organisation, but by representatives of all role players. In addition, it should be equipped and empowered to succeed in terms of all necessary resources and effective, professional supervision (Isenberg, 2011).

Entrepreneurship is driven by profit-seeking ambition and, when it is successful, it uniquely enriches the overall economy and society (Leitch & Harrison, 1999; Botha et al., 2006; Isenberg, 2011). Creating a conducive environment would lay the foundation for this growth (Isenberg, 2011).

In Britain, the Prince's Trust Enterprise Programme is for people who have a business idea they want help to explore, are aged 18-30 and are unemployed or working less than 16 hours per week. Services provided include: advice on employment options, business skills training, business planning support, start-up loan funding, ongoing support from a volunteer business mentor, access to specialist support, including free legal services and, for those who want to start a business, access to a wide range of free and discounted products and services (Habbash, 2015).

A vibrant private sector can boost economic activity, enhance productivity, foster competitiveness, facilitate entrepreneurship and ultimately provide a chance for upward mobility. Private sector development also creates more and better employment opportunities that enable people to invest in upgrading their education and skills and attain upward mobility. Competitive, profitable and growing SMEs, including those in the informal sector, can also pay better wages and invest more in training (Habbash, 2015). Not all private enterprises in all environments generate jobs, investment and human capital or contribute to reducing poverty in this way. Some enterprises have more of an impact than others in certain country or sector contexts. For example, employment effects in certain sectors are more sustainable than others and can affect women and youth differently (Isenberg, 2011).

Job creation and economic growth in cities are clearly linked to the cities' success in attracting and expanding private sector firms (World Bank, 2015) in the following ways:

- According to previous studies, SMEs favour locations where they can find proximity to suppliers and consumers, connective infrastructure and basic services.
- City officials can work to improve labour laws, tax codes, trade restrictions, limited access to credit and other constraints whose elimination or reduction benefits the creation of entrepreneurs and SMEs.

2.6 PRIVATE SECTOR INVOLVEMENT TO STIMULATE ENTREPRENEURIAL ACTIVITY

In some cases, the public sector is not the leader in local economic development efforts at all. Instead, private sector players step in to formulate proactive economic

development strategies and to guide their implementation (World Bank, 2015). The private sector growth of Coimbatore, a state in India, is directly linked to its thriving collection of vocational training institutions that produce a workforce with skills relevant to industry needs. This directed training is achieved efficiently through the private sector's involvement in devising curricula, sponsoring internships and, as in Coimbatore, even running universities or university departments (World Bank, 2015). The primary source of job creation has been the growth of private sector firms, which have typically accounted for approximately 75% of job creation. Thus city leaders need to be familiar with the factors that help to attract, to retain and to expand the private sector (World Bank, 2015).

Several critical success factors differentiated the use of policy levers in competitive cities compared with most other cities. For example, (a) business leaders were consulted about their needs and the constraints they encountered in their operations; (b) infrastructure investments were made in collaboration with the firms and industries they aimed to serve; (c) skills initiatives were designed in partnership with firms, ensuring that curricula addressed their practical needs; and (d) industries were supported, where they had a real commercial potential, through collective initiatives with the private sector rather than through the public sector alone (World Bank, 2015).

Private for-profit firms, their associations, and other stakeholder groups were highly involved in implementing city economic development strategies and interventions, though not to the same extent in all cities. Their involvement included, but was not limited to, providing financial and in-kind resources, acting as the city's public champions, collaborating with educational institutions to train workers and design adequate programmes and, in some cases (most dramatically in Coimbatore) actually leading local development efforts (Kulenovic & Cech, 2015). Importantly, many of the investors in micro-credit and other kinds of social ventures came from the private sector (Davies, 2002).

Globalisation is founded on the ontology of neo-liberal capitalism. The kernel of neo-liberal capitalism is free market operation. The mechanism of free market operation is that market forces: 1) drive the profit motive, 2) determine demand and supply, 3) are regulated by competition, and 4) ensure that individuals and private firms produce goods and services that consumers are willing and able to buy. The free operation of

the market, “as if by invisible hand”, without conscious regulation, generates social order and expands production (Habbash, 2015).

To create entrepreneurship and self-employed people, large lending is required in order to create small and medium enterprises. This means that access to finance and government policy are the major constraints to creating small and medium enterprises and employment (Habbash, 2015). The public/private financing model plays an important role in: disseminating government funds to youth, bank and financial institutions; lending policy; deposit rate; credit risk; views on youth self-employment loans, and youth issues in entrepreneurship. Therefore, creating young entrepreneurship through the public/private financing model has to analyse the existing policy of resource mobilisation (existing financing policy vs public/private financing policy) for young business around the world, point out the defects inherent in it and provide a package of conclusions for its improvement (Habbash, 2015).

Providing support to entrepreneurs in the form of space or capital or loans is meaningless unless more mature companies are willing to engage start-ups as potential suppliers. All of these measures are, at best, mildly effective if carried out in isolation (Isenberg, 2011). Successful entrepreneurship draws on professional support services such as venture-friendly lawyers, accountants, consultants, investment bankers, caterers, facilities managers, etc. In other words, if the focus is on achieving one, high-potential venture a year for every 100,000 residents, the mix of small and small-but-growing businesses will tend to sort itself out (Isenberg, 2011).

A vast number of public and private organisations offer numerous courses on entrepreneurship but, often, they are academic rather than involving practical learning from actual entrepreneurs (World Bank Group, 2014).

Event organisation is fast-paced and hectic and requires flexible and nimble thinking and practices, which are common traits found in the private sector. Moreover, events can, run at a loss at times, which can be covered more easily by private sector organisers. Fundamentally, entrepreneurs need to learn from other entrepreneurs whom they trust and respect. With low levels of trust and respect between the public and private sectors, this may pose a challenge for some public sector organisations (World Bank Group, 2014).

Praised for equitable development, Vietnam is a success story for economic development, transforming the country from a per capita income of \$100 in 1986 to a lower-middle-income economy with a per capita income of more than \$1,100 in 2011. With a large, young, and predominantly rural population of almost 90 million, half of whom are below 27 years of age, and with strong growth in gross domestic product (GDP), Vietnam has a dynamic economy, with a rising tide of entrepreneurship. The number of private sector firms grew from 35,000 in 2000 to more than 600,000 firms in 2011 (World Bank Group, 2014). In the private sphere, friends were employed as advisers more often than family members in all five countries surveyed (Coduras, Levie, Kelley, Saemundsson & Schott, 2010).

2.7 SUMMARY

In Chapter 1, the background and purpose of this research study was introduced. The chapter contained a literature study relating to the global approach to developmental training support for entrepreneurs. Three main topics were discussed: 1) Entrepreneurial environment, 2) Entrepreneurial education, and 3) Entrepreneurial training. The literature review contained theoretical models for each of the three main topics, as well as, literature supporting the hypotheses formulated.

Chapter 2 provided examples of entrepreneurial activity in various countries in relation to their economic development. The researcher focused on how entrepreneurial activity is measured, the outside constraints to entrepreneurial activity, global practices and examples of positive, entrepreneurial, developmental training. Factors which affect developmental training support for entrepreneurs negatively were also discussed. The focus in Chapter 3 is on what developmental training support has been undertaken in South Africa.

CHAPTER 3

DEVELOPMENTAL TRAINING SUPPORT OF ENTREPRENEURS IN SOUTH AFRICA

3.1 INTRODUCTION

Research questions RQ₂, RQ₃, RQ₄, and RQ₅ and research objectives RO₂, RO₃, RO₄ and RO₅ are addressed in this chapter. Chapter 2 contained a literature review of global trends regarding developmental training for entrepreneurs. This chapter comprises a literature study on developmental training for entrepreneurs in South Africa (RSA).

Historically, South Africa's economy has been dominated by large corporations and the public sector (Herrington et al., 2013). During the apartheid era, there was a conspicuous absence of small businesses in the dominant sectors of the economy and very little attention was paid to small enterprise promotion in public policy. During the apartheid era, black South Africans were largely prevented from owning property except in specially designated areas. This meant that they were unable to use their property to generate income, which had a negative effect on their ability to start businesses. Following the advent of democracy in 1994, the corporate sector underwent massive restructuring. Jobs in the formal sector were shed while the informal sector grew – though more out of necessity than out of real opportunity (Herrington et al., 2013). The legacy of apartheid structures has undermined the self-worth of the most vulnerable sectors of the society. These sectors feel unable to engender a desire to be independent and look to the government to solve their basic wants and needs such as housing, health, food security and employment. But more than twenty years after the apartheid era, the people of South Africa are highly politicised and society still shows extremely high levels of income inequality that is worsened by the lack of formal job opportunities in the country (Fatoki, 2010). Disturbingly, early stage entrepreneurial activity has declined in recent years with RSA ranking 57th out of 60 countries in 2015. As a result, the low levels of entrepreneurial

activity are partly responsible for the stagnation in the structural transformation of the economy.

The South African economy remains dependent on sectors such as agriculture and mining where looting, instability, violence and rent-seeking are endemic in spite of plentiful natural resources (Kelley et al., 2015). As a consequence of these factors, manufacturing is becoming increasingly uncompetitive and the economy becomes increasingly less innovative (Matthews et al., 2012). In contrast to RSA, the people in other developing countries, such as Brazil, India and China are two to three times more likely to be entrepreneurs than the people of RSA (Boshoff, 2015).

“The enormity of the South African Government's challenges cannot be underestimated as much still has to be achieved with limited resources” (Wright & Louw-Potgieter, 2010: 39). Based primarily on redressing the injustices of the previous apartheid government, agriculture and mining sectors feel entitled to a limitless supply of support and resources, whether this entitlement is earned or not. This unrealistic expectation has been compounded by pre-election promises that have not been delivered in the past (Wright & Louw-Potgieter, 2010). South Africa also suffers from a backlog in infrastructural development that is the result of both the legacy of apartheid policies and the new government's inability to improve service delivery. Crime still tops the list of key concerns facing small businesses. According to Herrington et al. (2013), the 2009 SME Report indicated that 66% of the SMEs surveyed rated the high levels of crime as a primary concern, followed by the global financial crisis (57%) and high interest rates (51%).

There have been low levels of participation by the youth in the economy. The South African population is currently estimated to be 50 million people, of which the youth population (aged 14 to 35 years) is approximately 20.5 million, representing a substantial 41.2% of the total population. Therefore, economic growth and development cannot be achieved without addressing the socio-economic needs of this segment of the South African population. The dilemma in South Africa is that 22 years after the advent of democracy, this segment of the population is still faced with low levels of economic participation, poor entrepreneurial skills and limited business opportunities. This is the result of the apartheid policies of the past and the existing gaps in current economic development policies, amongst other things. To a certain

degree, the South African Government has recognised the importance of developing a strong small-medium and micro-enterprise (SMME) sector that could lead to promoting and achieving economic growth, as well as, the creation of wealth and employment. To a certain extent, the government's focus on the training of entrepreneurs over the past few years has been on the development of previously disadvantaged individuals, specifically female entrepreneurs (Van der Merwe, 2002; Botha et al., 2006). Orford, Wood, Fischer, Herrington and Segal (2003:17) interviewed several South African entrepreneurs to obtain information on the main obstacles they face. In a Global Entrepreneurship Monitor Report (Kelley et al., 2015), the results indicate that the lack of education and training was the most frequently mentioned weakness by South African entrepreneurs; financial support was the second most frequently mentioned weakness, and cultural and social norms were the third most frequently mentioned. These findings indicate the restriction of entrepreneurship development in the South African economy (Botha et al., 2006).

3.2 THE SOUTH AFRICAN ENTREPRENEURIAL ENVIRONMENT

During the apartheid era, many black South Africans were banished to distant homelands, and were only allowed to come to the "white" areas if they had a job. As a result, a substantial part of the African population of South Africa grew up far from the centres of business and industry. Moreover, given the poor infrastructure in these places, their often-inconvenient locations, and white beliefs about the potentially insecure nature of these places, unfounded or otherwise, it was unlikely that capital would be invested in these areas (Banerjee, Galiani, Levinsohn, McLaren & Woolard, 2006).

Trevor Manuel, a previous Minister of Finance of South Africa, stated: "With millions of South Africans unemployed and under-employed, the government has no option but to give its full attention to the task of job creation and generating sustainable and equitable growth". Furthermore, he argued that "small-, medium- and micro-enterprises represent an important vehicle to address the challenges of job creation, economic growth and equity in our country". These words marked the beginning of post-apartheid South Africa's acknowledgement of the critical role of SMME development as a vehicle for economic growth, job creation and alleviation of poverty

(Department of Trade and Industry, 2013 & 2015; Rogerson, 2005; Masutha, 2014). Timmons (1999) and Kim et al. (2006) established that 90% of entrepreneurs start their businesses from the industry in which they have gained some form of experience. Timmons (1999) argues that entrepreneurs typically have between 8 to 10 years of experience before embarking on a new venture.

Table 3.1 shows South Africa's performance in terms of relative position above or below the median for the Global Entrepreneurship Monitor (GEM) sample for the years 2002–2014. Again, it is clear that the country's overall ranking has dropped significantly below the median for all other GEM countries, reversing the positive trend shown in 2010–2013 (Kelley et al., 2015).

Table 3.1: South Africa's relative TEA rankings, GEM 2002-2014

Year	SA's TEA Ranking	SA's TEA Rate	Median	No. of positions above/ below median
2002	20 th out of 37 countries	6.3	19	1 below
2005	25 th out of 34 countries	5.2	17	8 below
2009	35 th out of 54 countries	5.9	27	8 below
2013	35 th out 67 countries	10.6	34	1 below
2014	53 rd out of 70 countries	7.0	35	18 below
2015	38 out of 60	9.2	<i>n.a.</i>	<i>n.a.</i>
TEA = Total entrepreneurial activity				

Source: Adapted from Kelley et al., 2015

3.2.1 Environmental factors affecting South African entrepreneurship

Particular environmental factors (social, political and economic) are influential in creating unique business and entrepreneurial contexts. Kelley et al. (2015) has proposed that entrepreneurship dynamics can be linked to conditions that enhance (or inhibit) new business creation and growth. In the Global Entrepreneurship Monitor's methodology, these conditions are known as the Entrepreneurial Framework Conditions (EFCs). Understanding these conditions is essential in order to obtain a better understanding of the entrepreneurial environment within a specific economy (Kelley, et al., 2015). Table 3.2 shows the impact of these factors:

Table 3.2: EFCs influencing the pool of potential entrepreneurs in South Africa, 2005, 2010, 2013 and 2014

EFC	Mean score 2005	Mean score 2010	Mean score 2013	Mean score 2014
Market dynamics	2.7	2.9	2.8	2.9
Market openness	2.4	2.5	3.1	2.3
Entrepreneurship education – primary and secondary levels	2.2	1.8	1.8	1.8

Source: Adapted from Herrington et al., 2014

Van der Merwe (2002) states that the key to raising entrepreneurial activity rates lies in increasing the proportion of South Africans engaged in it, especially black people and women. Orford et al. (2003) further advocate increasing the proportion of people who complete secondary school and continue to higher education, and who believe that they have the skills, knowledge and experience to start a business. These two aspects go hand in hand, since higher levels of education are associated with significant increases in entrepreneurial self-confidence.

Table 3.3 below shows the demographic and environmental factors affecting entry into entrepreneurship by South Africans.

Table 3.3: Demographic and environmental factors affecting entrepreneurship in South Africa

Demographic factors	Environmental factors
Age: People between the ages of 25 and 44 are more likely to become entrepreneurs than people younger than 25 and older than 44.	Human capital: Lack of entrepreneurial capacity as a result of weaknesses in the education and training system to develop the skills and mind-sets needed for entrepreneurship and the potential of the population for entrepreneurship.

<p>Race: White African people are more likely to be entrepreneurs than black Africans (However, the differences between white and black Africans largely amount to lower levels of education and a higher probability of being located in a rural area for black Africans compared with white Africans).</p>	<p>Government policies: The national legislative and policy environment needs to be more conducive and supportive including government programmes – specific programmes, structures and institutions set up to support entrepreneurial businesses.</p>
<p>Gender: Men are 1.4 times more likely to be self-employed than women.</p>	<p>Financial support: Inadequate access to early stage finance, understanding of entrepreneurship by the financial community, and entrepreneurs' capacity for financial management.</p>

Source: Adapted from Van der Merwe & Nieman, 2003

Two main factors influence whether a person is likely even to consider starting a business, namely:

- **Perceived opportunities** which reflect the percentage of individuals who believe there is occasion to start a venture in the next six months in their immediate environment because good opportunities do exist; and
- **Perceived capabilities** which reflect the percentage of individuals who believe that they have the required skills and experience to start a new venture.

The transition from an intentional entrepreneur to one that actually starts a business is complex, and many entrepreneurs do not pass the intentional stage for a variety of reasons. The importance of government policies in enhancing entrepreneurial activities is recognised throughout the world. Although it is not Government's responsibility to start new businesses and provide employment, it is their responsibility to provide an environment that is conducive to starting and sustaining a new business through reforms and regulations that increase the ease of doing business and reduce unnecessary bureaucratic burdens. The EFCs most likely to have the greatest influence on the transition from intentional to active entrepreneur, as well as, on the

sustainability of the SME sector, are the following as shown in Table 3.4 (Herrington & Kew, 2014):

- The availability of, and easy access to, entrepreneurial finance;
- Government policies and regulations;
- The transfer of research and development; and
- Physical infrastructure, of which the supply of electricity is a major concern.

Table 3.4: EFCs influencing the early-stage and established business entrepreneurs in South Africa, 2005, 2010, 2013 and 2014

EFC	Mean score 2005	Mean score 2010	Mean score 2013	Mean score 2014
Entrepreneurial finance	2.7	2.5	3.3	3.0
Government policies	3.5	2.7	3.0	3.0
Government entrepreneurship programmes	2.5	2.1	2.2	2.3
Research and development transfer	2.2	2.1	2.1	2.2
Government and legal infrastructure	2.9	3.0	2.7	2.1
Physical infrastructure	3.3	3.1	2.8	3.1

Source: Adapted from Herrington & Kew, 2014

With reference to table 3.4 above, Herrington and Kew (2014), state that, South Africa has plenty of money/finance available to help aspiring entrepreneurs and is no better or worse than most other GEM countries around the world. Possible explanations to the difficulty for entrepreneurs to attract funding may be: 1) a lack of sufficient collateral on the part of the entrepreneur; 2) the inability of the entrepreneur to produce a business plan that is acceptable to the financial institution; 3) poor market research; 4) the absence of a viable business idea that has demonstrable benefits; and 5) the lack of access to markets.

It is clear from Table 3.4 that Government bureaucracy remains one of the major obstacles to entrepreneurial activity and business growth in the country. The authors add that strong negative ratings (under 2) for the time required to obtain permits and

licences, as well as the ease of coping with government bureaucracy and regulations, highlighting the red tape associated with starting up and managing a business (Herrington & Kew, 2014; Kelley et al., 2015). In addition, table 3.4 shows that research and development transfer as well as Government legal and physical infrastructure have remained largely unchanged.

Table 3.5 below shows that entrepreneurial intentions in South Africa have dropped from 15.4% in 2013 to 11.8% in 2014. The three indicators reflecting attitudes towards entrepreneurship (good career choice, high status and media attention) have also dropped. Of particular concern is the score for good career choice, which is the lowest since 2009. Entrepreneurial intentions in South Africa are significantly lower than for the rest of Sub-Saharan Africa, being only a fifth of the regional average. South Africa also performed poorly compared with other efficiency-driven economies in the Global Entrepreneurship Monitor survey conducted in 2014 (Herrington & Kew, 2014). The average for efficiency-driven economies was 22.8%, which was approximately double South Africa's score. It is clear that, in South Africa, even if the expected returns from entrepreneurship are considerably higher than the best alternative, the perceived risks involved might be too high for an individual who is thinking about starting a business. A variety of national characteristics could contribute to this risk-assessment, for example: "red tape" which could present unfavourable administrative burdens or high costs to those thinking about starting a business; access to resources and technical assistance; levels of corruption and crime; the attractiveness of the market; and the competitive environment (Herrington & Kew, 2014).

Table 3.5: Entrepreneurship attitudes and intentions in South Africa, 2003-2014

Attitudes and intentions	2003	2005	2009	2013	2014	AVG SSA **
Entrepreneurial intentions	12.2 *	10.7	13.3	15.4	11.8	58.0
Good career choice	48.0	55.2	63.7	74.0	69.6	71.5
High status of successful entrepreneurs	48.0	58.0	64.0	74.7	72.9	77.6
Media attention for entrepreneurship	47.5	54.4	63.9	78.4	72.6	72.9

* read as 12.2% of the adult population in 2003 who have entrepreneurial intentions
 ** SSA=sub-Saharan

Source: Adapted from Herrington & Kew, 2014

Entrepreneurs starting new ventures fall under two distinct categories as shown in Table 3.6 below (Reynolds et al., 2005).

- **Necessity-based, early-stage entrepreneurial activity:** Defined as the percentage of those involved in early-stage entrepreneurial activity that claim to be driven by necessity (having no better choice for work) as opposed to opportunity. This is also described as survivalist-driven motivation.
- **Opportunity-based, early-stage entrepreneurial activity:** This is the percentage of those involved in early-stage entrepreneurial activity driven purely or partly by opportunity, as opposed to finding no other option for work. This includes taking advantage of a business opportunity, or having a job, but seeking a better opportunity.

Table 3.6: Opportunity- and necessity-driven TEA rates amongst the adult population of South Africa, 2001 - 2014

Opportunity- and necessity-driven TEA rates.	2001	2005	2010	2013	2014	AVG SSA **
Necessity-driven (% of TEA)	18.5	39.5	36.0	30.3	28.2	33.7
Opportunity-driven (% of TEA)	64.7	57.0	60.7	68.6	71.3	64.0
Ratio of necessity vs opportunity	0.3	0.7	0.6	0.4	0.4	0.5
Read as: 18.15% of early-stage entrepreneurs in South Africa in 2001 were motivated by necessity						

Source: Adapted from Herrington & Kew, 2014

Education is inextricably linked to entrepreneurial intentions and growth as it influences confidence in the ability to start a business and to understand financial and business issues (Table 3.7). The Global Competitiveness Report 2014–2015 confirms that poor education at all levels continues to hamper South Africa (Kelley et al., 2015).

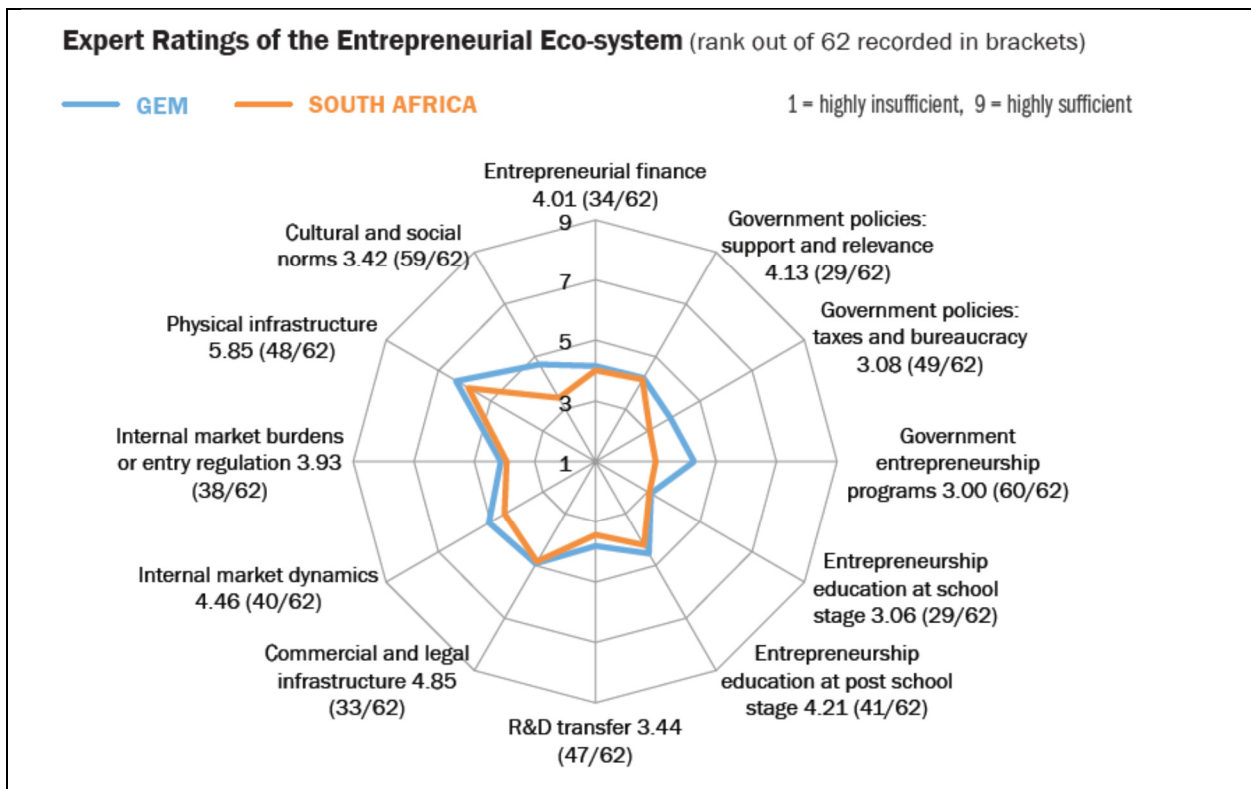
Table 3.7: Perceptions of good opportunities in the adult population of South Africa, 2001 - 2014

EFC	2001	2005	2009	2013	2014	AVG SSA **
Perceived good opportunities	19.7 *	27.3	35.4	37.8	37.0	73.3
Perceived capabilities	30.4	35.2	35.5	42.7	37.7	77.4
Fear of failure	26	25.5	29.5	27.2	25.3	23.9
* Read as 19.7% of the adult population in 2001 perceived there were good opportunities to start a business ** SSA= Sub-Saharan Africa						

Source: Adapted from Herrington & Kew, 2014

In a more recent report from the Global Entrepreneurship Monitor (Kelley et al., 2015), South Africa is rated against 62 other countries in 12 areas relating to the Entrepreneurial Eco-system or landscape. It is worth highlighting that South Africa rates poorly when it comes to Government policies regarding taxes and bureaucracy (49 out of 62 countries), and Government entrepreneurship programmes (60 out of 62 countries). It is also significant that the culture and social norms which exist within South Africa were considered in the survey to be some of the worst for the development of entrepreneurship (59 out of 62 countries). As GEM (Kelley et al., 2015: 15) puts it, “a society’s culture, history, policy and business environment, and many other factors, can influence its view toward entrepreneurship, which can, in turn, affect entrepreneurial ambitions and the extent to which this activity will be supported”. Figure 3.1 below shows the findings of the GEM (2015/2016) report for South Africa (Kelley et al., 2015).

Figure 3.1: Expert ratings of the South African entrepreneurial eco-system (ranking out of 62 countries recorded in brackets)



Source: Adapted from Kelley et al., 2015

3.2.2 Entrepreneurial intentions in South Africa

Herrington & Kew (2014) state that, of particular concern, is the alarming decline of early-stage entrepreneurial activity (TEA rate) by 3.4% from 10.6% in 2013 to 7.0% in 2014. Entrepreneurial intentions in South Africa have also dropped by 23% when compared with 2013 (Herrington et al., 2013). Kelly et al. (2015) report that there has been a small increase of TEA rates from 2014 (7%) to 2015 (9.2%). When one compares South Africa's nascent entrepreneurial activity between the ages of 18 and 64 years in 2014 with those of other African countries, South Africa rates the lowest at 3.2%, with the group average being 14.1% (Herrington & Kew, 2014). Herrington and Kew (2014) find that 7.0% of the adult population in South Africa is engaged in entrepreneurship, while 2.7% already own/manage an established business. Table 3.8 below shows the entrepreneurial rates amongst the adult population in South Africa during 2001-2015.

Table 3.8: South African entrepreneurial statistics

South African Statistics	2001	2005	2009	2013	2014	2015
Nascent entrepreneurial rate	5.3	3.6	3.6	6.6	3.9	5.5
New business ownership rate	1.4	1.7	2.5	4.1	3.2	3.8
TEA (Total Entrepreneurial Activity)	6.5	5.2	5.9	10.6	7.0	9.2
Established business ownership rate	-	1.3	1.4	2.9	2.7	3.4
Discontinuance of business	-	2.9	3.5	3.9	3.9	4.8

Source: Adapted from Kelley et al., 2015

Orford et al. (2003) and Van der Merwe and Nieman (2003) agree that, while there might be a range of contributing reasons for the low levels of entrepreneurial confidence in South Africa, the legacy of apartheid education does appear to be a prime candidate. It is also one area where the Government could make a significant impact on the development of people with the skills and confidence to become entrepreneurs. Foxcroft et al. (2002) connect the weak South African entrepreneurship performance to four factors:

- The high transaction cost of tax compliance, in particular for young firms;
- Weak support structures, business development services in particular, which are not accessible or suffer from low quality;
- Insufficient access to credit, in particular micro-finance; and
- Inadequate technical support structures, in the form of training and education, especially for informal businesses

These observations are supported by the evidence presented by Scaife (2015), who indicates that the increase in the number of procedures and costs to starting a business are linked to the poverty rate. There are five procedures in order to start a business in South Africa, ranking the country 38 out of the 140 countries surveyed Schwab and Sala-i-Martin (2014). On average the authors state the procedures to start a business in South Africa will take 19 days, with a ranking of 94 out of 140 countries surveyed. These indicators suggest that the Government in South Africa is

creating more obstacles to entrepreneurship than Governments in other countries. More emphasis should be placed on effectively setting up support structures for entrepreneurship. Meyer-Stamer (2003) agrees that these problems are compounded by a confused concept of entrepreneurship and entrepreneurship promotion. Van der Merwe and Nieman (2003) find that, all too often, nascent business owners purchase a business plan or take a skills course, obtain funding and then have no substance for a sustainable business. In contrast, nascent business owners should be seeking to identify markets and applying skills to satisfy the market, then writing a business plan to attract funding.

3.2.3 Entrepreneurship and employment

Davies (2002) emphasises that entrepreneurs play a fundamental role in creating employment. Enterprise is at the heart of employment creation. Both public and private sectors create employment. While the majority of people aspire to work in the formal economy, the majority of new work opportunities in the last decade have been generated in the informal economy. Although significant deficits exist in the formal economy, workers in the informal economy are often poorly paid, unprotected, unregulated and unrepresented (Davies, 2002). Rising unemployment is especially prevalent among youth, who constitute a major portion of the population in developing economies, yet are also needed in developed economies. Kelley et al. (2015), in their report predict that 80% of entrepreneurs expect to add one or more jobs to their businesses over the next five years. This employment data reveals the critical importance of entrepreneurs for future employment and economic development, particularly in the factor- and efficiency-driven economies. Entrepreneurship can affect regional economics in the following ways (Arthur, Hisrich, Cabrera & Cabrera, 2012):

- Employment and income growth;
- Increases in tax revenue;
- Improved service provision and local income retention; and
- Demonstration and motivational effects (i.e. the inspiration of role models).

Coduras et al. (2010) point out that the goal of entrepreneurship education should be to promote creativity, innovation and self-employment. Coduras et al. (2010) add that

as an economy develops and as the employment of relatively cheap labour becomes an increasingly less viable source of advantage, necessity-driven entrepreneurship will decline and Governments might start to pay more attention to entrepreneurship. The most developed nations, no longer being able to depend on low labour costs, would have to compete in ways that are more creative instead (Coduras et al., 2010).

South Africa’s rate of entrepreneurial activity is very low for a developing nation – a mere quarter of that seen in other Sub-Saharan African countries. Unemployment is high in South Africa (around 40%) yet, despite this, the number of people starting businesses because they have no other option is low (Herrington & Kew, 2014). Table 3.9 below is a representation of the unemployment rates in Sub-Saharan Africa in 2014. As can be seen, South Africa (highlighted in red) has by far the highest unemployment rate for the region.

Table 3.9: Unemployment rates of Sub-Saharan countries

Country	Total unemployment rate
Angola	8.4
Botswana	18.4
Ghana	4.5
Malawi	7.6
Namibia	17.7
Nigeria	7.5
South Africa	25.3
Uganda	3.9
Zambia	13.3
Average SSA	7.6

Source: Herrington & Kew, 2014

About 11% of entrepreneurs attempting to create high growth businesses, known as “opportunity entrepreneurs”, expect to provide 20 or more jobs over a period of 60 months as opposed to 2% of entrepreneurs who are “entrepreneurs by necessity”

(Zacharakis & Meyer, 2000). This type of mentality is common globally and a vision of what entrepreneurship entails, therefore, will have very important implications for the economy as a whole (Nicolaidis, 2011).

The ratio of entrepreneurs to workers in South Africa is approximately 1 to 52, while the ratio in most developed countries is approximately 1 to 10 (Friedrich & Visser, 2005; Acs et al., 2004; Gouws, 2002). Furthermore, Shay and Wood (2004) present disturbing findings from their research, which show that young South Africans believe in themselves as business starters significantly less than youth in similar, developing countries such as Argentina, India, Brazil and Mexico (Isaacs et al., 2007).

3.2.4 Factors constraining SMMEs in South Africa

3.2.4.1 Access to finance and credit

South African banks and lending houses tend to be conservative in nature when it comes to extending loans to SMMEs. Funding is primarily given to businesses which are more established (Wright & Louw-Potgieter, 2010). However, as pointed out by the Finmark Trust (2010), the geographical location of an SMME will also have a bearing on the likelihood of receiving a loan.

Lack of access to micro-finance is a constraint to youth enterprise development. More than 82% of small business owners claimed to have funded their business using their own resources, without any assistance from third-party funding institutions. This is a positive development, but also reveals the inaccessibility of funding to small businesses. The lack of access to finance is demonstrated by the fact that 39% of small business owners indicated that cash flow was a key obstacle to starting their businesses. They were not able to access short-term credit easily. In addition, the Finmark Trust survey (Finmark Trust, 2010) revealed that 65% of small business entrepreneurs required an average amount of R900 to start their business, which they found difficult to secure from third-party financial institutions. This suggests that, at the level of early stage entrepreneurial activity, there exists a market need for micro-finance in the R100 to R1800 range of financing for business start-up (with R900 being

the median amount). According to the survey, 35% of the small business owners interviewed claimed they started their businesses using loans. Of these, 8.6% claimed to have secured the loan through formal sources, while 91.4% said they used an informal loan/borrowing source.

The use of both formal and informal credit and loans was low among the small business owners surveyed, suggesting that high risk is associated with these categories of debt. Of the 35% who accessed loans, only 14.3% claimed to be repaying either money or goods currently or to have borrowed in the past 12 months. This suggests that, in South Africa, the chances of recovering a micro-loan in the R900 median range are very low (Department of Trade and Industry, 2013). Given the high risk in this area of financing, Government will need to intervene to address market failure. Lack of access to micro-finance is a serious constraint on youth enterprise creation and self-employment (Department of Trade and Industry, 2013). The survey results suggest there is significant opportunity for innovation in the banking sector and state sources of financing to meet the needs of the small businesses and micro-enterprises in terms of understanding the needs of early-stage entrepreneurial activity. These micro-finance challenges indicate a need to ensure that both public and private providers of micro-finance are able to market their products to the target beneficiaries. In this regard, the South African Micro-Finance Apex Fund and private-sector banking institutions should communicate aggressively and make their existing products accessible in this market segment (Department of Trade and Industry, 2013).

3.2.4.2 Poor infrastructure

Poor access to physical infrastructure can play a key role in entrepreneurial activity and adds significantly to the cost of doing business (Wright & Louw-Potgieter, 2010). As discussed by Harkiolakis (2014), this is supported by the Global Entrepreneurship Monitor Reports (2014, 2015/2016) on SMME development and the report includes accounting, legal and other professional services in this category.

Access to a space from which to trade can vary from province to province in South Africa (SEDA, 2016). As reported by SEDA (2016), the transport sector has had the largest increase in rent, followed by the real estate and business services sector. The

South African Government budgeted R17 million for the delivery of infrastructural and planning services for the 2014/15 fiscal year, which was to be used for a community survey project (StatsSA, 2016). As mentioned by Islam (2015), an increase in public spending on infrastructure has the benefit of providing a more conducive entrepreneurial environment. Islam (2015) adds that improved transportation and communication infrastructure can increase the degree of connectivity and networks required for innovative entrepreneurship, thus increasing the likelihood of start-ups. Islam (2015) refers to the Government's spending on public goods holistically as infrastructure including:

- Education;
- Health;
- Housing;
- Welfare;
- Social protection;
- Transport and modes of communication;
- Religion and culture;
- Environment; and
- Public order and safety.

Islam (2015) argues that the supply of these infrastructural needs leads to more entrepreneurial activity. In addition, Masutha (2014) found that the infrastructure provided by incubators might also have a positive effect on start-up firms and their survival rate. Services which Masutha (2014) refers to as being of value to start-ups are: subsidised office space, vehicles, drivers and furniture; training workshops; business mentoring and coaching; networking and procurement opportunities; and access to monthly bookkeeping and internet. As Harkiolakis (2014) points out, inadequate Government investment in physical infrastructure, especially in the energy and transport sectors, and the ineffective operation and maintenance of the existing infrastructure can impede the mobility of goods and services and increase the cost of doing business. Even despite the increase of the communications sector, especially mobile services, which has one of the fastest growth rates, the costs of the services it provides can be prohibitive for low-level entrepreneurs.

Harkiolakis (2014) refers to infrastructure which is conducive to innovation and entrepreneurship, such as, technical resources, knowledge, and other inputs essential to the innovation process. In this sense, infrastructure consists of a number of sources of knowledge, including:

- A network of firms that provide expertise and technical knowledge;
- A concentration of research and development that enhances opportunities for innovation by providing knowledge of new scientific discoveries and applications; and
- Business services with expertise in product positioning and the intricacies of new product commercialisation.

The Department of Trade and Industry (2013) has proposed a number of projects for the development of sustainable, competitive enterprises through the efficient provision of effective and accessible incentive measures that support national priorities, namely: (i) Broadening Participation Incentives provides incentive programmes which promote broader participation in the mainstream economy by businesses owned by individuals from historically disadvantaged communities and marginalised regions; (ii) Manufacturing Incentives provide incentives to promote additional investment in the manufacturing sector. The manufacturing investment cluster comprises the following programmes and schemes: the MCEP; the Enterprise Investment Programme (EIP); the Small and Medium Enterprise Development Programme (SMEDP); the Automotive Investment Scheme (AIS); EMIA; the Sector-Specific Assistance Scheme (SSAS), the Capital Projects Feasibility Programme (CPFP), and the Section 12I Tax Incentive scheme; (iii) Services Investment Incentives which provide incentive programmes that promote increased investment and job creation in the services sector. The programmes include the BPS (Business Process Services) and the Film and Television Production Incentive Support Programme for South African and foreign productions; (iv) Infrastructure Development Support capitalises on investments in the South African economy by providing infrastructure critical to industrial development, thereby increasing the export of value-added commodities and creating employment opportunities; (v) Product and Systems Development reviews, monitors and develops incentive programmes to support the IPAP and develops sector strategies to address market failures. Key activities include the development and enhancement of incentive project products; and (vi) Business Development and After Care which facilitates

access to targeted enterprises by reviewing the success of incentive schemes and improving such schemes. The South African Government spent approximately R1 billion in support of infrastructure development (Department of Trade and Industry, 2013).

3.2.4.3 Research and development (R&D)

It has been found that South African SMMEs are less innovative than those of developed countries (SEDA, 2016). SEDA (2016) argue that this might be because smaller firms are not able to link with larger corporations, denying them the opportunities of technology diffusion. Herrington & Kew (2014) propose that Government provides incentives for R&D in an effort to attract and strengthen links between domestic and foreign, knowledge-intensive firms. Katila, Chen and Piezunka, (2012) believe that entrepreneurial firms should invest in R&D moves that lower the production cost of their existing products. In this way, smaller businesses would be able to compete better against larger and stronger firms. Katila et al. (2012), continue to add that exploitive R&D moves are high performing for entrepreneurial firms because they are much less likely to trigger a competitive response from rivals than more visible product development moves will. Song, Podoyntsyna, Bij and Halman (2008) wrote that the findings from the literature review they conducted showed that some of the studies reported a negative relationship between R&D investments and competitiveness whilst, in others, there was a positive relationship. The findings of Song et al. (2008) were also not conclusive and further research into the topic was suggested. Song et al. (2008) did find that market scope clearly enhances the performance of New Technology Ventures (NTVs), as well as, product innovation for corporate ventures. However, product innovation is detrimental for independent NTVs. Song et al. (2008) also inferred that a radical innovation strategy is too risky for independent ventures.

Masutha (2014) advises that Government institutions, in particular universities, can assist with research and development in entrepreneurial incubators. Increasing competition and globalisation of industries, business ideas or technology, have raised the demand for what is referred to as technology ventures' outside-in innovation and acquisition of technology (Becker & Gassmann, 2006). Becker and Gassmann (2006)

refer to this as “open innovation”. Traditionally, research and development units – large corporations from different industries – have been the source of future innovation for common use (Becker & Gassmann, 2006; Porter, 1985). Becker and Gassmann (2006) add that an increasing share of total R&D expenditure is spent externally to tap outside innovation sources such as suppliers, customers, universities and research institutes. Becker and Gassmann (2006) write that knowledge creation and the core tasks of R&D management are increasingly being sourced through start-ups or re-delegated to academic institutions or other corporations.

3.2.4.4 Restrictive labour laws

Parker and Robson (2004) report that a group of OECD countries found South African labour laws to be restrictive to the development of SMMEs and entrepreneurial activity, particularly when retrenching or laying off employees. Herrington and Kew (2014) support this finding that South African labour laws do not take business cycles into consideration (SEDA, 2016). The report adds that the cost of labour for SMMEs is high for start-up ventures and hinders the likelihood of their success. Benjamin (2006) says that the labour law refers to a range of regulations and policies, the primary purpose of which is to regulate the labour market. Typically labour laws refer to the regulation of paid work performed by people other than employees.

The earliest labour laws protected workers against the worst abuses of the Industrial Revolution (Benjamin, 2006). Benjamin (2006) notes that collective bargaining and employee representation are evident in wage negotiations and representation in health and safety matters. Labour market regulation can be divided into a number of categories: a) minimum conditions of employment; b) collective bargaining and worker participation; c) institutions of governance; d) dispute resolution and adjudication; e) promoting equality in the workplace; f) providing skills development and placement within the labour market; and g) providing employment-linked social security (Benjamin, 2006). As Benjamin (2006: 5) quotes in his book: “The main object of labour law has always been, and we must venture to say always will be, to be a countervailing force to counteract the inequality of bargaining power which is inherent and must be inherent in the employment relationship”.

Collins and Hussey (2003) argue that employment law functions with other aspects of Government policies to reduce or minimise social exclusion consequent upon unemployment in order to prevent a breakdown in order or social cohesion. Collins and Hussey (2003) suggest that deregulation achieves little to improve the long-term competitiveness of businesses. This requires systems of management that attract investments because they offer efficient production, innovative products and a highly skilled, co-operative workforce. Collins and Hussey (2003) argue that employment law can be used to provide an institutional framework to support competitive enterprises. They suggest that competitiveness requires considerable flexibility and co-operation from workforces and this is best achieved through supplying reliable assurances of fair treatment, employment security, as well as, mechanisms for worker participation in the management of businesses.

The absence of labour protection might have negative consequences for workers and their families, for enterprises and for society. The lack of labour protection might affect employers by undermining productivity and distorting competition to the detriment of those who operate within the law. Lack of labour protection might lead to a neglect of training. This might lead to decreased productivity both within enterprises and nationally (Benjamin, 2006). SEDA (2016) found that South Africa's relatively high minimum wages, however, are proving costly for small businesses, particularly at their start-up stage, hindering the growth of small businesses.

3.2.4.5 Inadequately skilled workforce

The Department of Trade and Industry (2013) has acknowledged that a shortage of skills and limited entrepreneurship activity has acted as a constraint on employment growth. The South African National Development Plan (NDP) is equally affected by the skills shortages in the small business services sector (SEDA, 2016).

Schwab and Sala-i-Martin (2014) note that, when it comes to German labour skills, technical skills for companies are widely available and that the skills match the needs of businesses. Schwab and Sala-i-Martin (2014) found that Swedish development and training are adequately suited to an innovation-driven economy. The investment in skills and higher education often enables economies to move towards more productive areas and thus become more competitive (Schwab & Sala-i-Martin, 2014). Many

countries, particularly in emerging economies like South Africa, are experiencing a major scarcity of individuals who are appropriately trained with high-level technical skills, complemented by business- oriented professional skills (Kunert, Okole, Vorster, Brewin & Cullis, 2012). As Adendorff, Appels and Botha (2011) found, where skills are not available, this might lead to the sub-contracting of certain functions in order to fulfil a contract, thus reducing profitability. Adendorff et al. (2011) add that, in the construction industry, the loss of skilled labour, which might be entrepreneurially inclined, is often the result of larger firms offering higher wages and salaries. Kenny (2014) maintains that the success of Ireland's entrepreneurial activity is driven by the Government's ability to address skills shortages and educate labour to supply these needs. Kenny (2014) says this starts at primary school level with a focus on the arts for the creative problem-solving techniques entrepreneurs will need.

Steenekamp et al. (2011: 47) argue that the "traditional classroom delivery" method of basic education in South Africa might not be conducive to the development of an enterprising spirit among young learners. Enterprising approaches to small business education and training might be important for programmes aimed at promoting business initiation. Schwab and Sala-i-Martin (2014) conclude that, all too often, vocational and on-the-job training are neglected in many economies.

3.2.4.6 Regulatory and economic barriers

The Department of Trade and Industry (2013) reports that some of the reasons why South Africa's GDP growth has not managed to keep pace with other emerging markets and its counterparts in BRICS (Brazil, Russia, India, China and South Africa) include: firstly, South Africa is a small country that does not have a huge domestic customer base and, even though the African continent contains a billion potential consumers, the different currencies, regulations and policies, along with poor infrastructure and transport systems, make trade with neighbouring countries quite difficult; secondly, the low rate of savings and investments, partly because of a culture of low saving in the populace and the low confidence of the private sector to invest, stunts South Africa's economic growth; thirdly, despite investing 6.1% of South Africa's national budget in education, the country has an acute shortage of skilled labour as required by the market; fourthly, South Africa has a strong but volatile currency, which

deters investors and makes our exports less competitive; finally, the infrastructure of South Africa, though far better than the rest of Africa, suffers from severe bottlenecks, including power shortages, and is in urgent need of upgrading (Department of Trade and Industry, 2015).

Government's responsibility to provide a platform for SMMEs and start-up businesses is essential to sustained growth (SEDA, 2016). As reported by the Global Competiveness Report (Schwab & Sala-i-Martin, 2014), Governmental bureaucracy is one of the major obstacles to business activity in South Africa (Schwab & Sala-i-Martin, 2014). The report also found that "red-tape" was a major hindrance to new venture start-ups. Red-tape refers to the delays in obtaining licences or permits with which to begin trading. The National Exporter Development Programme (NEDP) is designed to contribute towards positioning South Africa as a reliable trade partner by increasing exports and enhancing the country's exporter base. The sub-programme prioritises the creation of a vibrant export culture within South Africa through providing trade information services and advice, supported by a national trade information system underpinned by an export help desk, extensive capacity building and export training (Department of Trade and Industry, 2015).

Venture strategies should be in place to address barriers such as laws, regulation, predatory pricing, price collusion, anti-trust, financial, economic and Governmental constraint before market penetration (Onyago, 2013). Onyago (2013) adds that these barriers were often mentioned by mentors to start-up entrepreneurs. Amidu and Wolfe (2008) argue that by lowering barriers and shortening logistics chains, globalisation promotes real choices and the freedoms that go with them, i.e. the freedom to trade, to choose markets from which to access required/appropriate technology for production, to realise economic potential thereby empowering the consumer and ushering in long-term prosperity for all. Growth in trade is the result of technological development, inter-regional and bilateral trade agreements, and concerted effort to reduce trade barriers. Some developing countries have opened up their economies to take full advantage of the immense opportunities for economic development through trade, whilst others have not (Amidu & Wolfe, 2008). Essentially, there are two major kinds of trade transactions: domestic and international trade. Domestic trade is that

which is conducted within the local country, making use of local currencies, whilst international trade is between countries (Amidu & Wolfe, 2008). International trade has some distinguishing factors:

- The transaction involves at least two countries;
- The transaction occurs across international borders and, therefore, it is subject to different laws, customs, cultures, languages and even religion;
- It also involves the use of acceptable standards of quality, value, and media of exchange for the trading parties; and
- The laws and regulations could vary over time and often without adequate notice, depending on the industrial economic policies the trading countries are pursuing at time.

Amidu and Wolfe (2008) found that, in Sub-Saharan Africa, the poor trade logistics and other man-made barriers to international trade inhibit the free flow of goods and services across the nations, placing Sub-Saharan Africa countries at the bottom of the ranking of 175 countries. Hence market access through reduction of tariffs and non-tariff barriers in developed countries is a key to effective participation by developing countries in the multi-lateral trading system.

Herrington et al. (2013) suggest that Government should incentivise entrepreneurship aggressively through: greater development of specialised economic zones, providing tax breaks for businesses below certain revenue thresholds, and lowering barriers to entry in certain industries. These sentiments are supported by Davies (2002: 25) when she states: "...we should remove all barriers, particularly those created by Government or within its power to change, that block or discourage people's entrepreneurship".

Kingdon and Knight (2004) point out that the idea that much unemployment in South Africa is voluntary, is incorrect. They suggest that the barriers to entry into the informal sector are a powerful factor in explaining high unemployment. They add further that, for as long as barriers to entry continue to restrict opportunities in much of the informal sector, this sector will be unable to absorb much more of the currently jobless. Unemployed workers face a high probability of remaining unemployed, whatever their search activity (Kingdon & Knight, 2004).

3.2.4.7 High levels of crime

Both the informal and formal SMME sectors of business are reported to be affected by crime levels (SEDA, 2016). Kelley et al. (2015) found that high crime forces SMMEs to fund security systems, which increases the cost of doing business. Herrington et al. (2014) argues that crime and violence are the key negatives against foreign investment in South Africa.

Eckhardt and Shane (2003) point out that several types of entrepreneurial opportunities are not productivity-enhancing, including crime, piracy and corruption. Herrington and Kew (2014) agree that crime, violence and corruption are major stumbling blocks for the economic growth of South Africa. Herrington and Kew (2014) rank South Africa 133rd out of 144 countries when it comes to crime and violence inhibiting and adding costs to business. Herrington et al. (2013) propose that losses in reduced annual sales due to crime, theft and disorder are commonplace in Sub-Saharan Africa and that the onus is on the individual business owners to protect themselves, which increases the cost of business. The steady increase in crime in these regions is indicative of a decline in law and order, which impacts on potential foreign direct investment opportunities.

Crime has become an additional tax on all businesses but, with low margins, many small businesses can least afford this additional cost (Herrington et al., 2013). Herrington et al. (2013) provide crime statistics for 2008/09 that indicate a 45% increase in robberies at small businesses. Overall, more than 70% of robberies targeted small businesses in 2009. These numbers are not only alarming, but steadily climbing (Olawale & Garwe, 2010). The authors continue, reporting that the high level of crime was ranked as the second most problematic factor for doing business in South Africa, and the surge of crime directed at small business would have acted as a strong deterrent to potential entrepreneurs. Herrington et al. (2013) found that crime is likely to be a significant inhibitor in generating a positive attitude towards starting a business enterprise. Government structures and policies will need to focus on reducing the crime levels, high unemployment and poverty if an entrepreneurial culture is to be encouraged. Valerio et al. (2014) found that crime posed a significant threat to the likelihood of informal entrepreneurs creating start-ups.

3.2.4.8 Lack of access to markets

SEDA (2016) found that the limited access to local and foreign markets threatens the longevity of South African SMMEs. This is particularly true when it comes to SMMEs trading from rural locations (Watson & Netswera, 2009). Watson and Netswera (2009) found that the remote location of many SMMEs hinders them from forming collectives which could have enhanced their bargaining power, making it difficult for them to lobby Government institutions to serve their needs better.

The recent worldwide economic crisis has highlighted the high degree of interdependence of economies and the degree to which growth depends on open markets (Schwab & Sala-i-Martin, 2014). The authors add that the size of the market affects productivity since large markets enable firms to exploit economies of scale. Traditionally, the markets available to firms have been constrained by national borders. In the era of globalisation, international markets have become a substitute for domestic markets, especially for small countries. Empirical evidence shows that trade openness is positively associated with growth. Even if some recent research casts doubts on the robustness of this relationship, there is a general sense that trade has a positive effect on growth, especially for countries with small domestic markets (Schwab & Sala-i-Martin, 2014). Innovation is also supported because companies which are predominantly medium-sized often operate in niche markets and are located in close geographical proximity to each other. Schwab and Sala-i-Martin (2014) conclude that this fosters the exchange of learning among businesses and facilitates the development of new goods and services. They suggest that countries should strengthen the macro-economic environment so as to reduce the effect of large firms dominating the domestic market (Schwab & Sala-i-Martin, 2014).

Young companies need access to: markets, service clients and customers, suppliers and distribution channels. Identifying potential customers in both the public and private sectors at an early stage is crucial to establishing and strengthening sales coverage. First-time exporters also need support to develop the skills and resources they need to compete in global markets and to achieve ambitious revenue targets along the way (Kenny, 2014). South African regulatory laws have worsened the conditions of SMMEs with regard to preparedness and competitiveness in both local and global markets (SEDA, 2016). SEDA (2016) add that increasing penetration of commercial franchise

enterprises into non-traditional markets has created awareness of mechanisms to replicate ventures amongst potential social entrepreneurs in these communities. An example of this is the deregulated liquor industry in South Africa, which has become one of the fastest growing sectors in the world (SEDA, 2016).

Hitt et al. (2001) found that firms operating in homogeneous markets will perform better by expanding company-managed units, thereby taking advantage of learning how to operate in these environments and diffusing this through standardisation. However, firms operating in heterogeneous environments will perform better through franchising, using the knowledge gained by exploring and adapting to the local environments. Hitt et al. (2001) found that globalisation heightens the complexities of doing business and leads to increased opportunities, which has led to more, smaller companies trading internationally (Hitt et al., 2001). The spin-off of entering new international markets is the ability to learn new capabilities from which the firms can profit. Established companies can play a key role in supporting access to markets for early-stage companies. Kenny (2014) concludes that there is a role for larger companies to help small firms secure contracts directly with them or within their supply chain. Established companies can also provide early-stage companies with access to distribution channels, which can help start-ups make use of such channels for market validation and endorsement.

3.2.4.9 Entrepreneurship culture in South Africa

According to Herrington et al. (2013), a culture of entrepreneurship can unleash the economic potential of all people in South Africa, particularly the youth. The South African youth need to be provided with options that enable them to contribute towards the economy (Mahadea et al., 2011). This includes aspects such as: the extent to which society values entrepreneurship as a good career choice; whether entrepreneurs have high societal status; and the extent to which media attention to entrepreneurship is contributing to the development of a positive entrepreneurial culture (Herrington & Kew, 2014). The authors add that entrepreneurial activity does not take place in a vacuum, and entrepreneurial attitudes and perceptions (both societal and individual) play an important part in creating an entrepreneurial culture. They found that culture and customs regarding female participation in the economy

are consistent and that men are more likely to be involved in entrepreneurial activity Herrington et al. (2014).

Entrepreneurship is an unlikely route for most young people starting out as experience is generally needed to succeed in business (Timmons, 1999). Moreover, the apartheid past dramatically reduced the culture of entrepreneurship, meaning that young Africans are unlikely to have grown up in households with business people who could have shaped their understanding of market opportunities and their access to networks and know-how. The Department of Trade and Industry (2013) find that it is critical to understand this context so that programmatic responses to encourage youth enterprise development are sensitive to the challenges the country faces.

There are many challenges that South Africa faces in promoting economic development that reverberate throughout the economy, affecting enterprise development and creation among all targeted groups, particularly African youth, women, the disabled and rural people. These include the poor GDP growth rate, lack of transformation of the South African economy, low levels of youth participation in the economy as evident from the low youth ratings on the Total Entrepreneurship Activity index, and high levels of youth unemployment, lack of critical management skills, and lack of access to finance and economic opportunities (Department of Trade and Industry, 2013).

Driver, Wood, Segal and Herrington (2001) report an overall lack of entrepreneurial elements in the education system in South Africa. Negative attitudes towards: entrepreneurship, entrepreneurial role models, confidence, initiative and creativity, entrepreneurship as a career choice, and a negative attitude towards failure all contribute towards the lack of a South African entrepreneurial culture. Many of these elements could be improved by education but are absent from the general education system. Driver et al. (2001) also confirm the generally low levels of business skills and the absence of entrepreneurial education in general. Acs et al. (2004) write in their World Competitive Yearbook (2003), that although South Africa still offers certain positive conditions (lowest living cost for employees, lowest electricity costs for businesses and relatively low income tax levels), it ranks lowest in terms of the employment rate, life expectancy, the level of economic literacy, the general skills level of employees, foreign direct investment, infrastructure and foreign exchange reserves.

It is suggested that, in South Africa, there are too few people with entrepreneurial qualities, leading to a situation where the South African economy performs poorly because only a very limited number of people succeed as entrepreneurs (Van der Merwe & Nieman, 2003).

A strong entrepreneurial culture cannot develop and flourish in areas with limited access to resources, poor infrastructure, little or no customer spend and no vibrant markets. In the absence of an enabling environment in which to use and develop their skills in practice, people will be forced to migrate/emigrate to a more favourable environment, search for formal employment within their current province, or remain unemployed (Herrington & Kew, 2014). Bosma et al. (2008) confirm that institutional characteristics, demography, entrepreneurial culture and the degree of economic welfare shape a country's entrepreneurial environment. Pretorius, Nieman and Van Vuuren (2005) add that a negative perception towards entrepreneurship as a career choice contributes towards the South African entrepreneurship culture. Davies (2002) agrees with these findings concluding that for social and economic progress, an entrepreneurial culture is every South African's responsibility.

Compared to national culture, community-level cultural norms reflect a more proximal context within which entrepreneurial action takes place. Community culture is both influenced by national culture and is also distinct from it (Stephan & Hopp, 2012). Stephan and Hopp (2012) suggest that culture might impact on important individual beliefs which, in turn, determine whether nascent entrepreneurs succeed in creating operational ventures or whether they abstain from the start-up process. Stephan and Hopp (2012) theorise that culture influences two key individual beliefs: an entrepreneur's motivation to work hard to create an operational venture (start-up motivation) and their confidence that they have the skills required to create an operational venture (entrepreneurial self-efficacy). Performance-based cultures are cultures which reward individual accomplishment (Stephan & Uhlaner, 2010; Stephan & Hopp, 2012). Such cultures reflect the extent to which a community (banks, Governments, role models and society as a whole) encourages and rewards innovation, high standards and performance improvement. Stephan and Hopp (2012) suggest that the expectation to demonstrate a hard working attitude combined with determined and confident high-performance behaviour is stronger in performance-based cultures. Furthermore, Stephan and Hopp (2012) found that cultures with

stronger, socially supportive norms have higher subsequent rates of nascent business creation (Stephan & Uhlaner, 2010; Stephan & Hopp, 2012).

3.2.5 Rural/urban distribution of entrepreneurs in South African provinces

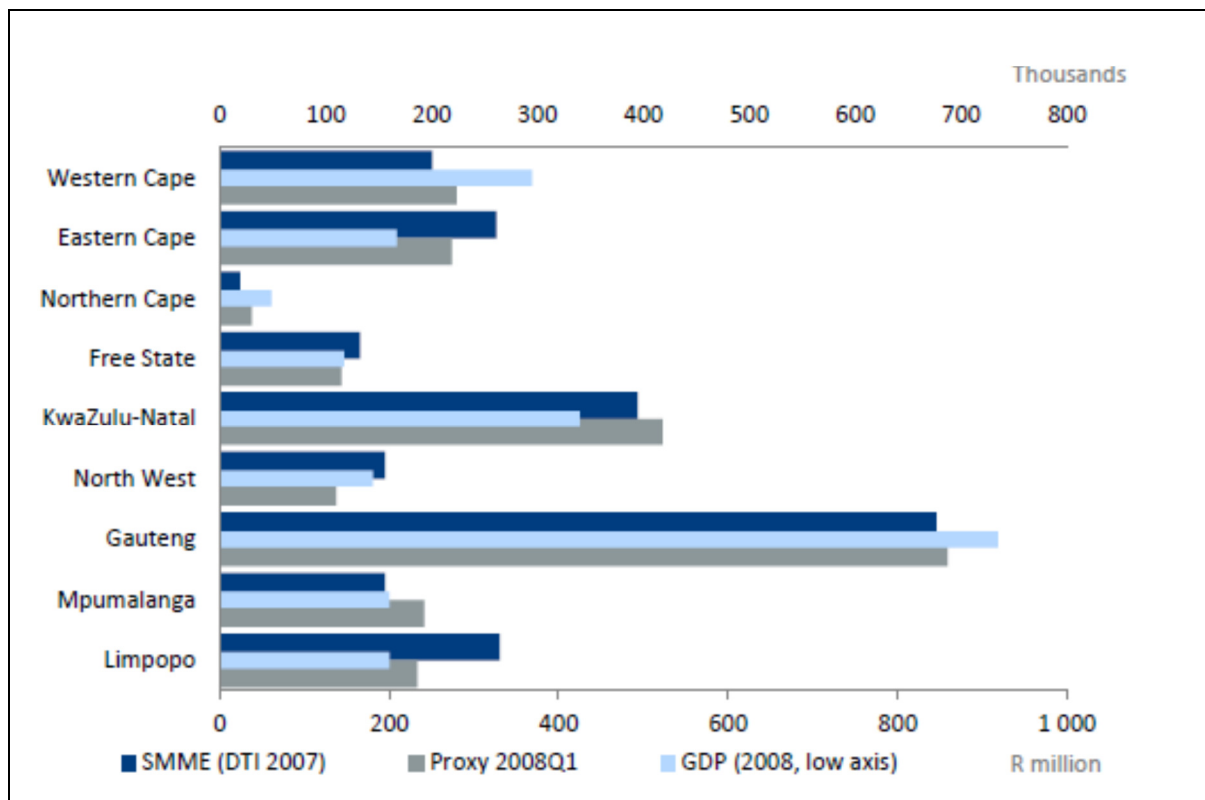
Research reports have shown consistently that individuals located in major urban areas were far more likely to be involved in entrepreneurial activity than those in rural areas. In metro areas, nearly 10% of adults were engaged in a start-up or new firm, compared to fewer than 2% in rural areas. The lack of entrepreneurial activity in rural areas has been confirmed by Global Entrepreneurship Monitor reports, which argue that this is a result of lack of infrastructure development, smaller markets and lower levels of skills. The lack of an enabling environment within rural areas will need to be addressed in order to tackle poverty and migration from rural areas (Tobergte & Curtis, 2013). The participation of young people in the economy through enterprise creation is paramount to move them from a state of dependence to one of independence, where young people can find their place in society as independent adults (Department of Trade and Industry, 2013).

One of the most destructive legacies of apartheid was the fact that Africans were deliberately repressed, banned from most skilled jobs and given a vastly inferior education. The destruction wrought by Bantu Education is well captured by the following statement, which was aired by the leading politician in the Senate in 1954: “What is the use of teaching a Bantu child mathematics when it cannot use it in practice?” The difference between expenditure on education for a black and a white child was 16 times more in favour of the latter. Although education expenditure patterns have been equalised in the post- apartheid era, youth still possess skills that are not required by the labour market, which is a challenge that needs to be addressed (Department of Trade and Industry, 2013). The challenge of the lack of skills is concentrated among African youth. It is argued that, with parents who were denied access to most skilled jobs and the fact that they are still exposed to a system of education battling the legacy of inequity, African youth are unlikely to have grown up in a household with business people who would have shaped their understanding of market opportunities, access to networks and capability. White youth are more exposed to the practical application of entrepreneurial skills as a result of learning

acquired from helping out in family businesses (Department of Trade and Industry, 2013). By contrast, this is an opportunity that many black youth do not have which, in turn, influences their success or failure in entrepreneurship. Moreover, they are not easily absorbed into the labour market owing to their lack of work experience and entrepreneurial skills to create self-employment. They also lack assets to use as collateral to secure funding to start business enterprises. This vicious cycle is self-perpetuating and further prejudices the economic development, particularly of black youth. There is a distinct need to introduce young people to a curriculum on entrepreneurship at an earlier stage, particularly at the basic level of education, to address the low levels of entrepreneurship among youth (Department of Trade and Industry, 2013).

Entrepreneurial skills remain low among the youth. Government departments and agencies involved in the area of entrepreneurial activity must assist in imparting the requisite skills for youth entrepreneurs and managers. Most small business owners (83%) are black, while two-thirds (66.3%) have an education lower than Grade 12, highlighting the importance of imparting skills to young and aspirant entrepreneurs. Figure 3.3 gives an indication of where small business owners acquire the skills they require to successfully run and manage the growth of their small enterprises (Department of Trade and Industry, 2013). Figure 3.2 graphically depicts the number of SMMEs by province in South Africa.

Figure 3.2: SMMEs by province and GDP in South Africa



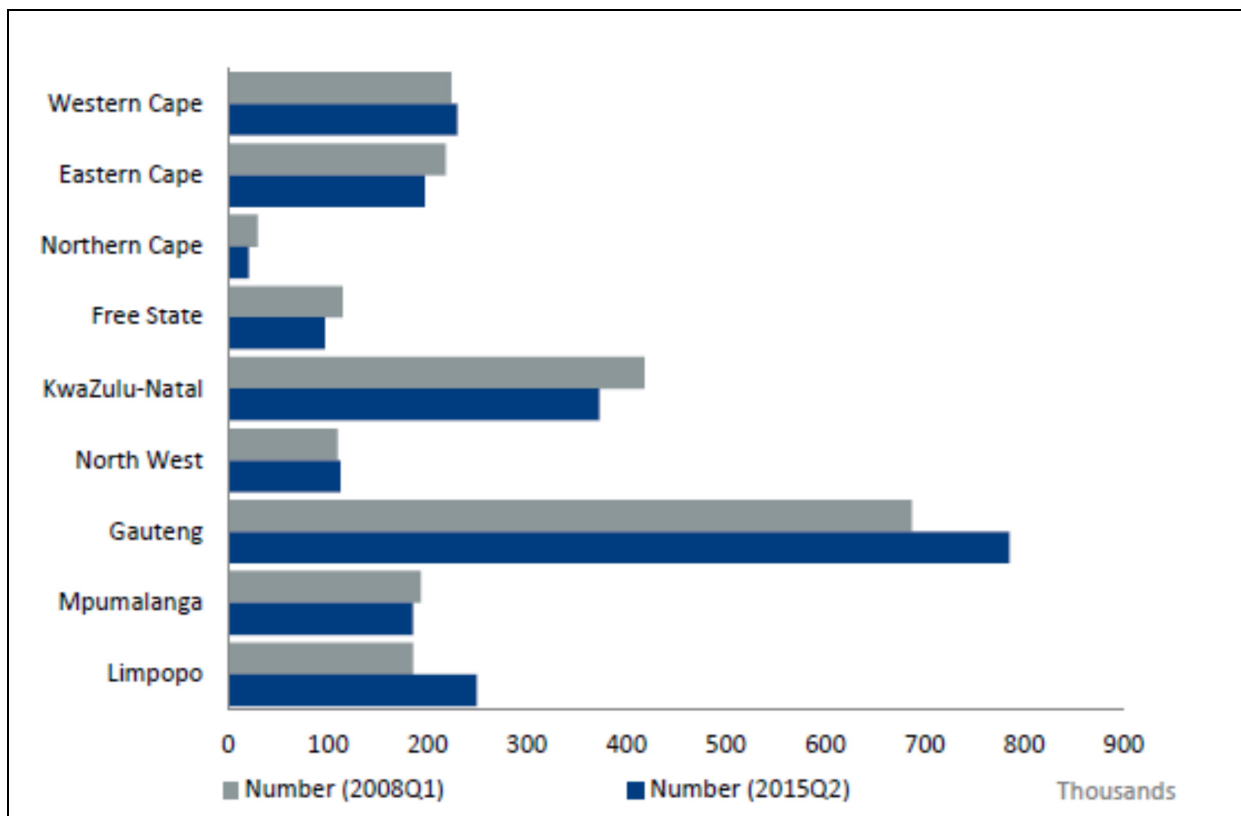
Source: SEDA, 2016

3.2.6 Development of entrepreneurs in South Africa

In terms of nascent entrepreneurship (which involves individuals who are actively committing resources to start a business that they expect to own themselves, but who have not yet reached the “birth event”), South Africa is rated at 5.1%, which is below the Global Entrepreneurship Average of 6.4%, as well as, below the average for efficiency-driven economies of 6.7% (Department of Trade and Industry, 2013). Coduras et al. 2010 in their Global Entrepreneurship Monitor Report attribute the increase in this rate (up from 3.6% in 2009) to the stimulus of the 2010 FIFA Soccer World Cup. The contribution of nascent entrepreneurial firms to economic development and growth in GDP is minimal and this trend is also reflected in the nascent entrepreneurship rates for youth. StatsSA (2016) report that, as at the second quarter of 2015, the number of SMMEs in South Africa was approximately 2.25 million. These were made up of 667 000 formal and 1.5 million informal businesses. A large segment (34%) of SMMEs was operating in the trade and accommodation sectors, whilst 34% were black-owned businesses.

Gauteng is the most entrepreneurially dynamic province in terms of both overall early-stage activity, as well as, opportunity-motivated entrepreneurship. Gauteng, the Eastern Cape and KwaZulu-Natal are the three provinces with the highest levels of entrepreneurial activity and, together, account for almost half of the early-stage entrepreneurial activity in South Africa. Mpumalanga and the Northern Cape, the two lowest-ranked provinces, have entrepreneurial activity rates of less than a tenth and fifth respectively of the rates in Gauteng. Overall TEA rates in South Africa are boosted considerably by the higher activity levels in the three top-ranked provinces. Provincially, youth TEA rates mimic this trend (Department of Trade and Industry, 2013). According to the Department of Trade and Industry (2013), the SMME sector grew by 27% between 2004 and 2007, with the most significant growth occurring in medium-sized enterprises (208%). The smallest growth occurred among micro-enterprises (-5.6%). Figure 3.3 below shows that Gauteng has by far the highest percentage of formal and informal SMMEs, with the Western Cape and KwaZulu-Natal showing less than half of the Gauteng activity (Department of Trade and Industry, 2013).

Figure 3.3: Formal/informal sector SMMEs by province in South Africa



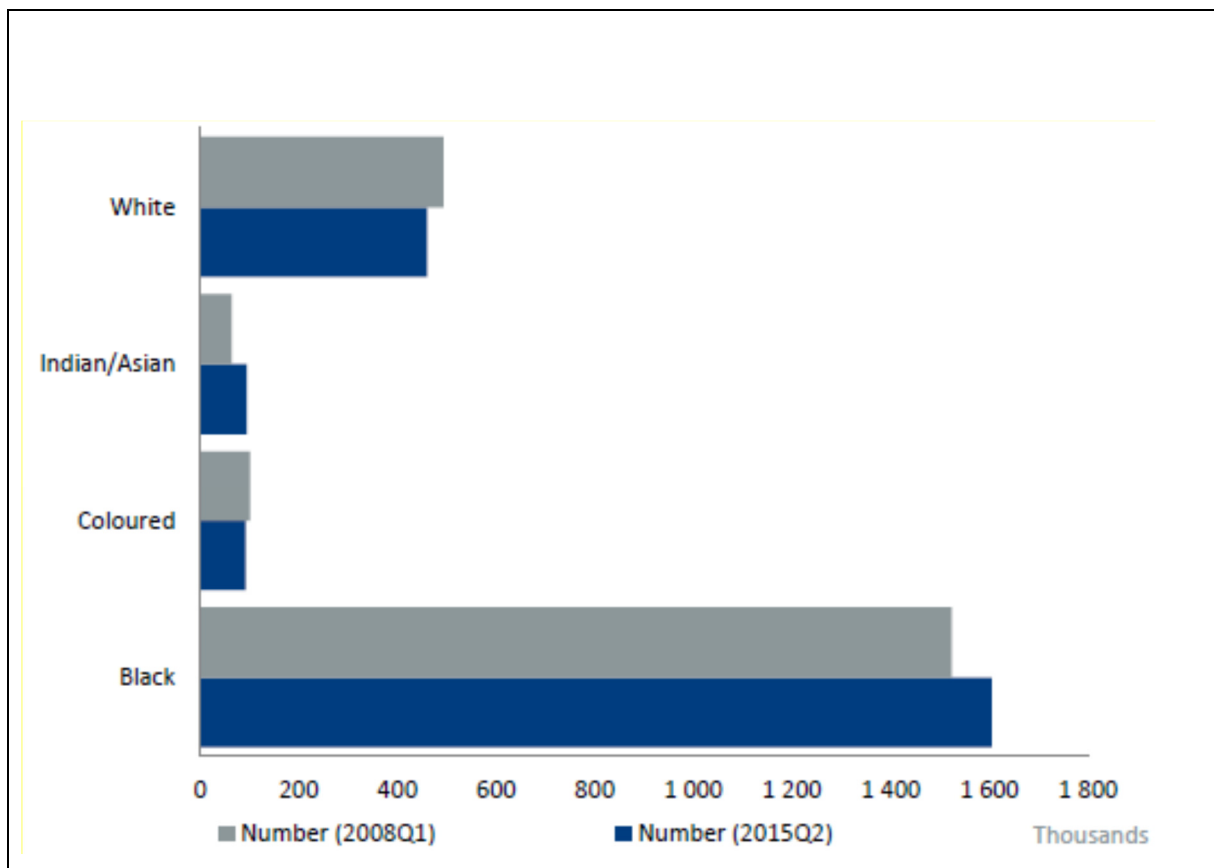
Source: SEDA, 2016

SEDA (2016) reports that the GDP per SMME increased by 8% between 2008 and 2013. SEDA (2016) adds that, of the 2.2 million SMMEs in South Africa, most (944.5 thousand) operate in the domestic trade (wholesale and retail) and accommodation sectors; followed by the community, social and personal services sector. In addition, the mining sector had on average R16 million turnover in the first quarter of 2015, compared with R360000 in the community and services sector (SEDA, 2016).

3.2.7 Demographic distribution of entrepreneurs in South Africa

SEDA (2016) reports that the majority of South African SMME business owners are black individuals (71%), followed by whites (20%). Of interest is that white business owners declined between 2008 and 2015. Indian business owners increased by 47% during the same period, whilst black SMMEs increased by only 5%. Figure 3.4 below graphically depicts SMME ownership by race between 2008 and 2015.

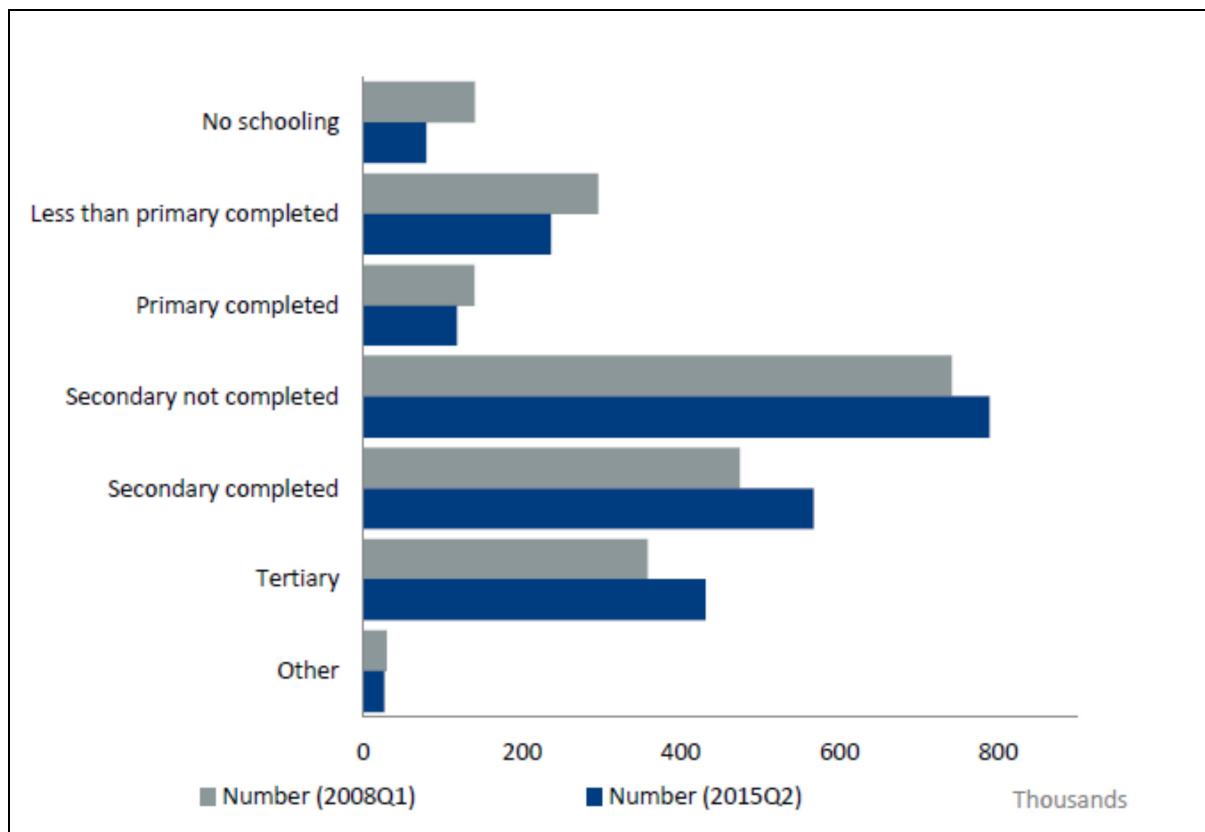
Figure 3.4: South African SMME ownership by race



Source: SEDA, 2016

SEDA (2016) found that the majority of SMME owners have some secondary schooling (60%) and a further 19% have tertiary education. By contrast only 4% have no schooling. Between 2008 and 2015 the number of small business owners with tertiary education increased by 20% and those completing high school also increased by 20%. Figure 3.5 below provides a graphical representation of the education levels of SMMEs in South Africa. SEDA (2016) also reports that a large proportion of informal SMME owners did not complete secondary education.

Figure 3.5: South African owners of SMMEs by education



Source: SEDA, 2016

3.2.8 Entrepreneurship vs. employment in South Africa

Increasingly, there are signs of economic disillusionment as the South African economy has not generated enough employment opportunities to absorb an increasing, annual number of school leavers. Lack of employment opportunities is associated with rising poverty, as partly evident from the number of people receiving social grants which increased from 2.8 million in 1994 to 13.5 million in 2009, whilst the number of taxpayers is approximately 4 million (Cilliers, 2009). Using an expanded definition, South Africa's unemployment rate, which includes the discouraged worker effect, was close to 30%, while the "official" unemployment rate was approximately 25% in the first quarter of 2010 (SEDA, 2016).

Statistics South Africa estimates that approximately 40% of the South African population is below the age of 20 and another 19% are in the 20-30 age group (StatsSA, 2016). In the South African context, people in the 15-35 age category are regarded as the youth group from which future leaders and wealth producers of the

South African economy will emerge (Mahadea et al., 2011). The youth of South Africa are valued members of the nation. They represent the hopes and aspirations of the country's future development. Although the young individuals have a tremendous potential to make a contribution to the value-adding activities of the country, a high proportion of the youth (approximately 50%) are unemployed or under-employed, and many are condemned to a marginalised existence of poverty on the fringes of the informal economy (Mlatsheni & Rospabe, 2002; StatsSA, 2016). According to a report commissioned by the Umsobomvu Youth Fund, about a third of the South African youth live in poverty (Morrow, Panday & Ritcher, 2005). Many young individuals lose their self-dignity when they are without gainful employment for a prolonged period, after years of secondary or tertiary education. Some young people, out of desperation, resort to criminal activities. Over a third of the prison population in South Africa is under the age of 26, reflecting a high incidence of crime among the South African youth (Morrow et al., 2005; Mahadea et al., 2011).

Prior to the dismantling of previous apartheid policies in 1996, one in four black adults had no access to formal schooling at all and only 6% of all South Africans had a tertiary qualification. The report acknowledged that apartheid education damaged people's confidence and self-esteem, which affected their initiative and creative thinking. The restrictions created during apartheid limited access to informal learning and work experience opportunities for many South Africans. As can be seen from the TEA rates in Table 3.10 below, these areas are critical in developing the skills and confidence necessary to start a business (Tobergte & Curtis, 2013; Nicolaidis, 2011).

Table 3.10: TEA by age group in South Africa, 2001 - 2014

Age group	2001	2005	2009	2013	2014	AVG SSA *
18-24 years	3.7	3.14	4.7	7.8	4.8	26.0
25-34 years	5.3	6.06	7.4	14.1	9.0	36.3
35-44 years	9.1	7.2	7.7	11.5	7.5	33.3
45-54 years	4.3	4.5	5.9	10.9	7.4	29.7
55-64 years	1.9	5.4	2.2	6.0	4.9	23.2
* SSA = Sub-Saharan Africa						

Source: Adapted from Herrington and Kew, 2014

3.2.9 Participation of female entrepreneurs in South Africa

According to Foxcroft et al. (2002), there are still twice as many male entrepreneurs as female entrepreneurs. The findings of Orford et al. (2003), in their Global Entrepreneurship Monitor Report of 2003, support these results, indicating that, on average, men are 2.3 times more likely to be involved in entrepreneurial activity in developing countries than women are. In South Africa in 2002, men were twice as likely as women to be involved in entrepreneurial activity whereas, in 2003, men were 1.9 times more likely than women to be involved in entrepreneurial activity. In 2004, men were 1.4 times more likely to be self-employed than women (Orford et al., 2003). The difference in the female and male rates was statistically significant in 2002, but not in 2003 and 2004.

The overall difference between entrepreneurial activity rates of men and women in South Africa is largely because of the much higher opportunity-entrepreneurial activity amongst men. The reasons for this could be the barriers that women entrepreneurs face. In addition, there are mutually reinforcing factors such as crime, low visibility and absence of business organisations, which raise the barriers to entry and growth for businesses even more (Botha et al., 2006). Botha et al. (2006) point out that the informal sector in South Africa has grown enormously over the past ten years, showing why entrepreneurship is seen as an important career option for women, as well as, their male counterparts. Workshops held by Ntsika Enterprise Promotion Agency in the late 1990s highlighted the most common barriers perceived by women entrepreneurs in South Africa as follows (Botha et al., 2006):

- Training programmes are outdated; courses offered by training institutions focus on training the traditional manager and not the entrepreneur;
- Exposure to media is very expensive;
- No database of women entrepreneurs by sector is available;
- There is replication and duplication of craft centres or groups in an area;
- There is no enquiry into failed businesses and the reasons for that failure; and
- Women are not taken seriously in the business world.

Mallane (2001) agrees with the above-mentioned barriers and highlights that it is important to do something about the challenges that have been carried into the new millennium in the area of gender and entrepreneurship. The challenges include research and policy issues, support structures and information provision as follows:

- There is a need to establish business and support networks to ensure co-ordination and integration of services. There is a need to work on the gender sensitisation of public policy to ensure that its translation into action is done through building of skills and the empowerment of women. Perhaps the largest disparity between men- and women-owned enterprises is illustrated in the lack of gender desegregated Government procurement data.
- There is a lack of forums to address female entrepreneurs' problems such as the laudable initiative of Ms Lindiwe Hendricks, former Deputy Minister of Women in Business, who established the South African Women Entrepreneurship Network (SAWEN) in June 2002.
- There is no journal on women entrepreneurship in South Africa, which could serve as the documentation of best practice and role-model promotion.
- There are very few support bases for aspiring female entrepreneurs and there have been limited studies on South African women in business.
- Prospective female entrepreneurs have often been humiliated when seeking business loans, as they are often not considered without their husband's co-signature.

One of the most important research findings conducted by the University of Pretoria in 2003 was that 68% of female entrepreneurs stated that they would like to receive some form of entrepreneurial training and education from commercial banks (Van der Merwe & Nieman, 2003).

The TEA index for female entrepreneurs in South Africa (8.1%) was lower than the average of all countries (10%) that participated in the Global Entrepreneurship Monitor Report 2010 study (Coduras et al., 2010). In South Africa, there is a view that women are becoming increasingly involved in entrepreneurial activity, which can be attributed to the rapidly changing political and business landscape. Women are continuously expected to take up the responsibility of heading their families as a result of various circumstances such as the retrenchment of male partners and spouses and the

shrinking numbers of job opportunities in the formal economy. In South Africa, women make up 52% of the adult population and 50% of the business force. Their contribution has not been nurtured. Moreover, the majority of South African female entrepreneurs operate within the crafts, hawking, personal services and retail sectors (Department of Trade and Industry, 2013). Women are less entrepreneurial than men because the majority of female entrepreneurs (71%) have educational qualifications equal to or lower than Grade 12 and therefore are involved in business opportunities that do not require high levels of expertise. They also lack critical expertise such as idea-generation, feasibility study, and export and technology skills. More troubling is that women generally do not believe they are entrepreneurial; they find it risky to be involved in business because of family demands; they often do not have the assets to use as security; and they do not understand the terminology used by banks and are therefore hesitant to approach them (Department of Trade and Industry, 2013).

Table 3.11 below shows the pattern of entrepreneurial activity in South Africa by gender.

Table 3.11: Entrepreneurial activity in South Africa by gender, 2001 - 2014

Gender (opportunity / necessity)	2001	2005	2009	2013	2014	AVG SSA **
Male – Opportunity	3.9	3.4	4.6	8.8	5.51	21.7
Male – Necessity	2.2	1.9	2.3	3.3	2.21	10.2
Male – Total	7.3	5.9	7.2	12.3	7.72	32.4*
Female – Opportunity	2.7	2.1	3.0	5.8	4.47	17.3
Female – Necessity	2.6	1.8	3.0	3.1	1.74	12.0
Female – Total	5.8	4.5	1.6	9.0	6.29	29.9
*Read as: In 2014 7.72% of the South African population were involved in entrepreneurial activity.						
** SSA=sub-Saharan Africa average						

Source: Adapted from Herrington and Kew, 2014

3.3 ENTREPRENEURIAL EDUCATION

It is apparent that the apartheid economic dispensation in South Africa provided higher education which served the needs of industry well at the time; in that they made available a workforce that would seek to work in an apparently secure environment for a 'boss' (Nicolaides, 2011). Nicolaides (2011) adds that the offshoot of such education was to instil within future university students the notion that they should graduate and then seek employment in large corporations or some other formal sector setting rather than opt for something innovative and creative as a work option. Today however, SMMEs are accounting for a sizeable portion of economic activity. The result is that higher education institutions (HEIs) are increasingly obliged to redefine their role in the South African economy (Nicolaides, 2011). Therefore, the primary function of HEIs currently should be to seek to instil a greater entrepreneurial character among students. HEIs should also strive to carefully consider local development needs and support the promotion of entrepreneurial education initiatives, not only at the tertiary level, but as early as primary school level. Government must fully support such initiatives and promote holistic education at all levels to help establish entrepreneurial ventures (Nicolaides, 2011; Nieuwenhuizen & Groenewald, 2008). The Global Entrepreneurship Monitor Report, 2003, indicates that the educational system could play a powerful role in helping to bring about an increase in the entrepreneurial involvement of young adults, not only through formal teaching but also through the introduction of learners to positive role models with an entrepreneurial background (Orford et al., 2003). According to Van Vuuren (1997), South African entrepreneurs with some form of formal, entrepreneurial education will be more likely to be successful than entrepreneurs who have had no education. This statement is supported by research that showed that 7 out of 100 entrepreneurs without entrepreneurial education were successful whereas, in the same study, 67% of 72% of the participants who had completed some form of university certificate/diploma were successful in starting and running a business (Van der Merwe & Nieman, 2003).

South Africa's low levels of entrepreneurial activity are the result of personal, as well as, environmental factors. Improving the skills base and fostering positive entrepreneurial attitudes through the education system is critical. However, without a more enabling environment that encourages individuals to see entrepreneurship as a financially viable employment option, it is debatable whether South Africa will

experience a significant increase in entrepreneurial activity (Herrington et al., 2013). A strong entrepreneurial culture cannot develop and flourish in areas with limited access to resources, poor infrastructure, little or no customer spend and no vibrant markets. In the absence of an enabling environment in which to use and develop their skills in practice, people will be forced to migrate/emigrate to a more favourable environment, search for formal employment within their current province, or remain unemployed. The key, therefore, to improving South Africa's entrepreneurial performance is a dual focus on improving the country's human capital through education and skills training, and creating a more enabling environment in order to dispel negative perceptions about entrepreneurship as an employment option. A more enabling environment is also necessary to reduce the cost of running a business, and therefore improve the sustainability of enterprises in the SME sector (Herrington et al., 2014).

The recent creation of a separate Ministry for Small Business Development, under the direction of Lindiwe Zulu, indicates an acknowledgement on the part of national Government of the critical importance of SMME development. In addition, the Western Cape provincial Government has, over the past two years, commissioned a study (in conjunction with the Global Entrepreneurship Monitor surveys) on entrepreneurship within the Western Cape region. In view of the importance of the SME sector in contributing to job creation and inclusive growth, this high-level interest in entrepreneurial activity and research is encouraging. GEM South Africa has been publishing annual reports since 2001 and has made numerous policy recommendations based on the significant amount of data collected over the years. The recommendations in this report take into account the trends in entrepreneurial activity (historical, as well as in 2014), as well as, the key constraints identified by the national experts.

Herrington et al. (2013) report that one of the most important constraints identified by the national experts since 2001 is the poor quality of education and training in South Africa. The authors add in their Global Competitiveness Report (2014–2015) also identified South Africa's inadequately educated workforce as the second biggest problem for doing business in the country (Herrington et al., 2013). Structural problems affecting the education system continue to be a stumbling block in the country's efforts to increase entrepreneurial activity and improve business productivity, affecting all

stages of the entrepreneurship pipeline. In order to increase the size of the pool of potential and intentional entrepreneurs, it is important to increase the levels of perceived capabilities through well-structured and high quality education. South Africa's score for perceived capabilities is only half the average for the Sub-Saharan African region and below the averages for the efficiency-driven economies that participated in the Global Entrepreneurship survey (Herrington et al., 2014). SMEs, which contribute so heavily to employment, are especially hard-hit by difficulties in finding skilled labour. The following recommendations were made by Herrington et al. (2014):

- A complete overhaul of the education system is required, with particular focus on improving the country's intake and pass rates in Mathematics and Science. A lack of mathematically and scientifically literate students will decrease the potential South Africa has to remain competitive in a knowledge economy.
- Ensure that competent individuals are leading the educational sector's reforms. It remains critical to address the quality of the teachers, as well as the quality and relevance of curricula. Mismatches between the skills required by industry and those provided by schools and universities are still prevalent. Educational facilities need to improve their capacity to provide the education and job skills needed to develop greater productivity and technology-intensive industries.
- It is imperative to address the structural problems that continue to deprive young people of a good educational foundation. There are still disparities in access to basic education, particularly between rural and urban areas. Even with the huge amounts of funding allocated to education, South Africa is plagued with a continued shortage of textbooks, poor quality infrastructure in many schools and high teacher absenteeism. The rate of progress of students remains a serious concern, with unacceptably high numbers of students not completing secondary school. A higher level of political accountability in these areas should be enforced (Herrington et al., 2014).

In many parts of the world, with South Africa being no exception, entrepreneurship is battling to find academic legitimacy. Entrepreneurship should be a separate, standalone subject and not be viewed as simply part of Business Management or part of an inter-disciplinary field. It is commendable to have guest speakers and guest lecturers, as these tend to offer a measure of interaction with entrepreneurial business

people, but this is not really enough. Academic teachers who are able to alter the mind-sets of students and who do have the ability to teach basic business skills effectively and develop creative thinking in their students by giving them practical, individual or group assignments should be the priority. Course content should focus on the skills and knowledge an entrepreneur would need to be successful (Nicolaidis, 2011). What is paramount is that potential entrepreneurs see themselves as self-reliant, aware, creative, analytical and knowledgeable individuals who are able to become self-employed successfully and make a meaningful contribution to the society in which they live. They require an entrepreneurial perspective (Kuratko, 2003). This perspective should ideally be developed at high school levels where more business-related subjects should be added to existing curricula and, perhaps, be made compulsory (Nicolaidis, 2011; Kuratko, 2003).

For example, education has been identified as a critical factor in preventing future, high levels of long-term unemployment, and there is evidence of a strong correlation between the education level achieved and high income over a lifetime. There is also evidence of a positive relationship between education and training programmes and the number of venture start-ups (Garavan & O’Cinneide, 1994). According to Foxcroft et al. (2002), the key factor which influences whether or not an entrepreneur progresses beyond the start-up phase is education. Foxcroft et al. (2002) add that the entrepreneur’s level of education also seems to have an impact on the average number of jobs he/she creates. Entrepreneurs without a matric employ on average 0.7 people, compared with three people for entrepreneurs with matric and 2.9 people for entrepreneurs with tertiary education.

Van Aardt, Van Aardt and Bezuidenhout (2000) believe that South Africans in general are not educated to become entrepreneurs but to enter the labour market as employees – consumers of existing jobs instead of creators of new jobs. More than three-quarters of black Africans and coloured people have not completed secondary school and fewer than 5% of black Africans and coloured people have higher education. In contrast, 50% of Indians and 71 % of whites have a matric and 30% of whites have higher education (Orford et al., 2003). Highly skewed access to education and continued differences in the quality of education, depending on schools’ pre-1994 status (black African, Coloured, Indian and White) are, therefore, likely to be part of the explanation for the fact that previously disadvantaged groups lack confidence and

skills to start businesses. Le Roux (2003) supports this statement and suggests that the earlier students start with entrepreneurship education, the better the result will be.

A number of international, regional, national, and local actors are taking part in the global experiment of entrepreneurial education and training (EET). Today, EET is recognised as an established field of study, growing in parallel with the interest of policymakers and students (Mwasalwiba, 2010). EET generally reflects both the activity of transmitting specific mind-sets and skills associated with entrepreneurship; as well as education and training programmes that seek to engender various entrepreneurship outcomes (Valerio et al., 2014). Valerio et al. (2014) continue to state that these programmes target two groups in particular: 1) secondary education students and 2) higher education students, the latter including both graduate and undergraduate students.

Valerio et al. (2014) outline a conceptual framework with three dimensions that available research has shown to influence the range of EET outcomes: (a) the context within which programmes are implemented, (b) the characteristics of individual participants, and (c) the functional characteristics of the programme itself (Valerio et al., 2014).

- **Programme context:** The Conceptual Framework accounts for a series of contextual influences that have been shown to affect the likelihood of a programme's capacity to generate outcomes. These include the economic context, the political context, and the cultural context.
- **Participant characteristics:** The Conceptual Framework accounts for the moderating influence of what participants bring with them coming into a programme. This includes an individual's profile, basic demographic identifiers and factors related to a participant's personality or traits, education, interest and intentions, as well as, behaviours while enrolled within a programme (e.g. attrition).
- **Programme characteristics:** The Conceptual Framework distinguishes among four major categories of programme characteristics: programme design, trainers and delivery, content and curriculum and wrap-around services.

The Conceptual Framework breaks down the sample of programmes as follows: Entrepreneurship Education – Secondary Education (EASE) students,

Entrepreneurship Education – Higher Education (EEHE) students, ET for potential entrepreneurs, and ET for practicing entrepreneurs (Valerio et al., 2014).

- **Entrepreneurship Education (ESEE):** is directed towards secondary education students. The evaluation demonstrated moderate, positive and significant effects on the development of non-cognitive skills (such as self-efficacy, the need for achievement, risk-taking propensity, persistence, analysing, creativity, and proactivity) among the students who received the intervention when compared to the control group.
- **Entrepreneurship Education (EEHE):** is directed towards higher education students. Across EEHE programmes, general business education, entrepreneurship awareness, marketing, and accounting are common areas of curricular focus. To facilitate this learning, several EEHE programmes use business plan competitions and enterprise simulations. Common EEHE wrap-around services include mentoring and coaching, typically from entrepreneurs. (Valerio et al., 2014).
- **Entrepreneurship Training** (focused on potential entrepreneurs, ETPo): A number of the ETPo programmes are designed to target vulnerable groups, including women, unemployed youth and welfare recipients. The characteristics of ETPo programmes in turn reflect the diversity among the individuals these programmes target and the outcomes they pursue. Across these programmes, the range of content includes business knowledge, entrepreneurial skills, financial literacy and accounting, marketing, sales, general management skills, vocational and life skills. Most ETPo programmes appear to include some wrap-around services. According to available ETPo evaluations, the training components that combine grants with activities such as internships and mentoring services have higher impacts than simple training programmes.
- **Entrepreneurship Training** (focused on practising entrepreneurs, ET): The common, targeted performance objectives include increases in profits, employees, and productivity, as well as business expansion in markets, financing, investment, and the implementation of better business practices and innovations.

There is a wide body of research associated with understanding the constraints to entrepreneurial success. Klapper and Parker (2011) describe how regulations related

to the ease of starting a business can affect entrepreneurial activity (Valerio et al., 2014).

McKenzie and Woodruff (2012) found that policymakers can support entrepreneurial endeavours with policies or programmes aimed at modifying regulations, easing business environment constraints, expanding access to credit, promoting value-chain integration, strengthening capacity to improve business practices, and establishing incubators to support innovation and business start-ups (McKernan, 2002; Paulson & Townsend, 2004; De Mel, McKenzie & Woodruff, 2008; Valerio et al., 2014). To summarise, a framework for the variety of areas that these policies aim to influence in promoting entrepreneurship includes (Valerio et al., 2014):

- The reduction of entry-exit barriers,
- Entrepreneurship education,
- Start-up support,
- Start-up financing, and
- Target group measures.

Even against the backdrop of debates about whether entrepreneurship can be learned, there is a growing global interest in entrepreneurship education and training (EET), as documented by the growth in course offerings at educational institutions (Kuratko, 2003) and by its inclusion in international agendas and programmes, such as the European Commission's Oslo Agenda and the Global Entrepreneurship Monitor (Valerio et al., 2014).

According to Valerio *et al.* (2014: 13):

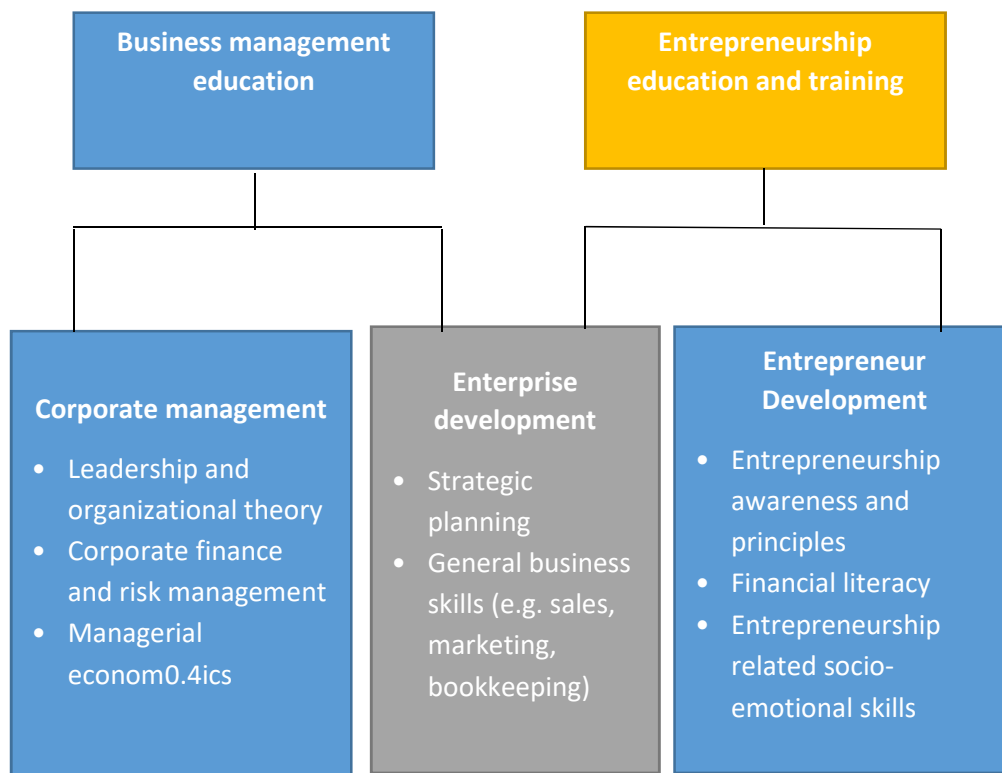
“As a working definition for this study, EET represents academic education or formal training interventions that share the broad objective of providing individuals with the entrepreneurial mind-sets and skills to support participation and performance in a range of entrepreneurial activities”.

Common Entrepreneurial Education and Training mind-sets and skills include socio-emotional skills like self-confidence, leadership, creativity, risk propensity, motivation, resilience and self-efficacy (Lüthje & Franke, 2003; Rauch & Frese, 2007; Hytti & O'Gorman, 2004); overall awareness and perceptions of entrepreneurship (Kolvereid & Moen, 1997; Peterman & Kennedy, 2003; Fayolle, Gailly & Lassas-Clerc, 2006;

Souitaris et al., 2007); and the general business knowledge and skills needed for opening and managing a business, like accounting, marketing, risk assessment and resource mobilisation (Detienne & Chandler, 2004; Honig & Karlsson, 2004; Bjorvatn & Tungodden, 2010; Karlan & Valdivia, 2011; Valerio et al., 2014).

Valerio et al. (2014) describe how business schools use models to train students how to analyse large amounts of credible information in order to ascertain solutions, while entrepreneurs tend to operate under different time and resource constraints, often with less credible information. Furthermore, Vesper and McMullan (1988) distinguish EET by its focus on building awareness of entrepreneurship and developing skills specific to both creating new products and services and to opening or expanding business ventures (see Figure 3.6 below).

Figure 3.6: Differentiation of management and entrepreneurship education as a field



Source: Adapted from Valerio et al., 2014

3.3.1 Scope of entrepreneurship education and training

The scope of EET interventions varies by curricula and scale. Some programmes are implemented on a global scale, like the International Labour Organization's Know About Business and Start and Improve Your Business programmes (Goppers & Cuong, 2007), or through a global reach, like the Junior Achievement's programmes. By contrast, EET can be specific to an individual school or institution, such as the University of Arizona's McGuire Entrepreneurship Program (Charney & Libecap, 2000) or the micro-finance institution, FINCA Peru (Karlan & Valdivia, 2011). Further, EET interventions can represent a blend of global and local partnerships between global brands and regional or local education ministries and institutions. Volkmann et al. (2009) add that EET can involve a range of public and private stakeholders including Government, educational institutions, businesses, and non-Governmental and international organisations. The roles of these stakeholders can include the development, financing, delivery, and evaluation of EET interventions (Valerio et al., 2014).

Governments can directly fund EET interventions, develop EET curricula, and train instructors to implement curricula in education systems (Martin et al., 2013). However, Cho and Honorati (2013) demonstrate that involving the private sector in the delivery of EET is more closely linked to better effects on the participants. This would suggest that Governments' role should also include public-private partnerships to provide EET more effectively. Additionally, Governments can support the monitoring and evaluation of programmes, collaboration, and integration among EET service providers, and they can serve as a convener for sharing good practices across programmes (Volkmann et al., 2009). Lastly, Pittaway and Cope (2006) suggest that research on the Government and policy role in EET remains under-developed, particularly in understanding the role of regional, national, and international policies in shaping EET interventions (Valerio et al., 2014).

3.3.2 Entrepreneurship at secondary school

The Global Entrepreneurship Monitor Report of 2001 shows that the higher the level of education of an individual, the greater the individual's tendency to pursue entrepreneurial activities, and the greater the probability of starting a new venture that

progresses past the start-up stage (Driver et al., 2001; Van der Merwe & Nieman, 2003).

Many researchers in South Africa are placing more emphasis on the fact that entrepreneurship education should be included in all the school systems. Orford et al. (2003) state that the schooling curriculum in private schools does include entrepreneurship, but it does not appear to be widely taught across Government schools. Preliminary research suggests that entrepreneurship education can have a significantly positive influence on four areas crucial to entrepreneurship:

- Learners' self-confidence about their ability to start a business;
- Learners' understanding of financial and business issues;
- Learners' desire to start their own business; and
- Learners' desire to undertake higher education.

The implementation of the compulsory schooling laws has meant that almost all of the younger workers now have about 10 years of education, whereas many of those who grew up under apartheid only had a few years of education. This means that the return to schooling and the benefits of having matriculated have probably fallen substantially. If the newly educated workers have not yet understood this, they might be pursuing jobs that are no longer going to be available to them. This might be why younger workers and, especially matriculants among them, have fared so poorly in recent years in terms of employment (Banerjee et al., 2006).

The problems in South Africa's educational system are widely recognised. Entrepreneurs should be taught the business and management skills involved in starting and running a business. For example, they should be taught how to write their own business plans and identify their own opportunities. Since the early 1980s, evaluation studies on entrepreneurship education and training have received increased attention from scholars (Friedrich & Visser, 2005). Friedrich and Visser (2005) quoted several researchers such as Gibb (1993) who states that the lack of clear consensus on the definition of entrepreneurship and small business contributes to the confusion in the existing research on training. Nieman (2000) states that entrepreneurship education should be directed at the preparation of individuals who can be change agents for the next decade, simultaneously providing the much-needed entrepreneurs required in South Africa (Van der Merwe & Nieman, 2003).

Disproportionately low spending on education, coupled with a lack of adequate facilities and resources, has ensured that previously disadvantaged South Africans, including women, have not received proper education and training. Scholars stress further that massive inequalities continue to plague education in South Africa and that some 30% of the adult population is considered to be functionally illiterate (Rwigema & Venter, 2004). A low skills base further compounds levels of illiteracy. The ratio of skilled workers to unskilled workers is 1:5 compared with 1:2 in most developed nations. South Africa's crisis in education and training has implications for the country's social growth, economic progress and global competitiveness (Van der Merwe & Nieman, 2003).

Table 3.12 shows that the rating for primary and secondary education providing adequate attention to entrepreneurship has dropped from 1.8 in 2013 to 1.47 in 2014 (Kelley et al., 2015). Not only is the focus on entrepreneurship inadequate, but the outcomes and methodologies also need to be probed. A further problem is that the system encourages higher education as the sole pathway to professional advancement and success, and creates the implication that vocational expertise is distinctly inferior to academic knowledge. Many teachers are lacking in academic competence, let alone entrepreneurial ability and they are unable to inspire and support those who show flair and passion (Kelley et al., 2015). The authors add that the reality of the South African situation is that the majority of our youth will not be in a position to access higher education and are dependent on the skills embedded in them in the primary and secondary phases of education.

Table 3.12: Average expert ratings on education and training for entrepreneurship in South Africa, 2010, 2013 and 2014

Educational entrepreneurial framework condition, 2010, 2013 and 2014	Mean score 2010	Mean score 2013	Mean score 2014
Primary and secondary education encourages creativity, self-sufficiency and personal initiative	1.8	2.9	2.1
Primary and secondary education provides adequate instruction in market economic principles	1.7	2.5	2.2

Primary and secondary education provides adequate attention to entrepreneurship and new firm creation	1.8	1.8	1.5
Colleges and universities provide good and adequate preparation for starting up and growing new firms	2.3	2.3	2.3
Business and management education provides adequate preparation for starting up and growing new firms	2.6	2.5	2.3
Vocational, professional and continuing education provides good and adequate preparation for starting and growing new firms	2.3	2.1	2.6

Source: Adapted from Kelley et al., 2015

Isaacs et al. (2007) found in their study that, in almost 60% of the schools, no entrepreneurship training programmes were offered. Schools offered the following reasons for non-compliance:

- Schools following the curriculum of 1994;
- Insufficient human or physical resources;
- Little support from Government;
- No entrepreneurship syllabus;
- Entrepreneurship not considered a priority;
- Lack of support from businesses; and
- Distances in rural areas presented problems for attendance.

Isaacs et al. (2007) hold that entrepreneurship education is the meaningful intervention by an educator in the life of the learner to provide entrepreneurial qualities and skills to enable the learner to start-up and operate a business. It is apparent from the foregoing definition that entrepreneurship, or certain features of it, can be taught thus dispelling the myth that entrepreneurs are born, not made (Kuratko, 2005; Tengeh et al., 2015).

3.3.3 Entrepreneurship education in higher education

Institutions of higher learning have acknowledged that they have a vital role to play in promoting entrepreneurship, although it is not yet clear how efficiently they can play that role. Beyond this, it has been contended that a substantial number of business start-ups arise from non-business disciplines, suggesting that entrepreneurship is an inter-disciplinary undertaking. Brizek and Poorani (2006) agree with this by stating that one can be entrepreneurial in any discipline. This is perhaps the reason why the demand for inter-disciplinary and cross-campus courses has increased significantly in recent years, resulting in increased programme offerings and adjustments to existing programmes in universities around the world (Tengeh et al., 2015). A distinction can be made between enterprise education and small business and entrepreneurship education and training as follows (Falkäng & Alberti, 2000; Botha et al., 2006):

The major objectives of enterprise education are to develop enterprising people and inculcate an attitude of self-reliance using appropriate learning processes. Entrepreneurship education and training programmes are aimed directly at stimulating entrepreneurship, which may be defined as independent small business ownership or the development of opportunity-seeking managers within companies.

In the earlier periods of the development of the field of entrepreneurship education, many authors used the constructs “entrepreneurship education” and “enterprise education” interchangeably. Garavan and O’Cinneide (1994) point out that the term “entrepreneurship education” is commonly used in Canada and the USA, but is much less commonly used in Europe. The preferred term in the United Kingdom (UK) and Ireland is “enterprise education”. The authors add that the major objectives of enterprise education are to develop enterprising people and inculcate an attitude of self-reliance using appropriate learning processes. Timmons (1999) argues that entrepreneurship education, on the other hand, should convince students to become actively involved in entrepreneurship, help them to understand the dynamic nature of the world of entrepreneurship and should mitigate reality shock by means of formal and informal tuition.

A three-stage model of the evolution of entrepreneurship education is suggested by Leitch and Harrison (1999). The first, and earliest, approach characterised entrepreneurship education as simply a sub-set of general management education.

The second approach was a reaction to this, as entrepreneurship grew in importance as a focus for academic debate, and was based on the argument that entrepreneurship education must be qualitatively different from conventional, large-company-based management. The third stage in the evolution of approaches to entrepreneurship education is an emerging reconceptualisation of the field, based in part on a renewed interest in the nature and role of leadership in changing organisational structures, which provides the basis for the re-integration of management education and entrepreneurship education.

Jamieson (1984) has suggested a three-category framework by which to organise entrepreneurship education. He distinguishes between 1) education about enterprise (raising awareness of entrepreneurship); 2) education for enterprise (preparing for business start-up); and 3) education in enterprise (growth and development training), and in so doing recognises the roles different types of education have to play:

- **Education about enterprise:** deals mostly with awareness creation and has the specific objective of educating students on the various aspects of setting up and running a business, mostly from a theoretical perspective. Enterprise modules within business and other courses at undergraduate or postgraduate level which seek to foster skills, attitudes and values appropriate to starting, owning, managing or working in a successful business enterprise would be included in this category.
- **Education for enterprise:** deals more with the preparation of aspiring entrepreneurs for a career in self-employment, with the specific objective of encouraging participants to set up and run their own business. Participants are taught the practical skills required for small business set-up and management and the courses are often geared towards the preparation of a business plan. Business start-up schemes and start-your-own-business programmes would be examples of this type of entrepreneurship training.
- **Education in enterprise:** deals mainly with management training for established entrepreneurs and focuses on ensuring the growth and future development of the business. Management development and growth training programmes, as well as, specific product development and marketing courses, might fit into this category.

De Faoite, Henry, Johnston and Sijde (2003) summarise that the provision of entrepreneurship education has been categorised as:

- The implementation of enterprise or straight forward awareness raising;
- Distinctly different from management training;
- Differentiated from business and personal skills development; and
- Specific to the particular stage of the business life cycle.

The role of higher education is clearly to meet the socio-economic needs of the country whilst safeguarding social justice and democratic values. In addition HEIs have an important role to play in regional innovation systems and what are termed learning areas. They also serve as knowledge producers, teachers and are agents of exchange in a society (Etzkowitz et al., 2000). The higher education system must therefore provide the requisite research, knowledge and a highly skilled workforce if the nation is to compete in the global arena which is highly dynamic (Nicolaidis, 2011).

Entrepreneurship courses at universities can make a very significant contribution in promoting meaningful entrepreneurship as they could allay the fears of failure of potential entrepreneurs by educating the students about pitfalls and risks to avoid when embarking on a new business venture. Students will thus have a fuller understanding of entrepreneurship as a phenomenon and surely become more competent stakeholders in entrepreneurship at whatever level – investor or employee, manager or entrepreneur (Maranville, 1992; Nicolaidis, 2011).

3.3.4 Difficulties in entrepreneurship education

Accommodating diversity, disparity and stake holding requires a holistic approach to the study of entrepreneurship and the delivery of entrepreneurship programmes. In developing an entrepreneurial, holistic management approach, the basic task is to encourage managers and other students to learn in a variety of ways and from different sources. Entrepreneurs who might need to be taught pose a different challenge. Style, content and form all require a different, creative and adaptive approach from the traditional reductionist and analytical approaches posed by management studies (Mitra & Matlay, 2004). Pretorius (2000b) identifies some difficulties and stresses that

do not depend on how knowledgeable the trainee is on completion of the programme, but rather on what will be achieved with that knowledge. Such as:

- Entrepreneurship has not been promoted as a career option as have other occupations, especially in some cultures. Many people do not want to establish their own businesses.
- The concept of what entrepreneurship really entails and the relevant attributes are still vague and inadequately defined.
- Some aspects of entrepreneurship are more difficult than other aspects to teach, such as perseverance and risk tolerance.
- Entrepreneurship programmes are often of very short duration.
- Facilitator and trainer commitment and mental preparation are often not sufficient to transfer competencies to learners.
- The failure rate of start-up businesses is a reality that every upcoming entrepreneur must face.
- The process that a start-up business follows is complex and not necessarily comprehensively understood.
- Theoretical training might be insufficient.
- Entrepreneurship is skill and competency based, while most programmes give this aspect insufficient attention.
- There is a mistaken perception that all people exhibit entrepreneurial tendencies but at a different intensity, and their choice to become entrepreneurs is rather a function of their environment.

3.4 ENTREPRENEURIAL TRAINING

Entrepreneurial education and training (EET) is recognised as an established field of study (Mwasalwiba, 2010; Valerio et al., 2014). According to Martin et al. (2013), research has found significant relationships among entrepreneurial education and training, entrepreneurship-related human capital assets (entrepreneurial knowledge and skill, positive perception of entrepreneurship, and intentions to start a business), and entrepreneurship outcomes (nascent behaviours, start-up behaviours, and financial success). Furthermore, Cloete (2012) found that that intentions and underlying attitudes are perception based, indicating that they can be learned. Given

the potential beneficial spin-offs of entrepreneurship, there is an interest in interventions that stimulate individuals' decisions to become and succeed as entrepreneurs. Among these interventions are entrepreneurial education and training (EET) programmes that aim to develop mind-sets, knowledge, and skills associated with entrepreneurial success. Despite a global interest in education and training for entrepreneurship, available and reliable information on programme outcomes is relatively sparse. While evaluations of EET programmes can rarely draw hard-line conclusions about outcomes that explain how education and training in themselves help address these issues, many EET programmes appear to contribute by association – whether as a means of generating income for individuals marginalised by an evolving global economic landscape for whom there might be few immediate alternatives, or through building foundational skills relevant to emerging knowledge-based sectors.

Universities and other institutions can positively contribute to entrepreneurship both indirectly, through education of candidates, and directly by commercialisation of research and by being the seedbed for new ventures. Furthermore, business schools rarely see entrepreneurship in Science as part of their portfolio. Conversely, Science Faculties rarely see training in entrepreneurship as part of their mission, so the topic is missing from the national training curriculum. This is particularly true in developing countries, such as South Africa, but it is also true in fully developed economies such as the USA and UK (Kunert et al., 2012).

Botha et al. (2006) argue that the need for entrepreneurial training in South Africa is given, but there still seem to be problems relating to entrepreneurial training programmes. The following suggestions have been to correct the problematic situation with a suggestion that the following need to be transformed:

- Courses offered by training institutions that focus on training the traditional manager and not the entrepreneur;
- Lack of skills training for growth-oriented (thus primarily opportunity-driven) business;
- The lack of models directly addressing creativity, innovation and opportunity-finding issues;

- Failure to differentiate between a business idea and an opportunity in a training context;
- Over-emphasis on the pre-entrepreneurial phase of actively seeking business opportunities, feasibility and realistic market-relation (an accentuation of opportunities is rather needed); and
- Lecturing as a teaching method; this is an approach that often reveals more about the teacher than about the subject taught.

Botha et al. (2006) stress that, in general, most programmes pay sufficient attention to the knowledge aspects but are weak on the skills and attitudinal aspects that are crucial to the success of any potential or start-up entrepreneur. See Table 3.13 below.

Table 3.13: Entrepreneurial developmental interventions

Stage of business	Business need	Intervention
Pre-start	<ul style="list-style-type: none"> • Ideas • Small-business know-how, Know-who networks • Counselling 	<ul style="list-style-type: none"> • Spin-off ideas, technology transfer, ideas generation workshops • Small-business skills training • Networking, access points • Pre-start counselling
Start-up (external)	<ul style="list-style-type: none"> • Customers/suppliers • Advice/consultancy • Business plan information • Intervention/instrument • Premises 	<ul style="list-style-type: none"> • Purchasing initiatives • Sourcing initiatives and directories • Business expertise provision, training, counselling, research • Databases/business planning Incubators, science parks
Start-up (internal)	<ul style="list-style-type: none"> • Finance established • Market/administration expertise • Financial management 	<ul style="list-style-type: none"> • Grants, loans, business partners, business angels • Training services • Advice/counselling, mentoring
Established	<ul style="list-style-type: none"> • New ideas • Specialist guidance and investments 	<ul style="list-style-type: none"> • Ideas generation workshops, spin-off ideas, technology transfer

Stage of business	Business need	Intervention
		<ul style="list-style-type: none"> Guidance services, including banks, venture capitalists, accountants
Growth	<ul style="list-style-type: none"> Market opportunities/exports Decline Product development strategic approach Management skills and finance 	<ul style="list-style-type: none"> Trade missions, export advisers Market/technical information Development courses Salary support, subsidies, grants
Decline	<ul style="list-style-type: none"> Confidence, customers, money Strategic review and planning 	<ul style="list-style-type: none"> Mentors, advice and guidance
Termination	<ul style="list-style-type: none"> Legal/other advice 	<ul style="list-style-type: none"> Advice and counselling
All of the above stages	<ul style="list-style-type: none"> Information on small business needs 	<ul style="list-style-type: none"> Research co-ordination, research databases

Source: Adapted from Botha et al., 2006

Botha et al. (2006) feel that there is often a significant gap between the perceptions of the training providers and those of the entrepreneurs in terms of training needs, for what sometimes appear as key problem areas to the trainer may have little importance for the entrepreneur. This might be because many providers have limited managerial or vocational experience of small firms and fail to understand the practical problems facing entrepreneurs. Timmons and Spinelli (2004) mention that there is a limit to what can be taught in entrepreneurship training programmes and that the only way to learn is through personal experience. Timmons and Spinelli (2004), and other authors, found that certain general perceptions or myths of entrepreneurship might discourage many prospective entrepreneurs from taking the chance. The myths include the following general statements:

- Entrepreneurs are born, not made;
- Someone has to supply you with a job;
- Anyone can start a business;
- Entrepreneurs are gamblers;

- Entrepreneurs are their own bosses and completely independent;
- Entrepreneurs work longer and harder than managers in large companies;
- Entrepreneurs experience a great deal of stress and pay a high price. Starting a business is risky and often ends in failure;
- Money is the most important start-up ingredient;
- Entrepreneurs should be young and energetic;
- If an entrepreneur is talented, success should happen in a year or two; and
- Any entrepreneur with a good idea can raise venture capital.

According to Timmons and Spinelli (2004), these myths should be investigated and put into perspective in order to change the negative perceptions based on them. Furthermore Timmons and Spinelli (2007) argue that entrepreneurs do not emphasise planning as much as the textbooks do and consequently entrepreneurship education should focus on actions rather than research and plan writing.

3.4.1 A model for South African entrepreneurship programmes

Botha et al. (2006) independently compared two existing models developed for entrepreneurship programmes in South Africa. Botha et al. (2006) analysed two models, one developed by Van Vuuren and Nieman (1999): Entrepreneurial Performance Education (E/P), and the second constructed by Pretorius (2001): Entrepreneurial Education (E/E). Pretorius et al. (2005), integrated the two models to provide an enhanced model for entrepreneurial training in South Africa. The comparison of the two models is shown in Table 3.14 below:

Table 3.14: Comparison of the education models of Van Vuuren and Nieman (1999) and Pretorius (2001)

Construct element	Entrepreneurial performance model (E/P) according to Van Vuuren and Nieman (1999)	Entrepreneurial education model (E/E) according to Pretorius (2001)
Entrepreneurial performance	Considers the performance of the individual as entrepreneur (or venture) and not as manager (where entrepreneur refers to	The requirements of the context determine the programme content. One

Construct element	Entrepreneurial performance model (E/P) according to Van Vuuren and Nieman (1999)	Entrepreneurial education model (E/E) according to Pretorius (2001)
	someone utilising an opportunity to start a venture).	required outcome is the start-up of a venture.
Motivation	Motivation as seen as the level (needed for achievement) of the individual, including: desire to be successful and to do well; urge to improve; motive to achieve excellence for its own sake.	Absent as a separate construct but considered partially as a requirement to excel.
Entrepreneurial skills	Considers: creativity and innovation; identification of opportunities; risk taking; interpretation of role models.	Seen as entrepreneurial success theme and considers: commitment; personal leadership; opportunity obsession; tolerance for risk and ambiguity; creativity; motivation to excel.
Business skills	Covers both skills and knowledge associated with the general functions; life cycle stages of a venture and the business plan.	Similar except that the business plan is a separate construct.
Approaches used to transfer knowledge and skills	Absent	Considers: own practical experience; how reinforced thinking is used; entrepreneurial way of being; use of apprenticeships; multi-disciplinary approach and thinking.
Business plan utilisation	Absent as a separate construct but stated under business skills.	Coverage of how the business plan is utilised by: preparation; presentation; defence and execution.
Contextual description	Absent but implied.	Considers: previous experience; minimum education level; outcomes of the programme; needs analysis of participants.

Source: Adapted from Pretorius et al., 2005)

3.4.2 Formal and informal education

Coduras et al. (2010) found that overlap between formal and informal training implies that formal training might provide a foundation, but that many people need specific knowledge and skills, perhaps when they become interested in starting a business or have taken steps to do so. Cost effective, convenient training sources, such as self-study and web-based programmes, are one way of meeting such needs, and they are becoming more widely available. Entrepreneurs could consider accessing these sources or indeed, supplying them. The Global Entrepreneurship Monitor, 2010 report (Coduras et al., 2010) show that entrepreneurship training can be a lifelong pursuit that includes a foundation built in primary and secondary schooling as well as opportunities for both formal and non-formal training in the years beyond school. Entrepreneurship training at the tertiary level should not be limited to those taking business subjects. This would enable entrepreneurship to become an informed career option for everyone, which can be exercised when a combination of circumstances make it a viable alternative.

The high level of overlap between formal and informal training indicates that both formal and informal systems are important sources of entrepreneurship training and suggests that they complement each other (Coduras et al., 2010). Foxcroft et al. (2002) provide that a distinction can be made between informal and formal training as follows:

3.4.2.1 Informal training

In the South African context, many people were prevented from acquiring skills in the past by discrimination; basic literacy and numeracy are often low, there is a lack of business training material specific to South Africa and, in any case, most is directed at the highly literate (Foxcroft et al., 2002). Informal training programmes operating outside the mainstream education system include courses, seminars or other types of training offered by local business organisations, employers or a Government agency. These might include non-credit evening courses at a university, local business organisation or a Government agency. These dimensions provide different perspectives on the nature of the training system in each country. Individuals who have had only informal training are rare (Coduras et al., 2010). The authors report that self-

study is the most prevalent method (88%) of informal training. This is followed by short university courses.

3.4.2.2 Formal training

Formal training includes any course that is part of an official education program, whether compulsory or voluntary. This includes primary or secondary education and tertiary-level certificate, diploma or degree programs (Coduras et al., 2010). In this context, formal training refers to the acquisition of skills where there is a general shortage of business skills such as how to keep records, budget, manage cash flow, maximise trade credit and writing a business plan. Training is too generic, there is seldom any follow-up and it is not sufficiently practical (Coduras et al., 2010). The high proportion of formal training reveals the importance of schools, colleges and universities in delivering this framework condition. In most countries, approximately 80% of people have received formal training from schools than from tertiary-level institutions, indicating that schools have a broader reach (Coduras et al., 2010).

3.5 SOUTH AFRICAN DEVELOPMENTAL TRAINING INTERVENTIONS

Of significance to South Africa is that, according to Schwab et al. (2015) in their report on Global Competitiveness, out of 144 countries, the South Africa economy has marginally improved in world ranking from 56th to 49th place overall. The report also indicates that South Africa rates poorly when it comes to health and primary education factors (ranking 144th as a nation). With regard to business sophistication and innovation, South Africa ranked 33rd and 38th respectively (Schwab et al., 2015). In order to address this decline in global competitiveness, the South African Government has the following initiatives in place to support entrepreneurial start-ups and existing businesses.

3.5.1 Small enterprise development agency (SEDA) in South Africa

This agency was established in December 2004 under the Department of Trade and Industry (DTI). It was formed by merging three organisations, namely, the Ntsika

Enterprise Promotion Agency, the National Advisory Centre (NAMAC) and the Community Public Private Partnership Programme (CPPP). The GODISA Trust and National Technology Transfer Centre were integrated into SEDA in April 2006 to form the SEDA Technology Programme (STP).

SEDA provides business development and support services for small enterprises through a national network; in partnership with other role players who support small enterprises. However, the quality of these contracted service providers varies considerably and consequently the service provided can be very poor and of little constructive value.

3.5.2 Small enterprise finance agency (SEFA) in South Africa

SEFA was founded in 2012 with access to R1.4 billion in funding, provided by the IDC and the Government of South Africa. At the beginning of 2014 it was merged with the South Africa Micro-Finance Apex Fund (SAMAF) and Khula Enterprise Finance Limited, which previously operated as the Industrial Development Corporation (IDC). SEFA caters for small businesses requiring funding of up to R3 million in the form of bridging finance, revolving loans, asset finance, working capital and term loans.

Any SME with a viable business plan can apply for finance. SEFA evaluates the application to determine whether the business can afford the funding and will be able to repay the money over time out of its cash flow (Herrington & Kew, 2014).

3.5.3 National youth development agency (NYDA) in South Africa

The NYDA was launched in 2009 and financed from the de-mutualisation of Old Mutual and SANLAM. Its mandate was to co-ordinate and promote the development of youth in South Africa by assisting them to start businesses and to finance existing businesses (Wright & Louw-Potgieter, 2010). It was required to initiate, facilitate, implement, co-ordinate and monitor youth development aimed specifically at reducing youth unemployment and promoting social cohesion. NYDA's primary target group is young South Africans between 14–35 years of age (Wright & Louw-Potgieter, 2010).

Much controversy has surrounded this organisation which was formed by the merger of two previously ineffective agencies, the Umsobomvu Youth Fund and the National Youth Commission. NYDA's method of assessing its performance is questionable and leaves doubts as to the real effectiveness of the organisation. Over the past few years, it has received much criticism in the media for spending money recklessly, as well as, for spending a disproportionate amount of its income on salaries for people who are not performing or have been appointed through political connections or nepotism.

Theoretically, the NYDA has eight key performance areas as part of its strategy, namely:

- Economic participation;
- Education and skills development;
- Effective and efficient operations;
- Information services and communications;
- National youth service;
- Policy, lobby and advocacy;
- Research, monitoring and evaluation; and
- Social cohesion.

3.5.4 Technology and innovation agency (TIA) in South Africa

TIA was created by an act of the South African parliament in November 2008. TIA is an initiative of the Department of Science and Technology (DST) and its mandate is to enable and support technological innovation across all sectors of the economy in order to achieve socio-economic benefits for South Africa and to enhance its global competitiveness. This involves supporting the development and commercialisation of research outputs from higher education institutes, science councils, public entities and private research institutions, and bringing them to market (Kunert et al., 2012).

TIA was formed through the merger of seven entities previously tasked with promoting innovation in the country. These were the Innovation Fund, Tshumisano Trust, Cape Biotech Trust, PlantBio Trust, LIFElab, BioPAD Trust and the Advanced Manufacturing Technology Strategy (AMTS). Its goals are to use South Africa's science and technology base to develop new industries, create sustainable jobs and help diversify

the economy from commodity exports towards knowledge-based industries equipped to address modern global challenges (Kunert et al., 2012).

It will be funded through five different vehicles, namely:

- Industry matching funding;
- Equity funding;
- Technology development funding;
- Idea development funding; and
- Youth technology.

3.5.5 National empowerment fund (NEF) in South Africa

The NEF was established in 1998 and is the driver and thought leader in promoting and facilitating black economic participation by providing financial and non-financial support to black empowered businesses and promoting the culture of savings and investment among black people (Ayer, 2010).

The NEF provides business loans from R250 000 to R75 million across all industry sectors for start-ups, expansion and equity acquisition purposes (Ayer, 2010).

3.5.6 Other South African funders

There are a number of other funders that are available for entrepreneurs including:

- Knife Capital;
- Leaf Capital;
- Masisizane Fund;
- Thundafund;
- U-Start;
- Edgegrowth;
- Futuregrowth;
- Atlantic Asset Management;
- Anglo; and
- Sebenza Fund.

Also of significance is the awareness of the South African public towards the above Government initiatives to stimulate and support entrepreneurial activity. Table 3.15 below is an indicator of the awareness of the Western Cape, Kwa Zulu-Natal and the Gauteng provinces.

Table 3.15: Awareness and usage of Government initiatives, 2014

Government agency	Western Cape heard of %	KZN heard of %	Gauteng heard of %
National Youth Development Agency (NYDA)	33.7	53.5	65.9
Small Enterprise Finance Agency (SEFA)	11.3	21.7	4.0
Small Enterprise Development Agency (SEDA)	54.8	26.6	48.5
Industrial Development Agency (IDC)	12.5	31.7	14.3
National Empowerment Fund (NEF)	4.6	10.0	20.4
Department of Economic Development and Tourism (DEDAT)	11.1	0.0	0.0

Source: Adapted from Herrington & Kew, 2014

3.5.7 Sector Educational Training Authority (SETA)

Recognising the dire need to improve skills development, the South African Parliament ratified the Skills Development Act in 1998, which defined a new Sector Educational Training Authority (SETA) system. In essence, the plan was to develop a series of sector skills plans within a clearly defined framework of the National Skills Development Strategy (Department of Trade and Industry, 2013), under the framework of the South African Skills Development Act No. 97 of 1998.

In March 2000, the Minister of Labour at the time formally established 23 SETAs, each with its own clearly defined sector and sub-sectors. Each of the sectors was made up of a variety of economic activities that were related and closely linked. So, for example,

one SETA would deal with banking while another would deal with health and welfare. All the SETAs were to be responsible for all sectors of South African industry. As mandated by the Department of Labour, in 2005, the SETAs are to contribute to sustainable development by aligning their work and resources to the skills needs for effective delivery and implementation. The South African Government's intention was to achieve this through the National Skills Development Strategy (NSDS), which is adjustable periodically, depending on the skills needs of the country. A sector is made up of economic activities that are linked and related. So, for example, there is a SETA that deals with the banking sector: another is concerned with skills development in the information technology sector; another is responsible for the manufacturing sector etc. The SETAs cover both the public and private sectors. One of the primary objectives of the SETAs was to collect skills levies from employers within each sector, in terms of the Skills Development Levies Act and make the money available within the sector for education and training. The funds were to go to employers and training bodies, and to learners in the form of discretionary grants and bursaries. The principles of the NSDS were the following:

- Support economic growth for employment creation and poverty eradication;
- Promote productive citizenship for all by aligning skills development with national strategies for growth and development;
- Accelerate broad-based economic empowerment and employment equity, i.e. 85% Black, 54% women and 4% people with disabilities including youth in all categories;
- Support, monitor and evaluate the delivery and quality assurance system necessary for the implementation of the NSDS; and
- Advance the culture of excellence in skills development and life-long learning.

The NSDS identified that more than 50% of Grade 12 learners were leaving school without basic skills to seek work and were in need of skills training. Furthermore, there were nearly 4.3 million people who were unemployed. Most of them have few skills and little training. There was an estimated figure of between 6000 and 7000 unemployed graduates. There were those who want to run their own businesses, people with disabilities, and those whose current skills provided them with barely enough money to survive.

The functions and responsibilities of SETAs, set out in Chapter 3, Section 10 of the South African Skills Development Act of 1998, were to: improve and raise skills and to bring skills to the employed or those wanting to be employed, in their sector. They were mandated to do this by:

- Developing a sector skills plan;
- Implementing the sector skills plan;
- Developing and administering learnerships;
- Supporting the implementation of the National Qualifications Framework, undertaking quality assurance, disbursing levies collected from employers in their sector; and
- Reporting to the Minister of Labour and to the South African Qualifications Authority.
- SETAs are involved in the development of learnerships that include the traditional apprenticeships of the past, internships, learning programmes and unit-based programmes. Like apprenticeships, learnerships combine practice and theory. The main difference is that learnerships go beyond “blue-collar” trades and also prepare people for higher and semi-professional occupations. A person who completes a learnership has to demonstrate the practical application of skills and will also have learnt theoretical applications. An electrician must be able to wire a plug and he/she should also know why it is vital to place wires at the appropriate terminal and the consequences of getting this wrong. Learnerships can be developed in any area identified in the Sector Skills Plan as a need. The development and implementation of learnerships is a major feature of the National Skills Development Strategy. Once they have completed their learnerships, learners receive a certificate from a SETA to show that they have a qualification that is part of the National Qualifications Framework (NQF) of South Africa. Learnerships are a new way of training and it is the duty of the SETAs to:
 - Encourage employers, workers and training providers to design new learnership programmes;
 - Recommend new learnerships to the Department of Labour and SAQA so that they can be satisfied the learnership will train people in skills that are needed and that the learnership programme has the right mix of practical training and theory;

- Administer the learnership agreement between an employer, a learner and an education and training provider;
- Assist in the identification of on-the-job and off-the-job education and training and promote core skills such as literacy and numeracy, team work and problem solving;
- Promote learnerships to employers, workers, young people and their parents to build support for the new programmes;
- Monitor the implementation of learnerships and spread examples of good practice;
- Issue certificates to people who complete learnerships successfully; and
- Provide quality standards, no matter where a qualification is undertaken within South Africa.

SETAs do not set standards or provide education or training programmes, but they support the national qualifications framework in the following ways (Department of Trade and Industry, 2013):

- They support the Standards Generating Bodies (SGBs). These are SAQA approved working groups that develop standards and qualifications to be registered on the National Qualifications Framework. SETAs may initiate the process of setting up Standards Generating Bodies under SAQA;
- They provide information about standards and the best ways of doing things; and
- They provide employers, workers and trainers advice on how to implement the National Qualifications Framework (NQF) which has eight levels – the highest being Professorship.

South African SETAs are funded by the Skills Development Levy imposed by Government. This levy is currently 1% of the monthly payroll of an organisation paid to the SETA to which the firm belongs. According to the Finscope business survey, conducted in 2010, only 2.3% of South Africans were aware of the developmental training benefits offered by SETAs (Finmark Trust, 2010). The following policy and planning recommendations have been made:

- Recommendation 2a: Commission and undertake qualitative, community-based research on BEE co-operatives for policy reform;

- Recommendation 2b: Monitor and evaluate the impact of support to BEE co-operatives;
- Promote and measure the quality of training;
- Measure the impact of training;
- Monitor and evaluate the impact of support to small and micro-enterprises;
- Devise and implement a Training Management Information System;
- Conduct triennial sectorial skills surveys based upon a set of indicators common across the SETA system;
- Undertake annual sectorial studies; and
- Compute non-compliance-driven training by enterprises.

Minniti et al. (2005) in their Global Entrepreneurship Monitor Report (GEM), further state that education and experience are key elements in successful venture creation, as it acknowledges the need in South Africa for a growing pool of potential entrepreneurs who have the motivation and the ability to identify and to realise new business opportunities. Nieman et al. (2003) note further that the South African Government is, however, obliged to attract this pool of entrepreneurs from the previously disadvantaged communities, who were side-lined in terms of venture creation during the era of apartheid in South Africa. In this regard, Buys and Mbewana (2006) refer to the educational backlog of previously disadvantaged communities, which originated as far back as 1950, as a result of an education system segregated along racial lines through the Population Registration Act of 1950 (Cloete, 2012).

The perceptions of entrepreneurs as to whether or not they intend to start a business are heavily influenced by whether they think they have the skills necessary to do so. This, in turn, is linked to education. Previous GEM South African Reports have also suggested that entrepreneurs with higher levels of education are more likely both to start a business and to ensure its sustainability. Historically experts agree that, in South Africa, education is an area that has failed entrepreneurs. Education is inextricably linked to entrepreneurial intentions and growth as it influences confidence in the ability to start a business and to understand financial and business issues. The Global Competitiveness Report (Schwab et al., 2015) confirmed that poor education at all levels continues to hamper South Africa's workforce. Difficulties in integrating into the workforce, faced by young women and young men, often reflect both a

mismatch between capabilities and work tasks and a general skills gap (Herrington & Kew, 2014).

Consequently, a vital component of the Government's ten year vision of the Accelerated and Shared Growth Initiative of South Africa (ASGISA) is for the nation to become entrepreneurial in orientation (Nicolaidis, 2011). In alignment with growing South African entrepreneurs, Isaacs et al. (2007) suggest the following:

- **Implement “Training-the-trainer programmes” for educators:** in seven provinces in South Africa. The rationale for this recommendation is based on their findings and observations that:
 - school teachers are ill-equipped for the role of mentor, advisor and lead promoter of entrepreneurship programmes at schools;
 - feedback from and interviews with the Departments of Education of all provinces support the notion for a concentrated and concerted “roll-out” of such types of interventions; and
 - cost-benefit analysis supports the impact of programmes of this nature. Training the educators has a multiplier effect at the point of delivery. For example, if 3 educators are responsible for training 25 people, these 25 people can be divided into groups of 3, providing 8 groups which can train 25 people each, providing an additional 200 (8×25) trained people. Training 25 people is far more cost-effective than attempting to train learners with, for example, 3 educators. When learners are trained to train, the multiplier effect takes place. Monitoring is essential to ensure that quality is not jeopardised in the process.

- **Train learners in the rural schools of four provinces:** namely Northern Cape, Eastern Cape, Limpopo, and Mpumalanga. The total number of learners in these provinces is 1 million (i.e. the 2001 figures multiplied by the percentages indicated by the Department of Education). If it is assumed that 25% of the learners are interested in entrepreneurship, the total number of learners that could be trained is 250 000. If 25 learners can be trained at a time, it will provide 200 educators with 40 groups each to train. If the length of the training programme is one month of concentrated training, it will take each trainer approximately three years to train the 40 groups.

- **Initiate entrepreneurship training in rural areas:** based on the finding from the interviews with leading service providers, as well as the feedback from schools, it is clear that there is a profound need for entrepreneurship training and intervention methods in rural areas.

3.5.8 Broad-based black economic empowerment (B-BBEE)

Tobergte and Curtis (2013) show that experts feel that the Government's BEE criteria have placed additional administrative and financial burdens on small businesses, and had a negative impact on their profitability and sustainability. Factors identified by the youth as negatively affecting their decision to start a business focused on access to finance, crime, business information and knowledge, and low turnover. Crime is a problem which affects the whole nation, but it exerts a marked negative influence on potential entrepreneurs' willingness to consider entrepreneurship as a viable career. The inability of township businesses to purchase on credit, coupled with the need to offer credit terms to debtors, impacts negatively on the cash flow of the business and would hinder growth. Large businesses could be offered tax incentives if they offer reasonable credit terms to smaller firms. B-BBEE is seen as necessary to remedy the economic imbalances perpetrated during apartheid (Mparadzi & Kalula, 2007).

Altman (2003) found that, twelve years after the political transition, black companies control only approximately 4% of the Johannesburg Stock Exchange's total capitalisation. Nonetheless, an estimated R150 billion worth of B-BBEE transactions had been concluded by mid-2005 while, in terms of the Financial Services Charter alone, some R125 billion of designated investments were to be made available by the sector for empowerment by 2014, with only R50 billion for transaction financing, the rest for transformational infrastructure (R25 billion), low cost housing (R42 billion), agriculture (R1.5 billion) and black small and medium business development (R5 billion). Altman (2003) adds that conservative valuations of 250 BEE deals announced in 2004 amounted to R62 billion, whilst 350 deals in 2005 amounted to R55 billion. These are not trivial amounts and, whilst a significant proportion of this funding was provided by public investment institutions, the major proportion is drawn from the private sector.

In their study, Horwitz, Jain and Steenkamp (2000) mention that statutory intervention is considered necessary by the state to influence supply-side skills formation and structural change in the labour market. In addition to the basic construct of employment equity, both jurisdictions refer to the term “designated groups”; relating to specified targeted groups in the legislation. Obviously the composition of these groups differs given demographic and historical differences in different jurisdictions. The law applies to Government agencies and private sector employers with the EEA applying to companies employing 50 or more employees or those with a specified financial turnover, as well as the Government departments and agencies throughout the country. B-BBEE and its employment equity provisions pertains to organisations with a turnover of R30 million or higher. Balshaw and Goldberg (2014) report in their book based on the amended codes of good practice, effective from 11 October 2013, that there is a retrospective shift in direction towards ownership, whereby ownership in corporate companies by previously disadvantaged individuals accounts for 57% of the B-BBEE scorecard points. This means there is greater emphasis on black ownership. BEE, as described by Balshaw and Goldberg (2014), is a matter of survival for the South African economy in a bid to curb unemployment and social unrest. The objectives of broad-based BEE are:

- Firstly, the altruistic driver – those people who believe “it is the right thing to do” and brought it onto the national agenda; and
- Secondly, those who recognise that broad-based BEE is a strategic imperative and understand that it makes good business sense.

Balshaw and Goldberg (2014) feel that BEE will continue to have a huge impact on the way business is done in South Africa for large companies, family businesses, small and medium-sized businesses and professional practitioners. Balshaw and Goldberg (2014) add that many companies are examining whether BEE compliance is still worth the cost.

From the Government’s perspective, BEE seeks to:

- Promote economic transformation to enable black participation. A black individual refers to black people, Indian and coloured people and includes black people with disabilities;
- Achieve substantial change in the racial ownership of South African companies;

- Increase the extent to which communities, co-operatives and other collective businesses own and manage new and existing businesses;
- Increase female ownership of businesses;
- Empower local and rural communities; and
- Promote access to finance for black empowerment.

The most recent codes of broad-based BEE's good conduct have the following compliance elements, with the total system totalling 105 points:

- Ownership (25 points);
- Management control (15 points);
- Skills development (20 points);
- Supplier and enterprise development (40 points); and
- Socio-economic development (5 points)

Companies with an annual turnover of less than R10 million automatically qualify as Exempted Micro-Enterprise (EME). Qualifying Small Enterprises (QSE) are entities with an annual turnover of between R10 million and R50 million. The Generic Scorecard applies to companies with an annual turnover of greater than R50 million.

It must be born in mind that broad-based BEE is voluntary and not a legal requirement in South Africa. However, it does place onerous obligations on businesses to comply if they wish to do business with the Government (Balshaw & Goldberg, 2014). Organisations who fail to reach certain scores may not be able to tender for contracts or fail in their contract bids because they would not be considered "B-BBEE compliant" (Horwitz et al., 2000). There is resistance from large and small businesses and, in particular, family-owned businesses, who may find it difficult to liquidate shareholding and management to black South Africans.

The upward mobility of an increasingly non-racial upper middle class is arguably a positive development in South Africa. Alongside this development though, is a continuing and, indeed, increasing inequality in relation to the labour market majority who are still inadequately educated and skilled for the needs of a globally competitive modern economy. The labour market suffers from a fundamental paradox – an over-supply of an under-skilled workforce and a severe shortage of intermediate skilled artisans, estimated at nearly 40% (Horwitz et al., 2000). The authors add that

economic empowerment has to be premised on a transformation of education and skills capacity building. As Tobergte and Curtis (2013: 90) relate the opinion of an expert: “Government is too keen to tie entrepreneurial activity to its own programmes of social justice, black economic empowerment and service delivery. Since entrepreneurial activity is not understood as a social utility in its own right, it gets little help and lots of obstruction from Government, even as Government claims to be supporting it”.

3.6 SUMMARY

In Chapter 3, the developmental training support of entrepreneurs was reviewed from a South African perspective. The purpose of the chapter was to portray the entrepreneurial environment with which nascent, existing and declining business owners of South Africa are faced. The chapter provides details of entrepreneurial education, as well as, entrepreneurial training initiatives which have taken place to date. Pretorius et al. (2005), analyses two education and development models, from a South African perspective, the first by Van Vuuren and Nieman (1999) and the second by Pretorius (2001). Pretorius et al. (2005) then formulates a revised developmental training model. Research questions RQ₂, RQ₃, RQ₄ and RQ₅ were addressed in this chapter.

The literature research in Chapter 2 and 3 was conducted to identify the factors which influence the training and development of entrepreneurs globally and in South Africa respectively. The literature study was used to develop a theoretical model and motivate the selected variables, which are hypothesised to influence the successful developmental training of entrepreneurs in South Africa.

CHAPTER 4

A THEORETICAL MODEL FOR THE PERCEIVED SUCCESS OF DEVELOPMENTAL TRAINING SUPPORT FOR ENTREPRENEURS IN SOUTH AFRICA

4.1 INTRODUCTION

Research questions RQ₇ and RQ₈ and research objective RO₆ are addressed in this chapter. The factors that were identified from the literature study that influence developmental training support for entrepreneurs were discussed in Chapter 2 and 3. These factors include: Entrepreneurial Culture, Socio-Emotional Attributes, Acquiring Business Skills, Industry Experience, Opportunity Identification, Regulatory Barriers, Economic Barriers, Outside Advice, Formal Training and Informal Training.

In this chapter the theoretical model is formulated and the identified variables are discussed and hypothesised to influence the success of developmental training support for entrepreneurs. The relationships between the variables are based on the discussion of the factors that influence the success of developmental training support for entrepreneurs, as presented in Chapters 2 and 3.

4.2 THE THEORETICAL MODEL

According to Mouton (1996), conceptualisation refers to both the clarification and the analysis of the key concepts in a study and also to the way in which the research is integrated into the body of existing theory and research. It also provides the underlying theoretical framework that guides and directs the research effort, and therefore requires clear and unambiguous definition of central concepts. Collins and Hussey (2003) describe such a theoretical framework as a collection of theories and models from the literature which explains the research questions or hypotheses. The theoretical framework also underpins a positivistic research study (Collins & Hussey, 2003), which is also the proposed paradigm for this study and which, according to Welman and Kruger (2001), attempts to develop and test theories and models.

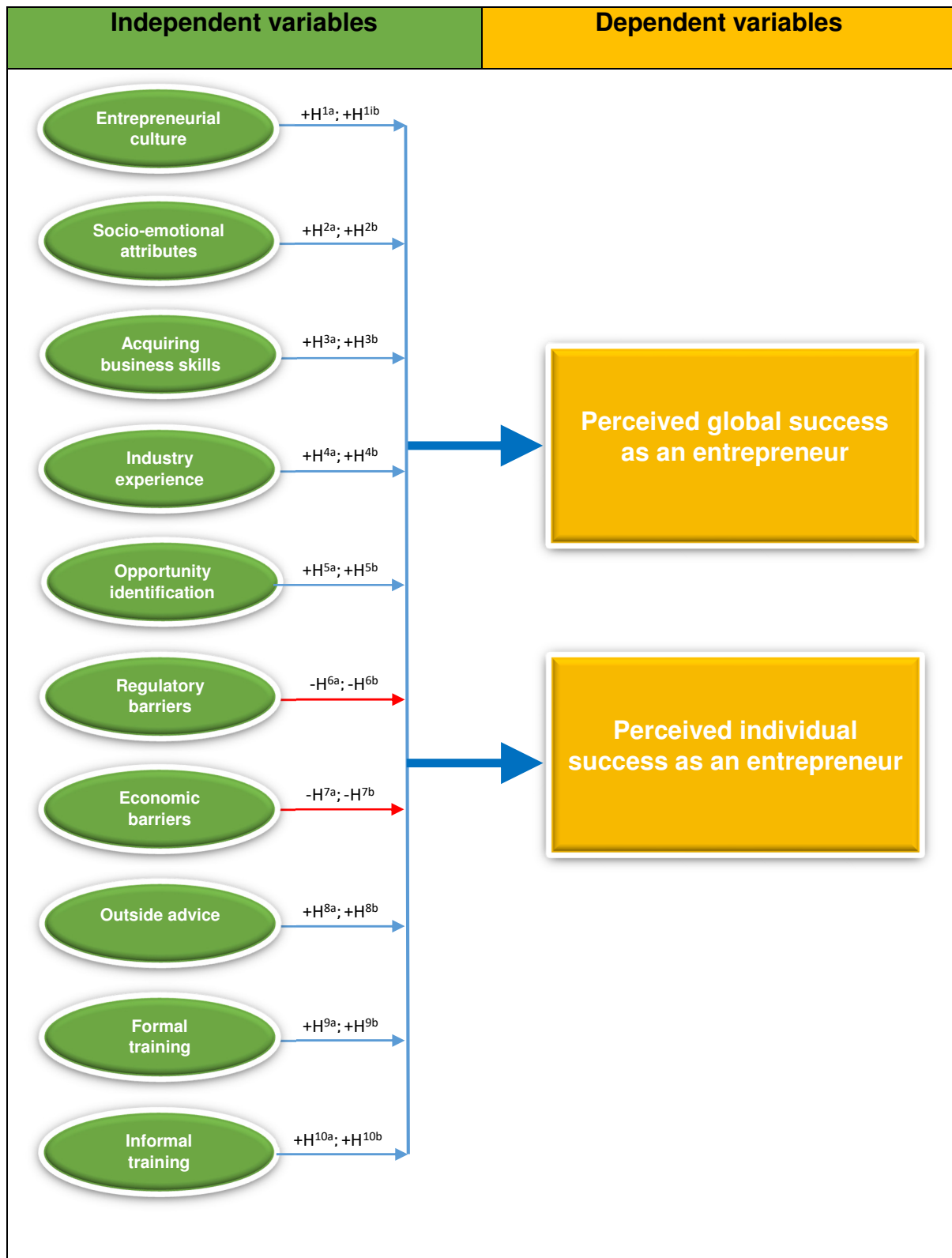
The outcome of the conceptualisation phase is a research hypothesis which, according to Zikmund (2003), is an unproven proposition that is empirically testable. It provides a tentative explanation of certain facts or phenomena (Zikmund, 2003), or a preliminary statement about the relationship between two or more operationalised variables (Welman & Kruger, 2001). The hypothesis, therefore, is a reasonable and logical conjecture which serves the practical purpose of providing a tentative, objective and logical construct that helps researchers to look for data (Zikmund, 2003).

The research problem was stated in Chapter 1 as: **To identify the major contributors to developmental training support for successful entrepreneurs in South Africa.**

The dependent variables in the proposed, developmental, training, support model are identified as Perceived Global Success of Entrepreneurs and Perceived Individual Success of Entrepreneurs. The proposed conceptual model is presented in Figure 4.1 below:

The theoretical model proposes 10 independent variables, namely: Entrepreneurial Culture, Socio-Emotional Attributes, Acquiring Business Skills, Industry Experience, Opportunity Identification, Regulatory Barriers, Economic Barriers, Outside Advice, Formal Training and Informal Training. Each of these components is then hypothesised to relate to the measures of success of developmental training support for entrepreneurs.

Figure 4.1: A theoretical model for developmental training support for entrepreneurs in South Africa



Source: Researcher's own construction, 2017

4.3 SUMMARISED DESCRIPTION OF EACH VARIABLE

According to Shah and Goldstein (2005), causal interpretation must be based on the theoretical grounding of, and empirical support for, the proposed model. Therefore, Shah and Goldstein (2005) suggest that researchers describe the theory they are testing, as well as its expected, manifested results as clearly as possible prior to conducting analysis. A theoretical justification for the structural relations between the variables of interest is also a key requirement in structural equation modelling (Boomsma, 2000), which is also the method used in this study to assess the hypothesised relationships in the proposed theoretical model.

In this section, the variables of interest are discussed individually and the hypotheses are aligned with the literature study.

4.3.1 Dependent variable: Perceived global success as an entrepreneur

Competitiveness has been defined by Porter et al. (2002) according to a country's economic development, distinguished by three specific stages: (1) factor-driven stage, (2) efficiency-driven stage and (3) innovation-driven stage. Countries in the factor-driven stage are typically driven by sole proprietorships i.e. the self-employed probably account for most, small manufacturing firms and service firms. These countries neither create knowledge for innovation nor use knowledge for exporting (Porter et al., 2002). Countries in the efficiency-driven stage must increase their production efficiency and educate the workforce to be able to adapt to technological developments. Efficient production techniques are important to compete in large markets, enabling companies to exploit economies of scale. Industries in this stage are manufacturers or provide basic services (Syrquin, 1988). The efficiency-driven stage is marked by decreasing rates of self-employment. As firms become bigger, effective management skills are required to capitalise on economies of scale to create wealth. In this model, the relationship between entrepreneurial activity and economic development would be negative. That is, as the economy becomes more developed, fewer people would be expected to pursue entrepreneurial activity. The innovation-driven stage is marked by an increase in entrepreneurial activity. Empirical evidence clearly shows that during this phase, the distribution of firm size in developed countries begins to shift away from larger corporations and towards entrepreneurial activity. There are three reasons for

this: an increase in service-oriented firms reducing the required size of the firm and the increase in technologically based firms (Jorgenson, 2001). Examples of such industries include express mail services, photocopying services, personal computers, the internet, web services and mobile phone services, all of which make it less expensive and less time consuming for geographically separate individuals to exchange information. Thirdly, Aquilina et al. (2006), have come to the conclusion that more per capita capital makes it easier for an individual to become an entrepreneur and for smaller firms to exist.

In recent years, economists have come to recognise the significant contribution of innovation and growth to prosperity and economic welfare (Acs & Armington, 2006; Schramm, 2006; Audretsch, 2007). In particular, since innovation contributes to competitive advantage in foreign markets (Roper & Love, 2002), developed economies are better integrated globally (UNCTAD, 2006) and tend to have higher levels of export-oriented entrepreneurship than developing economies (De Clercq et al., 2008). In order for economies to move into the innovation-driven stage, it is necessary for them to develop environmental conditions conducive to entrepreneurship. Several countries have achieved this in the past decade, including Korea, Ireland, Israel and Taiwan to name a few (Acs & Szerb, 2008). High-income countries, such as Germany, France, Belgium, Italy and Finland, have relatively low levels of entrepreneurial activity. Two countries are outliers: Japan, with one of the lowest levels of entrepreneurial activity, and the United States, with one of the highest levels of entrepreneurial activity.

Recent studies confirm that, during the last two decades, the development of new technologies and the emergence of new business models have caused a shift away from large corporations to small and new ventures (Jorgenson, 2001; Audretsch & Thurik, 2001). A country's proportion of export-oriented new ventures is a source of knowledge spin-offs that positively influences the total level of entrepreneurial activity. Also, export-oriented, new ventures might act as role models. Following the premises of institutional theory, individual economic actors might imitate the behaviour of highly visible and successful peers. Such imitation might then provide support and legitimacy to entrepreneurship as a career choice, resulting in the creation of more new businesses within the country. Three insights into the role exports can play in an economy become evident: firstly, countries at the efficiency-driven level need to

reduce necessity-driven entrepreneurship. Secondly, export-oriented entrepreneurs have a negative effect in developing countries, but a positive effect in developed countries, suggesting that exports in the efficiency-driven stage come from large firms and multinationals and not small firms. Thirdly, high-impact firms operate more in the innovation-driven stage, and not the efficiency-driven stage (Acs et al., 2008).

4.3.2 Dependent variable: Perceived individual Success of entrepreneurs

Robichaud, et al. (2001) argue that motivation falls into four categories: 1) extrinsic rewards, 2) independence/autonomy, 3) intrinsic rewards, and 4) family security. Extrinsic motives are the economic reasons that entrepreneurs work, whereas intrinsic motives are related to self-fulfillment and growth. Ashley-Cotleur et al. (2009) agree that extrinsic motivators for a nascent entrepreneur will include expected monetary rewards reflected in salary and benefits. Intrinsic rewards will centre on the satisfaction of being one's own boss, being more in control of one's destiny, and having ultimate responsibility for the success of the venture. Benzing, Chu and McGee (2009) remark that the motivating factors may differ across countries due to differences in income levels and employment opportunities. Swierczek and Ha (2003) in a study of SME owners in Vietnam found that challenge and achievement were more significant motivators than necessity and security.

Campos, Goldstein, MCGorman, Maria, Boudet and Pimhidzai, (2015) suggest that there are some behavioural and perception-based determinants of lower profitability, namely that female entrepreneurs exhibit a significant amount of "intrinsic" rather than "extrinsic" motivation, and are often driven more by flexible work schedules or personal achievement rather than a raw interest in profit or growth, contributing to preference-driven hypotheses.

4.3.3 Independent variable 1: Entrepreneurial culture

Culture can be defined as a cultural group's characteristic way of perceiving its social environment (Hopp & Stephan, 2012). Two measures of culture currently seem to dominate cross-cultural research: cultural values and cultural practices or norms. Contrary to popular belief, the distinction is important as cultural values and norms are

found to be only weakly or even negatively related to each other (Fischer, 2006; Javidan et al., 2006). Cultural norms, also called cultural practices, are more directly linked to actual entrepreneurial behaviour (Stephan & Uhlaner, 2010). Social and cultural norms of a country are considered to be one of the most important conditions that influence a person's intention to become an entrepreneur (Herrington & Kew, 2014), which might be viewed as the first step in an evolving, long-term, entrepreneurial process. The focal concern of entrepreneurial culture is with opportunities and how the culture develops around that interest. Therefore, by adopting a definition of entrepreneurship as a process centrally concerned with opportunities (Schendel & Hitt, 2007; Wong & Morse, 2014). Wong and Morse (2014) reason that entrepreneurial culture is a pattern of values, assumptions and practices shared within an organisation that is centrally concerned with opportunities, where opportunity is the creation of new value to society in part or in whole. In addition, parental role modelling of entrepreneurial values, such as autonomy and perseverance, provides a valuable cultural resource for future entrepreneurs (Hout, 1984; Miller & Swanson, 1958; Kim et al., 2006).

Kazela (2009) adds that the culture of dependence is very high in South Africa, hence the people expect Government to do everything for them. This attitude influences young people's consideration of entrepreneurship. Fatoki (2010) report that a lack of entrepreneurial culture, particularly among black South Africans, is a societal problem. Failure as an entrepreneur can also have socio-cultural effects as an individual might be unwilling to start another venture. Kim et al. (2006) found that approximately 50% of entrepreneurs who have failed on the first attempt at a new venture are less likely to attempt another new venture.

It is therefore hypothesised that:

H1^a There is a positive relationship between entrepreneurial culture and the perceived global success of entrepreneurs.

H1^b There is a positive relationship between entrepreneurial culture and the perceived individual success of entrepreneurs.

4.3.4 Independent variable 2: Socio-emotional attributes

The term “socio-emotional skills” refers to a distinct set of skills that enable individuals to navigate interpersonal and social situations effectively (Guerra et al., 2014). These skills encompass behaviours and attitudes that are consistent patterns of thoughts, feelings and conduct (such as commitment, discipline, or the ability to work in a team) and personality traits (such as self-confidence, perseverance, and emotional stability). These are broad attributes that are relatively stable over time (Borghans et al., 2008; Almlund et al., 2011). There is evidence that some entrepreneurial, socio-emotional skills are difficult to develop in people and that others, such as opportunity recognition, can be taught (Detienne & Chandler, 2004; Henry et al., 2005a). A body of research indicates that there is a relationship between labour market outcomes and socio-emotional skills such as creativity, teamwork, leadership and self-control (Heckman & Rubinstein, 2001; Jacob et al., 2003; Heckman et al., 2006; Becker & Woessmann, 2007; Borghans et al., 2008; Heineck & Anger, 2010). Students who possess considerable knowledge of finance, marketing, management and human resources, but have little understanding of their own strengths and weaknesses, personal preferences and behaviour patterns can affect the venture (Mattare, 2008).

It is therefore hypothesised that:

H2^a There is a positive relationship between developing socio-emotional attributes and the perceived global success of entrepreneurs.

H2^b There is a positive relationship between developing socio-emotional attributes and the perceived individual success of entrepreneurs.

4.3.5 Independent variable 3: Acquiring business skills

A distinction is made between the business skills and entrepreneurial skills required of an entrepreneur. Business skills refer to the completion of a business plan, communication skills, general management skills, financial management skills, marketing skills, operational skills, HR skills and legal skills. Cole and Fernando (2008) write that Governments and private organisations alike are investing heavily in

financial literacy programmes throughout the world. In contrast to business skills, entrepreneurial skills refer to creativity and innovation, risk propensity, opportunity identification and role models (Ayer, 2010).

From research conducted by Valerio et al. (2014) and Herrington et al. (2013) in Ghana, most participants felt that EET (entrepreneur education and training) programmes were successful in providing critical general business skills (management, marketing, sales and human resources) and financial skills (accounting, budgeting and capital structure), but less so in terms of thinking and problem-solving skills and soft skills (communication, leadership, presentation and negotiation). Valerio et al. (2014) found that there is consensus that training in business management is a must in any entrepreneurship ET programme. In a South African study conducted by Tengeh et al. (2015), it was reported that many universities encourage self-employment by providing students with the entrepreneurial skills necessary to run their own businesses.

Entrepreneurial incubatees have identified that amongst others, poor business skills were one of the key challenges they faced as start-up entrepreneurs before joining the incubation programme (Masutha, 2014). Another example was engineers who found that they lacked the business skills to build a firm around their inventions or consulting skills (Katz, 2003). There must be a transfer of both technical and business skills to the entrepreneurs to enable them to participate in the mainstream activities of the economy (Herrington et al., 2013).

Business skills are also imparted to entrepreneurs through the experience and skills of mentors (Ayer, 2010). These skills include entrepreneurial skills, technical skills, business plans, general business skills etc. (Watson, 2004; Botha et al., 2006; Mahadea et al., 2011; McKenzie & Woodruff, 2012). Obtaining key business skills occurs most easily through direct exposure to an entrepreneurial environment, so individuals with family business backgrounds might have an advantage over others (Kim et al., 2006). However, in a study in India, research found modest evidence that business skills yielded better profits or increased sales (Honorati & Mcardle, 2013; Field et al., 2010). The main impediments for small business survival have been identified as lack of access to finance, infrastructure and business skills (Nicolaidis, 2011). The author emphasises that practical components requiring innovation and

creativity, new dea-generation and practical action are business skills essential to emerging entrepreneurs.

It is therefore hypothesised that:

H3^a There is a positive relationship between acquiring business skills and the perceived global success of entrepreneurs.

H3^b There is a positive relationship between acquiring business skills and the perceived individual success of entrepreneurs.

4.3.6 Independent variable 4: Industry experience

Subjective entrepreneurial knowledge and perception is also shaped by managerial experiences within a specific industry. Industry-specific experience involves interactions with buyers, suppliers, distributors, and other stakeholders, which produce knowledge about the opportunities, threats, competitive conditions and Governmental regulations that are unique to each industry (Spender, 2000). Kor et al. (2007) continue to state that experience-based knowledge of the industry can be useful for perception and evaluation of new entrepreneurial opportunities and provides knowledge regarding how an industry works. Industry experience often embeds goodwill with certain customers, suppliers, and industry stakeholders. Experienced managers can capitalise on this goodwill by initiating and securing new business relationships for their current firm and it is this experience which may contribute to the success of a new business venture, when the experienced entrepreneur more easily secures resources and business orders for the firm through previous industry connections (Kor et al., 2007). Managers with different levels of industry experience will have varying levels of commitment to historical industry trends and such differences are likely to spur healthy conversations and debates concerning new strategic directions for the firm. Also, when managers are exposed to inter-industry differences in technology, distribution, marketing, and pricing, they are more likely to be innovative in formulating and implementing new strategies and to position current and future products and services creatively (Kor et al., 2007).

Studies have indicated that 90% of founders or more, start their companies in the same market-place, technology, or industry in which they have been working (Timmons, 1999). Timmons (1999) adds that other research has shown that founders are likely to have from 8 to 10 years of experience, and that they are likely to be well educated (Timmons, 1999). Entrepreneurs should gain related industry experience, develop business skills and seek to achieve success (Sluis et al., 2004).

Furthermore, the more educated entrepreneurs are (Osborn & Slomczynski, 2005), the greater the likelihood of their being able to identify more favourable employment opportunities (Osowska, 2016). Baycan et al. (2012) found that previous experience, through employment and/or entrepreneurship and, moreover, the actual way in which this experience was obtained as an employee and entrepreneur, has a pulling-effect to become an entrepreneur in the same sector of 69% (Baycan et al., 2012).

Kim et al. (2006) categorise work experience into four categories: general full-time work experience, managerial experience, previous start-up experience, and current self-employment. Full-time work experience provides two important learning opportunities. If such work experience occurs within the new venture's industry, individuals can rely on the knowledge of their industry to identify potential opportunities and other industry-related conditions (Shane, 2003; Kim et al., 2006). Previous managerial experience can give people skills needed to co-ordinate and administer diverse activities in the early phases of a start-up (Boden & Nucci, 2000). Kalleberg and Leicht (1991) found that prior start-up experience and current self-employment are two additional ways in which nascent entrepreneurs develop relevant planning and managerial experience for a new start-up. Rider et al. (2013) confirm that individuals of moderate experience are most likely to migrate to entrepreneurship. However, people who start small businesses in trades such as construction or carpentry have little need for advanced formal education. Instead, they draw on their acquired technical skills and on-the-job experience (Kim et al., 2006).

It is therefore hypothesised that:

H4^a There is a positive relationship between industry experience and the perceived global success of entrepreneurs.

H4^b There is a positive relationship between industry experience and the perceived individual success of entrepreneurs.

4.3.7 Independent variable 5: Opportunity identification

In addition to entrepreneurial action, identifying a business opportunity is a prerequisite for starting a new business. “To have entrepreneurship, you must first have entrepreneurial opportunities” (Shane & Venkataraman, 2000:220).

Although there is not enough empirical evidence yet that opportunity identification is related to new venture creation (Ucbasaran et al., 2008), there are strong theoretical arguments for this relationship. Ucbasaran et al. (2008) have argued that identifying more opportunities should be related to identifying an opportunity which entrepreneurs consider to be sufficiently innovative for starting a new venture (Gielnik et al., 2015). Of significance is the conceptual overlap between intentions and opportunity identification. Intentions represent a useful vehicle for gaining new insights into the processes by which opportunities and threats are identified and how resulting action is formulated and implemented (Krueger et al., 2000).

While there is no empirical proof at this stage, it is likely that the variance in unemployment rates for graduates of different universities (departments and disciplines) can be attributed to real and perceived differences in the quality of their qualifications (Ndedi, 2009). However, Ndedi (2009) argues that opportunity recognition is not a privilege for entrepreneurship/business-oriented students only, but is the prerogative of every active youth in other disciplines as well (Tengeh et al., 2015).

In a Global Entrepreneurship Monitor Report in 2012 it is noted that the rate at which South African youth can perceive and capitalise on business opportunities is only 39%, the lowest of the Sub-Saharan African countries that participated in the study (Tengeh et al., 2015).

According to the Global Entrepreneurship Monitor 2012 report, entrepreneurship can only be brought to fruition if potential entrepreneurs can perceive good opportunities, believe that they have the necessary skills to start a business, and are willing to take action after expressing their intentions. Opportunities originate as perceptions of what

individuals believe can be done to earn a profit and the source of such profit might be through individual and/or collective effort (Tengeh et al., 2015). Isaacs et al. (2007) argue that for this to develop requires deliberate efforts such as integrating entrepreneurial education into non-business disciplines in higher institutions of learning. Isaacs et al. (2007) agree that the key to the success of establishing a culture of entrepreneurship in South Africa is education and that this depends on all stakeholders including the state, educators and learners themselves.

It is therefore hypothesised that:

H5^a There is a positive relationship between opportunity identification and the perceived global success of entrepreneurs.

H5^b There is a positive relationship between opportunity identification and the perceived individual success of entrepreneurs.

4.3.8 Independent variable 6: Regulatory barriers

Given the potentially beneficial spin-offs of entrepreneurship, Governments around the world have taken an interest in interventions that promote and facilitate entrepreneurial success through required support systems and the removal of barriers to entrepreneurship (McKernan, 2002; Paulson & Townsend, 2004; McKenzie & Woodruff, 2012; Valerio et al., 2014).

Political factors can manifest as specific policy actions that reduce bureaucratic barriers and corruption, ensure fair practices, or provide grants and funding to support entrepreneurial opportunities and promotion programmes (Valerio et al., 2014). Governments can also promote entrepreneurship through an explicit framework or strategy. Moreover, political contexts can be shaped by local actors, including schools and various community-based organisations (Valerio et al., 2014). Valerio et al. (2014) add that barriers include each country's legal and regulatory frameworks and infrastructure, while issues of corruption and insecurity, particularly in the informal sector, remains endemic. The labour market itself poses a problem, in countries that suffer from very high youth unemployment (Valerio et al., 2014). In all countries,

Governments need to remove barriers to competition, review the provision of services with respect to efficiency and effectiveness, promote fiscal responsibility, and ensure transparency of the law and a clear legal framework for property rights and regulatory oversights (Minniti & Lévesque, 2008).

It is therefore hypothesised that:

H6^a There is a negative relationship between regulatory barriers and the perceived global success of entrepreneurs.

H6^b There is a negative relationship between regulatory barriers and the perceived individual success of entrepreneurs.

4.3.9 Independent variable 7: Economic barriers

Economic studies from around the globe consistently link entrepreneurship, particularly the fast-growth variety, with rapid job creation, GDP growth, and long-term productivity increases (Isenberg, 2011). Isenberg (2011) continues to add that governments would be better advised to remain sector neutral and to unleash rather than harness people's entrepreneurial energies. They should observe which direction entrepreneurs take and "pave the footpath" by gently encouraging supportive economic activity. Isenberg (2011) suggests that, by engaging the private sector, modifying cultural norms, removing regulatory barriers, encouraging and celebrating successes, passing conducive legislation, being judicious in emphasising clusters and incubators, subjecting financing programmes to market rigours and, above all, approaching the entrepreneurship ecosystem as a whole, Governments will be able to create economic growth by stimulating self-sustaining venture creation.

Tobergte and Curtis (2013) argue that Government should incentivise entrepreneurship aggressively through greater development of specialised economic zones, providing tax breaks for businesses below certain revenue thresholds, and lowering barriers to entry in certain industries.

It is therefore hypothesised that:

H7^a There is a negative relationship between economic barriers and the perceived global success of entrepreneurs.

H7^b There is a negative relationship between economic barriers and the perceived individual success of entrepreneurs.

4.3.10 Independent variable 8: Outside advice

As Chief Executive Officers (CEOs) work to acquire additional perspectives on strategic issues, they will tend to reach outside the regular circles of advisers upon whom they routinely rely. Research on social networks, as well as, other behavioural research, has indicated that the contacts that CEOs rely upon most routinely for advice are particularly likely to be executives with whom they share friendship ties or a common professional background (McDonald et al., 2008). As they seek out less routine sources of advice, CEOs will almost inevitably end up soliciting more information and advice from others with whom they lack such associations.

Onyango (2013) reports that entrepreneurial success revolves around receiving sound advice from experienced individuals, family, and friends. Entrepreneurs might also act as role models by offering advice and wise counsel to new entrepreneurs as they attempt to accomplish difficult entrepreneurial tasks (St-Jean & Audet, 2009; Onyango, 2013). Onyango (2013) adds further that entrepreneurs who valued and trusted their mentors' advice were more willing to follow and discuss issues with their mentors before making a final decision.

In a 2008 Global Entrepreneurship Monitor Report, outside advice used by nascent entrepreneurs falls typically within the following five broad categories (Acs & Szerb, 2008):

- The private sphere of family and friends, who are likely to give support or discouragement;
- The job sphere of managers and work-colleagues, who might serve as sounding boards;

- The sphere of experienced entrepreneurs, business people and people with expertise, who might convey tacit knowledge;
- The sphere of professionals such as bankers, lawyers and accountants, who offer codified knowledge; and
- The market sphere of competitors, collaborators, suppliers and customers, who might provide knowledge about the market.

Acs and Szerb (2008), in their Global Entrepreneurship Monitor 2008 report add that education, training and getting advice from others are three sources of learning that appear to reinforce one another. Much more remains to be discovered about how entrepreneurs use advisers (including the number, not just type of advisers) and the nature and quality of advice received (Martínez et al., 2010). Stanger (2004) and Botha et al. (2006) report further that women are more likely than men to consult multiple sources of advice at start-up. Botha et al. (2006) add that 74% of female entrepreneurs required advice on marketing, advertising and managing a business and 80% wanted advice on financial and cash-flow planning. When it comes to legal advice, it is common for incubators to offer legal assistance and advice to nascent entrepreneurs (Scaramuzzi, 2002).

Family members were used to: (1) promote entrepreneurship, (2) identify opportunities, (3) provide financial support, (4) offer practical assistance, (5) provide specialised advice, and (6) act as sounding boards. The entrepreneurs emphasised the reliability of family members (Adendorff, 2004; Jack et al., 2004). Jack et al. (2004) comment that other entrepreneurs who had experienced the same type of problem being faced by nascent entrepreneurs were able to give very practical advice on problem solving. Ardichvilia et al. (2003) report that, whilst experience from working at a specific job is paramount to starting a business, advice received from other people (family, friends, mentors etc.) is a second capability which enables entrepreneurs to discover and capitalise on a new opportunity.

It is therefore hypothesised that:

H8^a There is a positive relationship between outside advice and the perceived global success of entrepreneurs.

H8^b There is a positive relationship between outside advice and the perceived individual success of entrepreneurs.

4.3.11 Independent variable 9: Formal training

Formal training includes any course that is part of an official education programme, whether compulsory or voluntary. This includes primary or secondary education and tertiary-level certificate, diploma or degree programmes (Martínez et al., 2010).

In Germany, Finland, the Republic of Korea, Ireland, Spain and the United States, experts tend to agree that public and/or private agencies outside the formal education system provide adequate entrepreneurship education and training. Experts in other participating GEM countries were less positive. A large majority of those who received start-up training did so as a part of their formal education in school, college or university. On average, approximately 80% of those who had received training did so during their formal education. This high proportion of formal training reveals the important role the formal education system plays in entrepreneurship training (Martínez et al., 2010).

Slightly more than 60% of those who have received training, on average, have received informal training, either exclusively or in addition to formal training. This high level of informal training suggests that, despite having obtained formal entrepreneurship education or training, people might also want focused “not for credit, but for real” training. The most frequent source of informal training in most of the countries is self-study, followed by informal university programmes and courses offered by business associations (Martínez et al., 2010).

Start-up training rates vary according to an individual’s age, gender, education and income. In all three economic groups, younger individuals are more likely to have received training in starting a business. This probably reflects the recent increase in entrepreneurship training offered in the formal education system. People from wealthier households and better-educated people are also more likely to have received training. Such individuals might have more opportunities to access training. In most countries, men are more likely than women to have volunteered for training.

In less well-developed countries, women tend to have had fewer opportunities for compulsory training than men (Martínez et al., 2010).

Some research suggests that early, formal, entrepreneurship education affects the attitudes of students which, in turn, direct them towards certain future careers (Do Paco et al., 2008). Furthermore, according to Kourilsky and Walstad (1998), the early stimulation of these attitudes can even encourage entrepreneurship (Steenekamp et al., 2011: 58). The author concludes that attention should be paid to “formal learning, informal learning and practical experience”.

Unfortunately, literature attempting to connect formal or traditional entrepreneurial education systematically to entrepreneurial activity or performance is virtually non-existent (Honig & Karlsson, 2004). Researchers in one study of nascent entrepreneurs found no relationship between profitability and those that had written a formal business plan, two years after starting a business (Honig & Karlsson, 2004).

Formal education can affect the likelihood of entrepreneurial entry through: (1) the acquisition of skills, (2) credentialing, and (3) sorting people by ambition and assertiveness (Kim et al., 2006). Kim et al. (2006) add that formal education can give individuals access to social networks and also that educational achievements can be linked to ambition. Formal education thus enables individuals to gain knowledge and skills, earn credentials valued by others in the business community, and also sorts people by ambition and assertiveness (Kim et al., 2006).

Advanced formal education has a positive association with being a nascent entrepreneur. College graduates were twice as likely to be nascent entrepreneurs as people with high school degrees or less, but post-college education made no additional contribution to being a nascent entrepreneur (Kim et al., 2006).

It is therefore hypothesised that:

H9^a There is a positive relationship between formal training and the perceived global success of entrepreneurs.

H9^b There is a positive relationship between formal training and the perceived individual success of entrepreneurs.

4.3.12 Independent variable 10: Informal training

Informal training operates outside formal programmes, for example, non-credit bearing courses at a university, local business organisation or a Government agency.

Informal training and pre-market experiences are cultural capital resources that might increase interest in a start-up project (Lentz & Laband, 1990; Kim et al., 2006). In fact, it has been suggested that entrepreneurial education improves entrepreneurial capability and a nation's ability to spot and capitalise on entrepreneurial opportunities. Essentially, a major approach to achieving this is to increase the entrepreneurial intentions and capabilities of university students (Tengeh et al., 2015). Embedding entrepreneurship into the formal education system at all levels requires a strong commitment from the Government in terms of policy and resources, since most schools, universities and training programmes are overseen by the Government (Tengeh et al., 2015).

Informal learning is defined as unstructured, unintentional, implicit learning that occurs, for example, during work or during co-operation with others (Tjepkema, 2002; Lans et al., 2004). Powerful forms of informal learning are: learning on-the-job, learning from more experienced colleagues, and working as a member of a team.

It is therefore hypothesised that:

H10^a There is a positive relationship between informal training and the perceived global success of entrepreneurs.

H10^b There is a positive relationship between informal training and the perceived individual success of entrepreneurs.

4.4 SUMMARY

In this chapter the development of the theoretical model to be tested empirically and verified by way of observation was presented. The model is shown in Figure 4.1. It was found that there were 11 major determinants that influence the success of developmental training support for entrepreneurs in South Africa. These include 10 independent variables, namely: Entrepreneurial Culture, Socio-Emotional Attributes,

Acquiring Business Skills, Industry Experience, Opportunity Identification, Regulatory Barriers, Economic Barriers, Outside Advice, Formal Training and Informal Training. The second dependent variable, Individual Success is the eleventh variable.

The research methodology is discussed in Chapter 5 where the instruments and methods used to measure the proposed theoretical model have been defined.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION

While research on entrepreneurship is still growing and much is still needed to enact scientific change, specifically for the South African environment, further specific studies are required, taking into account South Africa's character. If South Africa is to be competitive on a global scale it is essential that a "formula" of success is found.

The aim of the study is to provide truthful knowledge on the subject which, according to Mouton (1996), requires the use of objective methods and procedures. The research methodology, therefore, has to focus on the research process and the kind of tools and procedures to be used, which include problem formulation, conceptualisation, operationalisation, sampling, data collection, data analysis and interpretation (Mouton, 1996; Mouton & Babbie, 2001). The primary objective of this study, as presented in Chapter 1, is to identify, investigate and empirically test the: major contributors to successful, developmental, training support for entrepreneurs in South Africa. The purpose of this chapter is to describe the research methodology that was followed to address this objective.

Research questions RQ₇ and RQ₈ and research objectives RO₆, RO₇ and RO₈ are addressed in this chapter. In the first part of the chapter the population studied is presented, as well as, a description of the sampling unit and sampling technique. The next section provides a holistic summary of the process of administering the questionnaire, which started with a description of the empirical study with a focus on the questionnaire as the primary research instrument and how it was developed and administered, as well as, the data collection stage. Then the operationalisation of the dependent and independent variables is addressed, as well as, the validity and reliability of the data. The final part of the chapter contains a description of the Structural Equation Modelling (SEM) technique that was used to test the proposed theoretical model, shown in Figure 4.1 of the previous chapter.

Research is seen as valid when dependable data are gathered by conducting practices professionally and according to standards of scientific method (Blumberg, Cooper & Schindler, 200). Collins and Hussey (2003) state that the purpose of the research relates to a process of enquiry and investigation using data which are systematically and methodically collected in an attempt to increase research knowledge.

5.2 RESEARCH DESIGN

A research design is defined as a set of guidelines and instructions that need to be followed in addressing the research problem (Mouton, 1996), which implies that the nature of the underlying research problem is likely to play a significant role in determining the specific design. The research design also needs to focus on the end-product (Mouton & Babbie, 2001; Zikmund, 2003) and, therefore, needs to specify the methods and procedures for collecting and analysing the needed information clearly. The research design can therefore be described as the science of planning procedures for conducting research (Collins & Hussey, 2003) with the objective of maximising the validity of the eventual results or findings (Mouton, 1996; Collins & Hussey, 2003).

The research process involves the application of various methods and techniques in order to create knowledge by using objective methods and procedures (Welman & Kruger, 2001). The research process can be described as a sequential process to discover answers to questions through the application of scientific procedures (Blumberg et al., 2008). Each research study has its own purpose, but the objectives of the research are likely to fall under the following categories (Blumberg et al., 2008):

- To gain knowledge of, or to achieve new insights into, a phenomenon (exploratory or formulated research studies);
- To portray accurately the characteristics of a particular individual, situation or a group (descriptive research studies);
- To determine the frequency with which an event occurs or with what other event it is associated with (diagnostic research studies); and
- To test a hypothesis of a casual relationship between variables (hypothesis-testing research studies).

The normal process under such a paradigm is to study the literature to establish an appropriate theory or theoretical model and construct and test a hypothesis, which is presented in Chapters 2 to 4. The ultimate aim of such a research process is according to Collins and Hussey (2003) to quantify and assess the relationship between the independent variable/s and the dependent or outcome variable in a population. According to Leedy (1997) it usually ends with confirmation or disconfirmation of the hypothesis that were tested.

Quantitative research designs are either descriptive or experimental. A descriptive study establishes only associations between variables and usually requires a sample collection of hundreds or even thousands of subjects for an accurate estimate of the relationship between variables (Collins & Hussey, 2003). An experiment on the other hand investigates causality, with the identification of cause-and-effect relationships among variables the main goal of causal research (Zikmund, 2003). For an accurate estimate of the relationship between variables an experiment may only need tens of subjects (Collins & Hussey, 2003). The quantitative research design associated with this study can be classified as an explanatory study as the sample collection amounted to 332 respondents.

5.3 QUANTITATIVE TESTING AND ANALYSIS

The process of a theoretical model building study can be categorised into the following elements (Buys & Mbewana, 2006):

- Data collection;
- Data analysis; and
- Inference of new hypothesis.

Data collection, the first stage of the process, is described in more detail in this chapter while the analysis of the data is discussed in Chapter 6.

A positivistic research paradigm was applied to this research, which is described by Collins and Hussey (2003) as a quantitative, objectivist, scientific, experimentalist or traditionalist research paradigm. The following are the key aspects of such a positivistic paradigm:

- It uses large samples and tends to produce quantitative data which are highly specific and precise (Collins & Hussey, 2003);
- It attempts to develop and test theories and models (Welman & Kruger, 2001); and
- It seeks explanations and predictions, with the intent to establish, confirm, or validate relationships and to develop generalisations that contribute to theory (Leedy, 1997).

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5.3.1 Population studied and sampling frame

The term “population” refers to a body of participants carefully selected to represent the population required for the study (Collins & Hussey, 2003; Blumberg et al., 2008). Therefore, the population can be defined as a collection of all the observations of a random variable being studied and about which one is trying to draw conclusions in practice (Collins & Hussey, 2003). Wagner (2003) emphasises that the population

must be defined in very specific terms to include only those units with characteristics that are relevant to the problem. According to Mouton and Babbie (2001) the unit of analysis refers to what object, phenomenon, entity, etc. of the study researcher is investigating. The population may refer to a body of people or any other collection of items under consideration for research purposes (Collins & Hussey, 2003). Once the target population has been defined, it must be made operational through the construction of the sampling frame, which refers to the set of all cases from which the sample will actually be selected (Mouton, 1996). In this regard, Mouton (1996) suggests that a sampling frame be constructed by defining a rule that will define membership.

According to Shah and Goldstein (2005), a structural equation model is a hypothesis about the structure of relationships between manifest and latent variables in a specific population, with a population that should be explicitly identified. It also contributes to population validity, which refers to the degree to which the findings obtained for a sample may be generalised to the total population to which the research hypothesis applies (Welman & Kruger, 2001).

Advance knowledge of population characteristics, such as the availability of a list of population members, is an important criterion in sample design (Leedy, 1997; Zikmund, 2003). This is especially true when the population element is defined by experience in performing a specific job or task (Zikmund, 2003). This study was concerned with the specialised field of entrepreneurship, which required the input of South African business owners.

The estimation of this study's population was influenced by the following considerations:

- Research hypothesis;
- The variance within the population; and
- The sampling technique.

Thus, for this research, the population identified for the study was all South African business owners (Table 5.1). A business owner in the South African environment was considered to be an entrepreneur.

Table 5.1: Sampling frame

Source	Rules for inclusion
South African business owners	Only owners of South African businesses were allowed to participate.

Source: Researcher's own construction, 2017

5.3.2 Sampling and sample unit

Sampling involves the random selection of elements from a target population (Mouton, 1996). A sample can be described as a subset of a population or a group of participants carefully selected to represent the population or the main interest of the study (Collins & Hussey, 2003). The main aim of sampling is to produce a representative selection of the population elements (Mouton, 1996). In this regard Mouton and Babbie (2001) also suggest that a sample of individuals from a population must contain essentially the same variations that exist in the population. According to Collins and Hussey (2003) a good sample must be unbiased, chosen at random, and large enough to satisfy the needs of the investigation being undertaken.

Sampling can be divided into two categories: non-probability sampling and probability sampling (Zikmund, 2003). Probability sampling allows the researcher to select each segment of the population to be presented in the sample in advance (Leedy, 1997; Zikmund, 2003). Non-probability sampling occurs when the sample units are selected on the basis of personal judgement (Zikmund, 2003). Mouton and Babbie (2001), as well as Shah and Goldstein (2005) also explain that it is sometimes appropriate for the researcher to select a sample on the basis of his/her own knowledge of the population, its elements, and the purpose or objectives of the study.

The sampling unit in this study refers to the entrepreneurial person who founded or owns an operational business in South Africa. Random (probability) sampling was applied to this research as it is appropriate when the members of a special population are difficult to locate (Mouton & Babbie, 2001). Random sampling is used on those occasions when processing the entire dataset is not necessary and is considered too expensive in terms of response time or resource usage. The savings generated by sampling might be the result of reductions in the cost (in response time or resources,

CPU and I/O time) in retrieving the data from the DBMS. Retrieval costs are significant when dealing with large administrative or scientific databases (Olken, 1986). In addition, Olken (1986) adds that savings might result from reductions in the cost of subsequent “post processing” of the sample. Thus this method was considered appropriate considering the scope, diversity and location of South African business owners. Questionnaires were electronically distributed to as many South African business owners as possible.

5.3.3 Sample size

The sample size provides the basis for the estimation of sample error and affects the likelihood of the model being estimated correctly (Hair et al., 2006). As with any statistical method, the critical question is how large the sample needs to be. Sample size depends largely on the degree to which the sample population approximates the qualities and characteristics of the general population (Leedy, 1997). According to Shah and Goldstein (2005) adequacy of sample size also has a significant impact on the reliability of parameter estimates, model fit and statistical power. From the literature it is also evident that the positivistic research paradigm that was applied to this research often uses large samples (Collins & Hussey, 2003). The process of structural equation analysis, the method of data analysis chosen for this research, also relies on tests which are sensitive to the sample size and the magnitude of differences in covariance matrices and requires that the sample size should not be too small.

From the literature, it is thus evident that a reasonable sample size was required for this research, with various writers indicating the number of sample units that are required for Structural Equation Modelling (SEM). Although examples of sample sizes between 100 and 200 are reported (Antoncic, 2006), sample sizes commonly vary from 200 to 400 for models with 10 to 15 indicators (Hair et al., 2006). According to Barret (2007) sample sizes of less than 200 are not recommended for SEM.

5.4 THE EMPIRICAL STUDY

5.4.1 Method of data collection

According to Mouton (1996) the most common method of generating primary data about the variables being studied is through surveys, which, according to Mouton and Babbie (2001), are mainly used in studies that have individual people as the unit of analysis. Mouton and Babbie (2001), as well as, Welman and Kruger (2001) agree that surveys are also excellent vehicles for measuring attitudes and orientation in a large population. Surveys are described by Zikmund (2003) as a research technique in which information is gathered from a sample by using a questionnaire. Questionnaires are relatively cheap, less time-consuming, and allow the researcher to take very large samples (Collins & Hussey, 2003) and, therefore, are a popular method of collecting data.

The internet is increasingly being considered as a medium to survey the public (Couper, 2000). Questionnaires have become popular in the growing research on e-mail survey methodology (Akl, Maroun, Klocke, Montori & Schunemann, 2005; Ranchop & Zhou, 2001). E-mail surveying has been used by researchers in various fields such as management (Donohue & Fox, 2000), policy research, education (Fraze, Hardin, Brashears, Smith & Lockaby, 2002), market research (Rabchhod & Zhou, 2001; Smee & Brenna, 2000) and telecommunications (Shermis & Lombard, 1999).

The advantages of using the internet are inherent in the cost savings by eliminating printing of instruments, as well as, the time and cost savings associated with having data returned already in an electronic format (Cobanoglu, Warde & Moreo, 2001). Since most online survey software prompts respondents to complete missed questions, this feature minimises researchers' concerns for missing data (Cobanoglu et al., 2001).

For this research, an electronic online survey technique was used to collect the raw data based on the factors influencing the perceived success of developmental training support for entrepreneurs in South Africa. A self-administered questionnaire was carefully designed and developed from the evidence provided in the literature in

Chapters 2 and 3, which is common to a positivistic research paradigm according to Collins and Hussey (2003). The results obtained from the returned questionnaires were then analysed statistically by means of Structural Equation Modelling (SEM).

The sample collection for this research amounted to 332 respondents who were geographically dispersed across South Africa.

5.4.2 The research instrument or questionnaire

The purpose of the measuring instrument for this study was to source primary data to test the hypothesised relationships in the conceptual model and to identify the major contributors to successful, developmental training support for entrepreneurs in South Africa.

A questionnaire is described by Collins and Hussey (2003) as a list of carefully structured questions, chosen after considerable testing, with a view to selecting reliable responses from a chosen sample. As such the questionnaire may be viewed as a tool that can probe internal thoughts and perceptions. In this regard, Leedy (1997) also highlights the questionnaire as a common tool for observing data that is beyond the physical reach of the observer. Leedy (1997) posted four practical guidelines for the use of questionnaires to collect data:

- The language must be unmistakably clear;
- The questionnaire should be designed to fulfil a specific objective;
- Proper planning is essential and the importance of the research and its potential value to the respondents must be highlighted; and
- The initial covering letter is extremely important in giving clear instructions and clearly acknowledging and dealing with any concerns respondents may have.

Based on the literature study presented in Chapters 2 and 3, a structured questionnaire was developed to source the primary data to test the hypothesised relationships depicted in the theoretical model and, consequently, to identify the factors influencing the perceived success of developmental training support for entrepreneurs in South Africa. Although self-administered, structured questionnaires are common to a positivistic research paradigm (Collins & Hussey, 2003), they do pose a challenge because they rely on the clarity of the written word. The questions

were presented in a seven-point, Likert scale format, to minimise inaccurate answers and to ensure the questionnaire collected only the relevant information needed to address the research problem.

The published online questionnaire consisted of an introductory cover letter (see Appendix B) and the survey questions (see Appendix C). The covering letter introduced the researcher and provided details concerning the purpose of the study and the type of information that was required. The first question was used to qualify whether the respondent was a South African business owner or not. Where a negative response was given, the survey was immediately terminated. In this way only South African business owners were able to proceed and complete the full questionnaire. In addition, assurance of confidentiality was provided. The covering letter also included the emblems of the Nelson Mandela Metropolitan University and NMMU Business School.

5.4.3 Questionnaire design (and qualifying questions)

In order to ensure that the research objectives could be met, each qualifying question needed was carefully constructed. The wording of the qualifying questions was based on the design methodology provided by Leedy and Ormrod (2005), which highlights the following key issues pertaining to questionnaire design:

- Concise language must be used;
- Do not pose unrealistic demands to respondents;
- Each question should only address one topic;
- Questions should have no escape route (e.g. “don’t know” or “no comment”);
- Each question should be polite;
- Questions should be straight forward and be safeguarded against double meaning;
- There must be an appropriate question order;
- The layout must be easy to follow;
- Clear instructions must be given; and
- The questionnaire must be tested first.

In addition, Mouton and Babbie (2001) emphasise that the researcher must make sure that respondents are competent to answer the questions. Since many of the respondents in this research were business owners who may not be familiar with certain theoretical concepts, special care was taken to avoid the excessive use of specialist language or complex terms. Welman and Kruger (2001) stress that it is important that most of the respondents understand the questions in the same way, which is very relevant to this research where the studied population consisted of various elements. Special care was also taken to avoid leading or value-laden questions, as highlighted by Welman and Kruger (2001).

The final questionnaire consisted of 84 statements or items linked to the variables that influence the success of developmental training support for entrepreneurs in South Africa as described in Chapter 4. A seven-point, Likert-type interval scale was used and respondents were requested to indicate the extent of their agreement or disagreement with each statement, ranging from 1 (strongly agree) to 7 (strongly disagree). The Likert scale is an attitude scale that is based on different assumptions about the relationship between individuals, their attitudes and their responses to the items (Welman & Kruger, 2001), and is extremely popular for measuring attitudes, according to Zikmund (2003) because the method is simple to administer. Interval measurement scales, according to Leedy and Ormrod (2005), also allow for the use of more advanced statistical procedures. The decision to undertake Structural Equation Modelling (SEM) as the statistical means was therefore a predominant motivating factor for using an interval scale in this research.

5.4.4 Pilot study

Although researchers take special care in designing questionnaires, according to Mouton and Babbie (2001), there is the possibility of error so the questionnaire should be pre-tested. This can be done by means of a pilot study which is described by Zikmund (2003) as a research project that involves sampling, but the rigorous standards used to obtain precise, quantitative estimates from large, representative samples are relaxed.

A pilot survey was initially completed to test the questionnaire amongst a sample of South African business owners. One hundred and sixteen questionnaires were

distributed electronically and 25 respondents completed the pilot study. The responses were then reviewed and statistically analysed to test for ambiguously worded questions. No changes were made to the original questionnaire. The final questionnaire items were coded sequentially and then positioned randomly in the questionnaire.

5.4.5 Administration of the questionnaire

Completion of the questionnaire was done in September 2016. Subsequent to the pilot survey, targeted respondents were invited to complete the questionnaire. All questions were asked in English as this is the preferred language for conducting business in South Africa. A random approach was taken to the selection of respondents. The researcher made use of various databases of South African business owners to target the respondents. As mentioned, the first question of the questionnaire established whether the respondent was a business owner and, if not, the questionnaire ended. South African business owners who qualified to respond proceeded through the remaining questions. A database of over 200000 e-mail addresses was used as the e-mailing list. As part of the questionnaire, respondents were required to provide responses to a set of demographic questions that included:

- Geographical location of the business;
- Age of the business;
- Industry sector of the business;
- Highest level of education of the business owner;
- Family involvement in the business;
- Gender, age and ethnic group of the respondent; and
- Length of time the business owner had been running the business.

The final questionnaire was published electronically and the start page referred to the covering letter. The covering letter included details of the Nelson Mandela Metropolitan University (NMMU) and the student credentials of the researcher. An internet software programme, QuestionPro.com was used to upload the e-mail addresses, filter out discontinued e-mail addresses, schedule e-mails to the respondents and retrieve and store the results. QuestionPro.com also logged the time a respondent spent

completing the survey and allocated a unique web session code to each completed questionnaire. Some studies suggest that, in populations with access to the Internet, response rates for e-mail and web surveys are expected to match those of other survey methods (Couper, 2000). Apparent differences in response rates for online surveys and postal surveys have several causes or explanations. One explanation for the differences in response rates might be the fact that less time and attention have been devoted to developing and testing motivating tools to increase online survey response rates, compared with the time spent studying tools employed in conventional hard copy questionnaires (Couper, 2000). Special attention was given to prevent a low response rate. For the first four months, weekly reminders were sent via e-mail. The researcher also attracted respondents by calling on business owners face-to-face, with a flyer containing a link to the online survey, in order to encourage participation. A record of completed surveys was kept and the survey was closed on 24 February 2017. The minimum target of 300 completed surveys for SEM analysis was met.

5.5 OPERATIONALISATION OF VARIABLES

The central concepts in an investigation must be operationalised, regardless of the data collection technique (Mouton, 1996). According to Welman and Kruger (2001), this process of defining the constructs and their relationships must precede their empirical testing. The first step to operationalise the variables is to define them carefully in the light of the theory in which they appear (Welman & Kruger, 2001) and then to compile, for the purpose of measurement, a list of characteristics denoted by the concept (Mouton, 1996). When a measuring instrument is then constructed the items or questions are regarded as indicators of the list of denoted characteristics (Mouton, 1996). Although operational definitions do not guarantee accuracy, they do assist the researcher to identify an abstract construct by means of concrete variables.

Questionnaires represent a common and concrete illustration of the variable operationalisation process and the questions themselves serve as the operationalisation process (Mouton & Babbie, 2001). A generalised procedure for operationalisation involves:

- Identify the concept to measure;
- Determine one or more quantitative measurement of the concept; and

- Determine the method for obtaining this measurement.

5.5.1 Operationalisation of the dependent variables

5.5.1.1 Perceived global success as an entrepreneur

For the purposes of this study, the perceived success of a global entrepreneur relates to the positive impact an entrepreneur has had on creating employment, uplifting the well-being of communities and being willing to act as a role model for future entrepreneurs. In addition, the profitability of the entrepreneur's business has contributed to the growth of the country's economy (by paying taxes) and has improved the competitiveness and innovativeness of the industry in which the entrepreneur actively operates.

5.5.1.2 Perceived individual success as an entrepreneur

For the purposes of this study, the perceived success of an individual entrepreneur relates to whether the entrepreneur is able to provide financially for his/her family, retire sooner than if employed elsewhere and, therefore, has a better control over his/her financial destiny. In addition, the entrepreneur will enjoy a better lifestyle and have more free time than if employed elsewhere, allowing more free time to mentor other entrepreneurs and open additional ventures. Lastly, the entrepreneur may be in a position to pass down the business to family members.

5.5.2 Operationalisation of the independent variables

5.5.2.1 Entrepreneurial culture

For the purpose of this study the term "entrepreneurial culture" can be defined as an individual's perception of their social environment. This would include cultural values and cultural practices or norms, both within the family home environment and the

culture embodied in a country. Family home culture should encourage business talk, which positively encourages new venture creation as a career choice. Family culture also refers to the independence experienced by an individual who has started a business.

5.5.2.2 Socio-emotional attributes

For the purpose of this study, the term “socio-emotional attributes” refers to a distinct set of skills that enable individuals to navigate interpersonal and social situations effectively. These skills encompass behaviours and attitudes that are consistent patterns of thoughts, feelings and conduct, such as commitment, discipline, or the ability to work and lead a team. They also include personality traits such as self-confidence, perseverance and emotional stability. An individual’s willingness to take risks, seek family advice before making decisions, creatively solve problems, as well as, to be a self-starter are attributes of this independent variable.

5.5.2.3 Acquiring basic business skills

For the purpose of this study, “business skills” refers to the completion of a business plan, communication skills, general management skills, financial management skills, marketing skills, operational skills, HR skills and legal skills. In addition, the acquisition of business skills may also be of a softer nature, typically learnt in short courses or through learning from mentors. Innovation and creativity, new idea-generation and practical action are business skills essential to emerging entrepreneurs.

5.5.2.4 Industry experience

For the purpose of this study, the term “industry experience” involves interactions with buyers, suppliers, distributors, and other stakeholders, which produce knowledge about opportunities, threats, competitive conditions, and Government regulations that are unique to each industry. It also refers to goodwill created by the individual, which may be used to his/her advantage when starting a new venture.

5.5.2.5 Opportunity identification

For the purposes of this study, the term “opportunity identification” is essential to origination of start-up businesses. The identification of opportunities may be a natural occurrence for an entrepreneur or may be something which has been taught. The entrepreneur typically uses industry skills and experience to identify and capitalise on a profitable entrepreneurial venture.

5.5.2.6 Regulatory barriers

For the purposes of this study, the term “regulatory barriers” refers to the negative impact Governmental “red-tape” might have on entrepreneurial activity. It also refers to restrictive or hindering laws made by a ruling Government, making it difficult to start a new venture. These could be in the form of over-protective labour laws, where minimum wages prevent employment or the loss of skilled workers, referred to as “brain-drain”.

5.5.2.7 Economic barriers

For the purposes of this study, the term “economic barriers” refers to preventive barriers to entrepreneurship, such as inflation, as well as the negative effect of an unstable exchange rate, limited access to start-up capital and the high cost of starting a new business venture. Poor infrastructure and the lack of a conducive entrepreneurial environment makes conducting business difficult. The definition also refers to the negative effect crime has on entrepreneurs.

5.5.2.8 Outside advice

For the purposes of this study, the term “outside advice” refers to advice received by business owners from within their social network, which may be from friends and family. Outside advice may also be in the form of advice from mentors, professional business consultants, competitors, suppliers and customers. Advice received may lead to business owners’ recognising and capitalising on a business opportunity.

5.5.2.9 Formal training

For the purposes of this study, the term “formal training” refers to education regarding entrepreneurship received from formal streams such as schooling, university or colleges. This variable also refers to the level of education a business owner may have received. The importance of the facilitator’s attitude and influence on the business owner is stressed.

5.5.2.10 Informal training

For the purposes of this study, the term “informal training” refers to the education received by a business owner from his/her home environment, which may have included role models and discussions with others about business related matters. Informal training may also have been received through reading business journals and from casual work performed in the family business or elsewhere.

5.6 VALIDITY AND RELIABILITY OF THE DATA

According to Boomsma (2000), it is important for the researcher to know how well the model fits the sample data, and that there is not too large a discrepancy between the theoretical and the observed relations. In this regard, Collins and Hussey (2003) highlighted two aspects with regard to the credibility of research findings, namely validity and reliability, and it is important that the study and its subsequent results conform to the requirements of validity and reliability.

5.6.1 Validity of the data

Zikmund (2003) describes validity as the ability of a measuring instrument to measure what it is intended to measure and, according to Mouton (1996), should be viewed as a synonym for best approximation of the truth. According to Collins and Hussey (2003), a test is therefore valid if it demonstrates or measures what the researcher thinks or claims it does, or when the research findings accurately represent what is really happening in the situation. For an empirical measure to be valid it must adequately reflect the real meaning of the concept under consideration (Mouton &

Babbie, 2001), which, according to Mouton (1996), depends on the quality of the elements of knowledge (data, statements, hypotheses, etc.). This is also key to a positivistic paradigm which focuses on the precision of measurement and where there is always a danger that the measurement does not reflect the phenomena the researcher claims to be investigating (Collins & Hussey, 2003).

Collins and Hussey (2003) pose the following questions in terms of questionnaire validity:

- Does the questionnaire measure what it was intended to measure?
- Did the study reveal accuracy because the requirements of valid research were satisfied?

To a considerable extent, the researcher determines the validity of the data, as the original definition of the construct is proposed by the researcher and, therefore, must also be matched to the selected indicators or measurements (Hair et al., 2006).

5.6.2 Reliability of the data

Reliability applies to a measurement when similar or consistent results are obtained over time and across situations (Zikmund, 2003). According to Mouton and Babbie (2001) the chosen technique, applied repeatedly to the same object, would therefore need to yield the same result each time. This requirement of consistent performance is also highlighted by Mouton (1996) and Welman and Kruger (2001), who refer to reliability as the extent to which the obtained scores may be generalised to different measuring occasions and forms of measurement. Mouton (1996) also highlighted the following possible sources of error during data collection which might affect the reliability of the data:

- The effects of the researcher;
- The effect of the research participants or individual respondents; and
- The research context or circumstances under which the research was conducted.

For this research, special attention was given to the formulation of measurable questions, based on the literature study in Chapters 2 and 3, which were relevant in

the formulation of the theoretical model of the perceived success of developmental training support for entrepreneurs in South Africa.

5.6.3 Cronbach's alpha measurement

According to Tavakol and Dennick (2011) it is possible to measure the reliability of an instrument objectively by calculating the Cronbach's alpha coefficient, which was also used in this research to assess the degree of reliability of the proposed variables in the theoretical model. In essence Cronbach's alpha provides a measure of internal consistency. Tavakol and Dennick (2011) describe internal consistency as the extent to which all the items in a test measure the same concept or construct, and is therefore concerned with the inter-relatedness of a sample of test items. The reliability coefficient is expressed as a number between 0 and 1, with different reports about the acceptable values of alpha. These values range from 0.7 to 0.95, with a maximum alpha value of 0.90 that has been recommended (Hair et al., 2006; Tavakol & Dennick, 2011).

5.7 METHOD OF DATA ANALYSIS

After the reliability of the measuring instrument has been confirmed, the theoretical model can be subjected to statistical testing. According to Leedy (1997), inferential statistics, which is the whole logic of hypothesis testing, is concerned with the kinds of inferences that can be made when generalising from the data (for example from sample data to the entire or target population). If the research indeed finds a relationship between the variables appearing in a research hypothesis, it is expected from the research hypothesis and chosen statistical method/s to bring this relationship to light, i.e. the researcher wishes to make statistically valid conclusions (Welman & Kruger, 2001). In this regard, Shah and Goldstein (2005) also highlighted that causal interpretation must be based on the theoretical grounding of, and empirical support for, a model.

5.7.1 The technique of Structural Equation Modelling (SEM)

In Chapter 1, the research methodology approach was discussed and Structural Equation Modelling (SEM) was referred to as the appropriate method to be used in this study for the assessment of the hypothesised relationships in the theoretical model presented in Chapter 4. This section describes SEM and the process to assess empirically the proposed theoretical model of the perceived success of developmental training support for entrepreneurs in South Africa.

Structural Equation Modelling is a technique used to specify, estimate, and evaluate models of linear relationships among a set of observed variables (also called manifest variables) and unobserved variables (also called latent variables) that can either be independent (exogenous) or dependent (endogenous) in nature (Lee & Zhu, 2000; Shah & Goldstein, 2005). According to Savalei and Bentler (2010), SEM is especially appropriate for testing theory, and incorporates multiple, independent and dependent variables, as well as, hypothetical, latent constructs that clusters of observed variables might represent. In general, SEM consists of two components. The first component is the structural model showing potential causal dependencies between dependent and independent variables. The second component is the measurement model showing the relationships between the latent variables and their indicators.

According to Savalei and Bentler (2010) in most substantive research, it is important to establish an appropriate model to evaluate such a series of simultaneous hypothesis about the effects of latent variables and manifest variables on the other variables, and simultaneously take the measurement errors into account. In this regard, SEM enables the researcher to accommodate these multiple, inter-related, dependence relationships in a single model (Hair et al., 2006). According to these authors, as well as Shah and Goldstein (2005), SEM is well recognised as the preferred data analysis method to serve this purpose. It is also described by Hair et al. (2006) as a rigorous statistical technique which enables the researcher to model complex relationships that are not possible with any other multivariate techniques.

5.7.2 The role of theory in Structural Equation Modelling

Two basic conditions are suggested for the successful application of SEM. The first condition is that the model must have a sound theoretical foundation and, secondly,

that a sound modelling strategy must be adopted (Hair, Anderson, Tatham & Black, 1998).

In the first instance, a detailed and accurate questionnaire had to be developed to provide a theoretical foundation for the variables to measure the theoretical constructs of the model. The theoretical justification for the model was obtained through an extensive survey of the relevant literature which, according to Hair et al. (1998), is the platform that reinforces the method of SEM. According to Hair et al. (2006), a theoretical model is especially needed when modifying the model, and serves the purpose of directing the estimation development. As a result of the flexibility of SEM, there is a relatively high risk of over-fitting the model, or developing a model which can be generalised (Hair et al., 1998). As a result, SEM is a confirmatory system, which is guided more by the theory than by empirical results. Hair et al. (1998) also suggest that although no limit is placed on the number of variables in the model, interpretation becomes a challenge if more than 20 concepts are tested. Researchers, therefore, should look at the practical limitations of SEM and ensure that a balance is achieved.

The development of a modelling strategy, as indicated above, is the second condition for the successful application of SEM. Hair et al. (1998) argue that there is no single correct method of applying multivariate techniques, and that the application is rather dependent upon the modelling strategy. The modelling strategy involves the formulation of the objectives of the research and then applying the appropriate method in the most suitable manner. In this regard, three strategies are highlighted by Hair et al. (1998) namely: the confirmatory modelling strategy, the competing models strategy, and the model development strategy. It is widely acknowledged that the confirmatory modelling strategy is the most direct application of SEM. When using this strategy, the researcher specifies a single model and SEM is then used to assess how well the model fits the data (Hair et al., 2006). For the purpose of this study, a confirmatory modelling strategy was adopted. As such, the objective of the study was to apply SEM to test and, potentially, confirm the factors identified as influencing the perceived success of developmental training support for entrepreneurs in South Africa.

Structural Equation Modelling (SEM) provides the researcher with the ability to accommodate multiple, interrelated, dependence relationships in a single model (Hair et al., 2006). SEM allows for the examination of a set of relationships between one or

more independent variables (IVs), either continuous or discrete, and of one or more dependent variables (DVs), either continuous or discrete. Both IVs and DVs can be either measured variables (directly observed) or latent variables (unobserved, not directly observed) (Hair et al., 2006). In conclusion, SEM can be used as a tool for causal modelling, causal analysis, simultaneous equation modelling, analysis of covariance structures, path analysis, or confirmatory factor analysis modelling (Garson, 2012).

5.7.3 The stages of a Structural Equation Modelling assessment

Hair et al. (1998) proposed the following seven stages in analysing a model using SEM:

- Stage 1: Develop a theoretical model.
- Stage 2: Construct a path diagram of causal relationships.
- Stage 3: Convert the path diagram into a set of structural equations and measurement models.
- Stage 4: Choose the input matrix type and estimate the proposed model.
- Stage 5: Assess the identification of model equations.
- Stage 6: Evaluate the results for goodness-of-fit.
- Stage 7: Make the indicated modifications to the model, if theoretically justified.

The seven stages of SEM are briefly discussed below before showing how they were implemented in the research process. In addition the implementation of each stage in the current study will be described:

Stage 1: Develop a theoretical model

The process of developing a theoretical model in this study commenced by identifying the factors influencing the dependent variable, by using the literature review and then by using structural equation modelling to test the propositions. Each variable in the model was conceptualised as a latent variable and then measured by multiple indicators (Garson, 2008). SEM is “based on causal relationships in which the change

in one variable is assumed to result in a change in another variable” (Hair et al., 1998). The theoretical justification of the model to be investigated is the foundation that underpins the method of structural equation analysis (Venter, 2002).

The theoretical model presented in Chapter 4 was subjected to empirical testing. The numerous factors influencing the dependent variable, namely: perceived global success as an entrepreneur, were presented and hypothesised influences were suggested.

Stage 2: Construct a path diagram of causal relationships

According to Hair et al. (2006), a path diagram is a visual presentation that depicts a dependence relationship between two constructs, i.e. the impact of one construct on another construct. SEM alone cannot establish causality (Hair et al., 2006) without path diagrams that are especially helpful in depicting a series of causal relationships (Hair et al., 1998). Hair et al. (1998) indicate that a path diagram enables the researcher not only to present the predictive relationships amongst constructs (i.e. the independent-dependent variable relationship), but also the associative relationship (correlations) amongst constructs and even indicators. In the process of constructing a path diagram of causal relationships, the hypothesised relationships amongst the constructs included in the model under investigation are portrayed.

In a path diagram a straight arrow depicts a relationship between one construct and another, while a curved arrow denotes a correlation between constructs. A straight arrow with a head on either side indicates a reciprocal relationship between constructs. A variable that is not predicted or “caused” by another variable in the model is referred to as an exogenous construct or independent variable, with no arrows pointing to these constructs from other constructs (Lee & Zhu, 2000). A variable that is predicted or caused by any other construct in the model is referred to as an endogenous construct or dependent variable. Intervening variables are described by Garson (2008) as variables which are both effects of other exogenous or intervening variables and are causes of other intervening and dependent variables. The path diagrams proposed for this study will be presented in Chapter 6.

Stage 3: Convert the path diagram into a set of structural equations and measurement models

Once the path diagram has been constructed, it is necessary to specify the model in more formal terms by means of sets of equations. These equations define the structural linking constructs, the measurement model, and a set of matrices that indicate the hypothesised correlations between the constructs or variables. The objective is to link operational definitions of constructs mathematically to the theory for the appropriate empirical test (Hair et al., 1998).

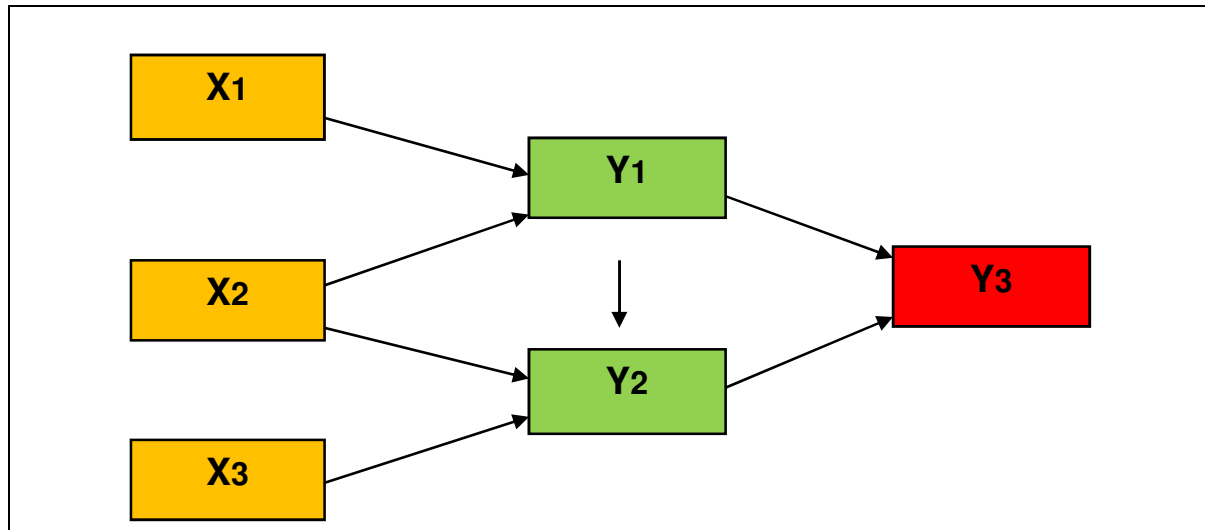
A conventional model in SEM commonly comprises two sub-models, namely the measurement model and the structural model (Hair et al., 2006). The measurement model involves assigning indicator variables to the construct they represent, in other words, which variables measure which latent construct. The structural model involves assigning relationships between constructs based on the proposed theoretical model (Hair et al., 2006). The process is then followed by specifying a set of matrices indicating any hypothesised correlations amongst constructs or variables. Examples of path diagrams to be converted into structural equations are presented in Figures 5.1 and 5.2 below.

In order to apply appropriate empirical tests, Hair et al. (2006) indicate further that the objective is to link the operational definitions to the theory. In the structural model, each hypothesised correlation effect of an exogenous construct on an endogenous construct, or an endogenous construct on another endogenous construct, is expressed as an equation. For each equation, a structural coefficient (b) is then estimated and an error term (ϵ) is included to provide for the sum of the effects of specification and random selection error. The process of equation formulation is illustrated in Figure 5.2.

From Figure 5.1 and 5.2, it can be seen that X_1 and X_2 have an effect on the endogenous variable Y_1 , and that provision is made for the measurement and specification error ϵ_1 of the magnitude B_1 and B_2 . The endogenous variable Y_2 , in turn, is influenced (coefficients b_3 and b_4) by the exogenous variables X_2 and X_3 , and the endogenous variable Y_1 , whilst provision is made for the measurement and specification error ϵ_2 . The endogenous variable Y_3 is influenced by endogenous

variables Y1 and Y2, to the extent of B6 and B7, with a measurement error term ϵ_3 (Hair et al., 1998).

Figure 5.1: Path diagram example indicating structural relationships



Source: Adapted from Hair et al., 1998

Figure 5.2: Structural equation example

	Endogenous	=	Exogenous	+	Error	
	Exogenous		+	Error		
Y_1		=	$b_1X_1 + b_2X_2$			
Y_2		=	$b_3X_2 + b_4X_3$			+
Y_3		=	$b_6Y_1 + b_7Y_2$			+ ϵ_3

Source: Adapted from Hair et al., 1998

Stage 4: Choose the input matrix type and estimate the proposed model

According to Hair et al. (2006), SEM uses either a covariance or a correlation matrix as its input matrix. In the case of confirmatory factor analysis, Hair et al. (2006) indicate

that either type of input matrix can be used. However, as the objective is an exploration of the pattern of relationships across respondents, correlations are the preferred input data type which then activates the correlation of the covariance matrix of all the indicators in the model (Hair et al., 2006). The measurement model then determines which manifest variables indicators correspond with each latent construct. In doing so, the structural coefficients will then estimate the relationships between the latent variables (Venter, 2002).

After the structural and measurement models have been specified and the input data type has been selected, the computer software application for estimation is then selected. For the purpose of this study, the software application, LISREL version 8.8 (Jöreskog & Sörborn, 2006), was used. Hair et al. (1998) state that, because of the estimation procedure, constructs must be made scale-invariant in order for the indicators to be standardised to compare the constructs. Two approaches are used for this procedure: firstly, to set one of the loadings in each construct to the fixed value of 1.0 and, secondly, to estimate the construct variance directly. According to Jöreskog and Sörborn (2006), either approach results in the same estimates, but the second approach is recommended for purposes of testing theory.

Stage 5: Assessing the identification of model equations

During this stage, the researcher assesses whether or not the software application has produced any meaningless or illogical results in the identification of the structural model (Hair et al., 2006). According to Venter (2002), typical symptoms of model identification problems are: very large standard errors for one or more coefficients, the inability of the software application to invert the information matrix, unreasonable and impossible estimates such as negative error variances, or high correlations of approximately 0.90 or greater amongst estimated coefficients. If such identification problems occur, Hair et al. (2006) recommend that researchers should look at the following three main causes first:

- There could be a large number of estimated coefficients relative to the number of variances or correlations which are indicated by a small number of degrees of freedom;

- The use of reciprocal effects (two-way causal arrows between two constructs); and
- Failure to fix the scale of a construct.

The solution to an identification problem is to eliminate some of the estimated coefficients, which can be achieved by imposing more constraints on the model. In this regard, Hair et al. (1998) propose that a structured process be followed by adding more constraints and deleting paths from the diagram until the problem is rectified. In this way attempts are made to achieve an over-identified model that has degrees of freedom available to provide a better estimation of the true causal relationships (Hair et al., 1998).

Stage 6: Evaluating the results for goodness-of-fit

The first step when evaluating the empirical results is to determine offending estimates (Hair et al., 1998). After it has been established that the model provides acceptable estimates, the goodness-of-fit has to be established for the overall model and then separately for the measurement and structural models. According to Venter (2002) and Hooper, Coughlan and Mullen (2008), the evaluation of the goodness-to-fit results is an assessment of the extent to which the data and the theoretical model meet the assumptions of SEM. These assumptions include that the observations were independent, that a random sampling of respondents was conducted, and that all relationships were linear.

Three types of goodness-of-fit measures are highlighted by Hair et al. (2006), namely: 1) absolute fit measures, 2) incremental fit measures, and 3) parsimonious fit measures. Absolute fit measures assess the overall model fit (both structural and measurement models collectively) with no adjustment for the degree of over-fitting that might occur. Incremental fit measures compare the proposed model to another model specified by the researcher. Parsimonious fit measures adjust the measures of fit to provide comparisons between models with differing numbers of estimated coefficients, in order to determine the amount of fit by the estimated coefficients (Hair et al., 2006).

During this evaluation stage, an assessment is made of the overall fit of the proposed model of factors that influence perceived global success as an entrepreneur. Chapter

6 provides an assessment for this purpose and will reflect the results of the absolute fit measures based on the Robust Maximum Likelihood estimation method. This choice implies that the purpose of the statistical analyses was focused on assessing relationships rather than to obtain a good fit.

One way to establish both measurement and structural model validity is goodness of fit. In most instances, according to Hair et al. (2006), the closer the structural model's goodness of fit comes to the measurement model, the better the structural model fit. Criteria commonly used for model fit are the chi-squared test, the goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), and the root mean square residual (RMR) (Hair et al., 2006; Hooper et al., 2008).

Stage 7: Make the indicated modifications to the model, if theoretically justified

Hair et al. (1998) suggested that during this final stage, the results should be examined for their correspondence to the proposed theory. The objective of this examination, according to Cooper and Schindler (2007), should be to maximise the fit and also estimate the most likely relationships between variables. In cases where modifications to the model are considered, the researcher must ensure that the principal relationships in the theory are still supported even if the modifications should be found statistically significant. Hair et al. (2006) also state the importance of modifications being theoretically justified and deemed empirically significant, and highlighted that a theoretical model is supported and considered valid to the extent to which the parameter estimates are statistically significant and in the predicted direction.

The identification of the significant causal relationships is therefore important for interpreting research results. In this regard, Hair et al. (1998) indicate that residual values greater than 2.58 are to be considered statistically significant at the 0.05 level, with a value of 3.84 or greater suggesting that a statistically significant reduction in chi-square is obtained when the coefficient is obtained.

5.8 SOFTWARE PACKAGES

Even though SEM, as a method for measuring relationships among unobserved variables, has been in existence since the early 20th Century, it was not until Bagozzie published his monograph in 1980 that researchers started to acknowledge the reliability of SEM (Shah & Goldstein, 2005). With the availability of efficient software applications, it has become a widely used multivariate method in behavioural, educational and social sciences (Lee & Zhu, 2000). Today, several software applications are available for conducting SEM analysis, each with its own fundamental requirements for conducting analysis. The first software application that was developed to solve SEM models was LISREL, with various other applications such as EQS, SAS, AMOS, RAMONA and SPSS that are also available (Shah & Goldstein, 2005).

Although the software is user-friendly and computes all the complex calculations, it still requires that the user or researcher knows the underlying assumptions of the chosen application method, as well as how to apply and report it correctly. The path diagrams in this study (as presented in Chapter 6) were converted to structural equations and measurement models by using the software application LISREL version 8.8, (Jöreskog & Sörborn, 2006).

5.9 SUMMARY

Chapter 5 provided a detailed description of all the processes to pre-test the proposed theoretical model. The population studied was described, as well as, the sampling unit and sampling technique. The variables were operationalised using clear and concise definitions. An explanation was also provided of how the measuring instrument was developed and administered, and the demographic information pertaining to respondents was summarised. The statistical analysis performed to ensure the validity and reliability of the results was also explained. Finally, a detailed description of the SEM technique used to verify the proposed theoretical model was given. Chapter 6 contains a detailed discussion of the various statistical analyses.

CHAPTER 6

EMPIRICAL RESULTS

6.1 INTRODUCTION

In Chapters 2 and 3, the literature study was discussed, and the factors believed to have an influence on the dependent variables were identified. A theoretical model was proposed in Chapter 4 and the hypothesised relationships were illustrated. In Chapter 5, the research design and methodology used to investigate empirically the factors influencing the success of developmental training support for entrepreneurs in South Africa were discussed. Chapter 6 contains the report of the empirical results, with the focus on question RQ₈ and research objective RO₈.

The research problem in Chapter 1 was stated as being: ***to identify the major contributors to developmental training support of successful entrepreneurs in South Africa.*** The dependent variable in the proposed model was *perceived global success as an entrepreneur*.

The factors influencing success as an entrepreneur were discussed in Chapter 4 and included: *Entrepreneurial culture, Socio-Emotional Attributes, Acquiring business skills, Industry experience, Opportunity identification, Regulatory barriers, Economic barriers, Outside advice, Formal training and Informal training*. The hypothesised relationships in the proposed theoretical model were presented in Chapter 4 (Figure 4.1).

The report on the empirical results in this chapter starts with demographic information followed by a discussion on exploratory factor analysis (EFA).

6.2 DEMOGRAPHIC INFORMATION

Demographic information was obtained from the last section of the questionnaire and was summarised. The data reported in Table 6.1 indicate that the demographic data represent the realised sample, as well as, the population identified for this study.

Table 6.1: Demographic information

n=332	Frequency	Percent	Valid percent	Cumulative percent
Question	How many years have you been running your own business?			
Less than a year	22	6.6	6.6	6.6
1 to 2 years	35	10.5	10.5	17.2
3 to 5 years	46	13.9	13.9	31.0
6 to 8 years	20	6.0	6.0	37.0
More than 9 years	209	63.0	63.0	100.0
Question	What geographical area is your business primarily located in?			
Eastern Cape	77	23.2	23.3	23.3
Free State	6	1.8	1.8	25.2
Gauteng	157	47.3	47.6	72.7
KwaZulu-Natal	23	6.9	7.0	79.7
Limpopo	2	0.6	0.6	80.3
Mpumalanga	3	0.9	0.9	81.2
Northern Cape	3	0.9	0.9	82.1
North West	1	0.3	0.3	82.4
Western Cape	58	17.5	17.6	100.0
Question	What industry sector does your business fall under?			
Agricultural	11	3.3	3.3	3.3
Banking	2	0.6	0.6	3.9
Chemicals	6	1.8	1.8	5.7
Construction	12	3.6	3.6	9.3
Tourism / Hospitality	10	3.0	3.0	12.3
Education	34	10.2	10.2	22.6
Energy / Water	8	2.4	2.4	25.0
Fibre processing	0	0	0	0
Finance / Accounting	13	3.9	3.9	28.9

n=332	Frequency	Percent	Valid percent	Cumulative percent
Food beverage	7	2.1	2.1	31.0
Health & Welfare	10	3.0	3.0	34.0
Insurance	5	1.5	1.5	35.5
Local government	2	0.6	0.6	36.1
Manufacturing	40	12.0	12.0	48.2
Media & comm.	25	7.5	7.5	55.7
Mining	4	1.2	1.2	56.9
Public service	3	0.9	0.9	57.8
Safety & Security	1	0.3	0.3	58.1
Services	107	32.2	32.2	90.4
Wholesale & Retail	32	9.6	9.6	100.0
Question	Is your business primarily run by family members?			
Yes	153	46.1	46.1	46.1
No	179	53.9	53.9	100.0
Question	What is your highest level of education?			
Primary school	0	0	0	0
Secondary school	53	16.0	16.0	16.0
Diploma	97	29.2	29.2	15.2
Degree	65	19.6	19.6	64.8
Honours	28	8.4	8.4	73.2
Masters	73	22.0	22.0	95.2
Doctorate	13	3.9	3.9	99.1
Professor	3	0.9	0.9	100.0
Question	What is your gender?			
Male	248	74.7	74.7	74.7
Female	84	25.3	25.3	100.0
Question	What is your ethnic group?			

n=332	Frequency	Percent	Valid percent	Cumulative percent
Black	31	9.3	9.3	9.3
Coloured	17	5.1	5.1	14.5
Indian	14	4.2	4.2	18.7
White	252	75.9	75.9	94.6
Other	9	2.7	2.7	97.3
Unknown	9	2.7	2.7	100.0
Question	What age were you when you started your first business?			
Less than 18	8	2.4	2.4	2.4
18 to 21	19	5.7	5.7	8.1
22 to 25	23	6.9	6.9	15.1
26 to 29	59	17.8	17.8	32.8
30 to 34	51	15.4	15.4	48.2
34 to 38	49	14.8	14.8	63.0
39 to 43	54	16.3	16.3	79.2
44 to 48	28	8.4	8.4	87.7
49 to 53	23	6.9	6.9	94.6
Older than 53	18	5.4	5.4	100.0
Question	What is your current age?			
No response	4	1.2	1.2	1.2
26 to 35	35	5.40	5.40	6.6
36 to 45	62	18.60	18.60	25.40
46 to 55	134	40.20	40.20	65.90
56 to 65	76	22.80	22.80	88.80
Above 65	37	11.10	11.10	100.00
Question	Which annual turnover best describes your business?			
No response	1	0.3	0.0	0.0

n=332	Frequency	Percent	Valid percent	Cumulative percent
Less than R2,000,000	99	29.8	29.8	29.8
R2,000,000 to R5,000,000	73	22.0	22.0	51.8
R5,000,000 to R10,000,000	43	13.0	13.0	64.8
R10,000,000 to R20,000,000	27	8.1	8.1	72.9
R20,000,000 to R30,000,000	13	3.9	3.9	76.8
R30,000,000 to R35,000,000	12	3.6	3.6	80.4
Greater than R35,000,000	64	19.3	19.3	99.7

Source: Researcher's own construction, 2017

The population for this study was all South African business owners. No attempt was made to segment the respondents so as to represent the demographics of South African business owners accurately. A database of e-mail addresses was used which generated random respondents who qualified as South African business owners.

Responses were received from all South African provinces, but the significant majority of the respondents came from Gauteng (47.3%), which is the province with the greatest economic activity in South Africa. The Eastern Cape responses made up 23.2% and the Western Cape 17.5%.

With the exception of the fibre processing sector recording no responses, all other sectors surveyed provided responses. Sectors with the most significant responses were the services sector (32.2%), the manufacturing sector (12.0%) and the education sector (10.2%).

Of the responses received, 63.0% have owned their family business for longer than nine years and 24.4% of the respondents started their businesses within the last five

years. The data shows that 46.1% of the responses were from family-run businesses, while 53.9% were not family-run businesses.

All respondents had an education level higher than primary school. However, 16.0% of the respondents had only secondary school as their highest level of education. Respondents with a diploma level education amounted to 29.2% and 22.0% of the respondents indicated that they had a master's degree qualification.

The majority of the completed and useable questionnaires were from males (248), representing 74.7% of the population. The ages of the respondents varied from 26 years to 79 years, with the majority being between the ages of 40 and 70 years. This age group represented 64.35% of the responding population. From the results, it was observed that 12.38% of the population was below 40 years of age, 32.41% was between 40 and 49 years of age, 38.06% was between 40 and 50 years old and 22.05% was above 60 years of age.

Previously disadvantaged South Africans, being Blacks, Coloured and Indians accounted for only 18.6% of the respondents. The majority of responses were received from Whites (75.9%). In response to the question of when business owners started their first business venture, the majority (64.30%) fell between the ages of 26 to 43 years old.

South African businesses are categorised according to turnover as follows (StatsSA, 2016): small medium enterprises (SMEs), with a turnover of R10 million per annum; qualifying small enterprises (QSEs), with a turnover of between R10 million and R30 million per annum; and Generic entities with an annual turnover of greater than R30 million (Balshaw & Goldberg, 2014). Responses received from the survey included SMEs (64.8%), QSEs (12%) and Generic accounted for 22.9%.

6.3 DISCRIMINANT VALIDITY OF THE RESEARCH INSTRUMENT

Exploratory factor analysis (EFA) was conducted to identify the potential, underlying dimensions or factors in the data and to assess the discriminant validity of the instrument used to measure these factors. The discriminant validity of the constructs in the theoretical model was confirmed and, where necessary, redefined.

After the reliability of these constructs had been confirmed by means of Cronbach's alpha coefficient analysis, the theoretical model proposed in Chapter 4 was revised to reflect only those constructs that demonstrate sufficient discriminant validity and reliability. The relationships between these factors were presented in a path diagram and converted into a structural model for which the path coefficients of the relations between the latent variables were estimated. An assessment of the goodness-of-fit of the theoretical model to the empirical data was then undertaken.

When a large set of variables is factor analysed, the method first extracts the combinations of variables displaying the greatest amount of variance and then proceeds to combinations that account for smaller amounts of variance (Hair *et al.*, 2006). In order to determine how many factors to extract, a combination of several criteria were used, namely, the Eigenvalues and the Percentage of Variance criterion (Hair *et al.*, 2006, 1998). The ability of the data to be factor analysed was assessed by using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of Sphericity. The Eigenvalues, Percentage of Variance explained, and individual factor loadings were considered to determine the number of factors to extract. The Eigenvalues (> 1.0) as presented in Table 6.3 below and Table 6.6 suggested that three factors should be used as the dependent variables and 11 factors as independent variables. All items with loadings < 0.3 were deleted and most interpretable factor structure is shown in Tables 6.2 and 6.3 below.

In order to reflect only those constructs that demonstrate sufficient discriminant validity and reliability, the theoretical model presented in Chapter 4 were revised and, where necessary, redefined. A path diagram was used to depict the relationships between these factors, which was converted into a structural model. The goodness-of-fit of the theoretical model to the empirical data was then assessed.

6.4 RELIABILITY OF THE INSTRUMENT

Reliability of a research instrument refers to the assessment of the extent to which all the items in a test measure the same concept or construct, and is thus concerned with the inter-relatedness of a sample of test items (Hair *et al.*, 2006). According to Hair *et al.* (2006) the purpose of such an assessment is to ensure that responses are not too

varied at different points in time. In Chapter 5, Cronbach’s alpha was explained as an estimate of internal consistency, which was used to assess the internal consistency of the measuring instrument in this study. In this study, a Cronbach’s alpha coefficient of greater than 0.70 was used as the norm to confirm acceptable reliability (Hair *et al.*, 2006).

6.5 DISCRIMINANT VALIDITY AND RELIABILITY

6.5.1 Dependent variables

Three factors with Eigenvalues greater than 1.0 were extracted as follows: *Global Success* (coded GLBSUCC), *Individual Success* (coded INDSUCC), and *Financial Success* (coded FINSUCC) as shown Table 6.2. The three factors explained 59.14% of the variance in the data. The Bartlett’s Test of Sphericity value of 0.000 ($p < 0.05$) and Kaiser-Meyer-Olkin (KMO) value of 0.811 ($KMO > 0.6$) also indicated that enough variance existed in the data to conduct EFA and that the data could be factor analysed.

Table 6.2: Rotated factor loadings: Dependent variables

Item	Factor		
	1	2	3
	INDSUCC	GLBSUCC	FINSUCC
INDSUCC1	0.608	0.013	-0.321
INDSUCC4	0.588	0.023	-0.014
INDSUCC3	0.526	0.101	-0.037
INDSUCC2	0.427	0.001	0.036
GLBSUCC8	-0.108	0.802	0.100
GLBSUCC7	-0.234	0.644	-0.027
GLBSUCC4	0.176	0.518	0.010
GLBSUCC5	0.271	0.484	0.011
INDSUCC6	0.128	0.457	-0.108

INDSUCC8	0.056	-0.077	-0.926
GLBSUCC6	0.032	0.112	-0.479

Table 6.2 indicates that a total of eleven items loaded on three distinct factors and this structure explains 59.14% of the variance in the data. The highlighted loadings represent significant loadings ($p \geq 0.3$). Sufficient evidence of discriminant validity was therefore provided. The next step was to describe each of the factors.

Apart from the factor GLBSUCC, the factor analysis revealed two further, dependent variables namely: *Individual Success* (INDSUCC) and *Financial Success* (FINSUCC).

Factor 1: Perceived individual success as an entrepreneur (coded INDSUCC)

The factor *Perceived Individual Success as an Entrepreneur* (INDSUCC) was measured by four items. Table 6.3 below shows the factor INDSUCC explained 35.027% of the variance in the data. The four items measuring *Perceived Individual Success as an Entrepreneur* returned a satisfactory Cronbach's alpha coefficient of 0.656 which indicated that the instrument used to measure this construct was reliable. The items INDSUCC2, INDSUCC4, INDSUCC3 and INDSUCC1 were thus regarded as measures of individual success of an entrepreneur.

Table 6.3: Factor 1 - Perceived individual success as an entrepreneur (INDSUCC)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 3.85		% of Variance: 35.03		Cronbach's alpha: 0.66
INDSUCC2	My success as an entrepreneur has given me more free time than if employed elsewhere	0.427	0.357	0.688
INDSUCC4	My success as an entrepreneur will most likely allow me to retire	0.588	0.490	0.550

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
	sooner than if I was employed elsewhere			
INDSUCC3	My success as an entrepreneur gives me more control over my financial destiny	0.526	0.501	0.590
INDSUCC1	My success as an entrepreneur has allowed me to enjoy a better lifestyle than if I were employed elsewhere	0.608	0.555	0.536

Factor 2: Perceived global success as an entrepreneur (coded GLBSUCC)

The factor *Perceived Global Success as an Entrepreneur* (GLBSUCC) was measured by five items. The factor GLBSUCC explained 14.292% of the variance in the data. *Perceived Global Success as an Entrepreneur* returned an Eigenvalue of 1.572, as recorded in Table 6.4, and an acceptable Chronbach's alpha of 0.743. The items GLBSUCC8, GLBSUCC7, GLBSUCC4, GLBSUCC5 and INDSUCC6 were thus regarded as measures of *Global Success as an Entrepreneur*.

Table 6.4: Factor 2 - Perceived global success as an entrepreneur (GLBSUCC)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 1.57		% of Variance: 14.29		Cronbach's alpha: 0.74
GBLSUCC8	My success as an entrepreneur has contributed to the innovativeness of my industry	0.802	0.575	0.672
GLBSUCC7	My success as an entrepreneur has contributed to the competitiveness of my industry	0.644	0.540	0.685

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
GLBSUCC4	My success as an entrepreneur has contributed to the wellbeing of my community	0.518	0.490	0.708
GLBSUCC5	My success as an entrepreneur has allowed others to view me as a role model	0.484	0.484	0.709
INDSUCC6	My success as an entrepreneur gives me the confidence to mentor other entrepreneurs	0.457	0.484	0.711

Factor 3: Perceived financial success as an entrepreneur (coded FINSUCC)

Predictably, based on the literature, the factor analysis supported factors one and two as the dependent variables. Factor one, as stated is *Perceived Individual Success as an Entrepreneur (INDSUCC)* and factor two *Perceived Global Success as an Entrepreneur (GLBSUCC)*. However, the data revealed a third dependent variable factor, which was given the name *Perceived Financial Success as an Entrepreneur*. This factor was coded as FINSUCC. The factor FINSUCC explains 9.818% of the variance in the data. *Perceived Financial Success as an Entrepreneur* returned an Eigenvalue of 1.080 as recorded in Table 6.5 and an acceptable Chronbach's alpha of 0.663. The items INDSUCC8 and GLBSUCC6 were thus regarded as measures of *Financial Success as an Entrepreneur*.

Table 6.5: Factor 3 - Perceived financial success as an entrepreneur (FINSUCC)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 1.08		% of Variance: 9.82		Cronbach's alpha: 0.66
INDSUCC8	My success as an entrepreneur allows me to provide financially for my household	-0.926	0.501	N/A
GLBSUCC6	My entrepreneurial business/es is/are profitable	-0.479	0.501	N/A

The exploratory factor analyses revealed that *Success as an Entrepreneur* (at least for this sample) is not a uni-dimensional construct. In fact, three clear sub-dimensions emerged, namely: *Global Success as an Entrepreneur*, *Individual Success as an Entrepreneur* and *Financial Success as an Entrepreneur*. As a result, the empirical model (see Figure 6.1) that was subjected to empirical assessment had to be modified to reflect three separate, dependent variables. In addition, a separate hypothesis had to be formulated between each one of the three dependent variables and the independent variables: *Mentorship*, *Economic Barriers*, *Socio-Emotional Attributes*, *Culture*, *Industry Experience*, *Regulatory Barriers*, *Economic Barriers* and *Business Skills*.

6.5.2 Independent variables

The independent variables: *Entrepreneurial Culture*, *Socio-Emotional Attributes*, *Acquiring Business Skills*, *Industry Experience*, *Opportunity Identification*, *Regulatory Barriers*, *Start-up Finance*, *Outside Advice*, *Formal Training* and *Informal Training* were assessed for discriminant validity by using the Principal Axis Factoring with Oblimin rotation and Kaiser normalisation. The results of the factor analysis for the independent variables are recorded in Table 6.6, followed by the individual factor analysis results.

Table 6.6 indicates that a total of 33 items, expected to measure the independent variables, loaded on eight distinct factors with Eigenvalues greater than 1.0 and were extracted, namely: *Outside Advice, Informal Training, Formal Training, Economic Barriers, Opportunity Identification, Socio-Emotional Attributes, Entrepreneurial Culture, Industry Experience, Regulatory Barriers and Acquiring Business Skills*. The eight factors explained 58.99% of the variance in the data. The Bartlett's Test of Sphericity value of 0.000 ($p < 0.05$) and Kaiser-Meyer-Olkin (KMO) value of 0.783 ($KMO > 0.6$) also indicated that enough variance existed in the data to conduct EFA and that the data could be factor analysed. The highlighted loadings represented significant loadings ($p \geq 0.3$). Sufficient evidence of discriminant validity was therefore provided. The next step was to describe each of the factors.

Table 6.6: Rotated factor loadings - Independent variables

Item	Factor							
	1	2	3	4	5	6	7	8
	MENTSHIP	ECOBARR	SOCIOEM	CULT	INDEXP	REGBARR	ECOBARR	BUSKILL
OUTADV6	0.802	0.112	0.123	0.030	0.047	0.032	0.001	-0.082
INFTRAIN3	0.661	-0.135	-0.031	0.002	0.004	-0.037	0.074	0.087
FTRAIN4	0.618	-0.009	-0.038	0.142	0.060	0.027	-0.002	-0.031
OUTADV2	0.509	-0.081	-0.073	-0.024	-0.016	-0.181	0.017	0.156
INFTRAIN5	0.445	0.159	0.190	0.064	-0.148	0.174	0.071	0.203
ECOBARR3	0.056	-0.713	0.072	-0.023	0.020	-0.026	-0.175	-0.058
ECOBARR6	0.044	-0.608	0.006	-0.023	-0.023	-0.002	-0.147	0.125
REGBARR4	-0.052	-0.592	0.067	0.085	-0.042	0.138	0.125	0.004
ECOBARR1	0.127	-0.419	-0.193	0.107	0.320	0.061	-0.220	0.060
ECOBARR4	0.278	-0.391	0.030	0.057	0.227	0.246	-0.195	-0.241
OPPID1	0.057	-0.067	0.670	0.077	-0.013	-0.093	0.022	-0.022
SOCIO5	0.012	-0.048	0.646	-0.173	0.054	0.108	0.089	0.027
OPPID4	0.068	0.051	0.634	0.048	-0.018	0.048	-0.053	0.027
SOCIO1	-0.059	-0.006	0.506	0.036	0.064	-94.000	-0.172	0.036
SOCIO6	0.062	-0.017	0.473	0.053	0.032	0.051	0.012	0.090

OUTADV4	0.022	-0.053	-0.034	0.715	-0.047	-0.062	0.051	0.123
CULT4	0.024	0.197	-0.028	0.654	0.235	0.102	-0.019	-0.062
CULT1	0.164	-0.027	0.150	0.624	-0.004	0.038	-0.080	-0.166
CULT5	-0.034	-0.143	0.020	0.525	-0.098	-0.030	0.018	0.199
INDEXP1	0.208	0.284	0.010	-0.005	0.571	0.072	-0.080	0.036
OPPID5	-0.003	0.019	0.117	0.004	0.565	0.029	0.040	0.055
INDEXP2	0.037	-0.097	0.041	0.057	0.512	-0.163	-0.249	0.094
INDEXP7	-0.042	-0.056	0.017	-0.005	0.443	-0.038	0.063	0.032
REGBARR3	0.027	0.077	0.039	0.047	-0.104	0.749	-0.075	-0.080
REGBARR2	-0.187	-0.263	0.065	0.011	0.036	0.585	0.043	0.059
REGBARR1	0.010	-0.247	-0.076	-0.214	0.274	0.468	-0.165	0.144
REGBARR5	0.017	-0.253	-0.108	0.024	-0.216	0.329	-0.176	0.099
ECOBARR2	-0.150	-0.065	0.090	0.064	-0.157	-0.034	-0.829	0.032
ECOBARR5	0.009	0.013	-0.004	-0.101	0.129	0.164	-0.633	0.106
BUSKILL4	-0.010	-0.030	0.087	-0.019	0.105	-0.049	-0.021	0.633
BUSKILL3	0.000	-0.065	0.075	0.083	0.125	-0.078	0.019	0.561
BUSKILL1	0.106	0.104	-0.021	0.074	0.066	0.150	-0.104	0.537
BUSKILL2	0.178	-0.004	0.165	-0.061	0.051	-0.014	-0.048	0.514

Factor 1: Mentorship (MENTSHIP)

The factor *Mentorship* (MENTSHIP) was measured by five items. Having analysed the items contributing to this factor the descriptive name *Mentorship* (MENTSHIP) was allocated to this factor. The factor returned an Eigenvalue of 5.201 and a Cronbach's alpha value of 0.750, as recorded in Table 6.7. The five items OUTADV6, INFTRAIN3, FTRAIN4, OUTADV2 and INFTRAIN5 contributed to the factor measuring *Mentorship* (MENTSHIP).

For the purposes of this study, *Mentorship* (MENTSHIP) refers to the extent an entrepreneur receives advice from mentors and role models both outside and within

the family circle and includes the influences of training facilitators and discussions with others.

Table 6.7: Factor 1 - Mentorship (MENTSHIP)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 5.20		% of Variance: 15.76		Cronbach's alpha: 0.75
OUTADV6	Advice received from mentors has positively influenced my development as an entrepreneur	0.802	0.659	0.658
INFTRAIN3	Role models have significantly assisted with my business knowledge	0.661	0.639	0.664
FTRAIN4	Facilitator/s positively affected my attitude to start a new business venture	0.618	0.525	0.706
OUTADV2	I received entrepreneurial mentorship from others outside my family circle	0.509	0.434	0.753
INFTRAIN5	Discussions with others helped guide me with my development as an entrepreneur	0.445	0.420	0.743

Factor 2: Economic barriers (ECOBARR)

The factor *Economic Barriers* (ECOBARR) was measured by five items. Having analysed the items contributing to this factor, the descriptive name *Economic Barriers* was allocated to this factor. The factor returned an Eigenvalue of 3.658 and a Cronbach's alpha value of 0.773, as recorded in Table 6.8. The five items ECOBARR1, ECOBARR4, ECOBARR6, ECOBARR3 and REGBARR4 contributed to the factor measuring *Economic Barriers*.

For the purposes of this study, *Economic Barriers* refers to the barriers affecting the development of entrepreneurs in South Africa negatively. They include inflation, crime, rising exchange rates, underdeveloped infrastructure and the “brain drain” causing a loss of skills within the economy.

Table 6.8: Factor 2 - Economic barriers (ECOBARR)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 3.66		% of Variance: 11.08		Cronbach's alpha: 0.77
ECOBARR1	Inflation has a negative effect on the start-up of new ventures	-0.713	0.540	0.733
ECOBARR4	Crime poses a substantial barrier to start-up ventures	-0.608	0.550	0.730
ECOBARR6	Unstable exchange rates negatively affects the start-up of new ventures	-0.592	0.578	0.721
ECOBARR3	Poor infrastructure restricts the start-up of new ventures	-0.419	0.650	0.697
REGBARR4	The “brain-drain” experienced in South Africa has negatively affected the start-up of new ventures	-0.391	0.421	0.772

Factor 3: Socio-emotional attributes (SOCIOEM)

The factor *Socio-Emotional Attributes* (SOCIOEM) was measured by five items. Having analysed the items contributing to this factor the descriptive name *Socio-Emotional Attributes* was allocated to this factor. The factor returned an Eigenvalue of 2.513 and a Cronbach's alpha value of 0.730, as recorded in Table 6.9. The five items OPPID1, SOCIO5, OPPID4, SOCIO1 and SOCIO6 contributed to the factor measuring *Socio-Emotional Attributes* (SOCIOEM).

For the purposes of this study, *Socio-Emotional Attributes* (SOCIOEM) refers to the likelihood that an entrepreneur will be a self-starter, willing to take risks, identify opportunities and, in so doing, solve problems which will result in profitable business ventures.

Table 6.9: Factor 3 - Socio-emotional attributes (SOCIOEM)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 2.51		% of Variance: 7.62		Cronbach's alpha: 0.73
OPPID1	Identifying business opportunities is something that comes naturally to me	0.670	0.571	0.652
SOCIO5	I am able to creatively solve problems	0.646	0.523	0.681
OPPID4	I am able to identify a profitable new business opportunity	0.634	0.563	0.653
SOCIO1	I am willing to take calculated risks in business	0.506	0.422	0.708
SOCIO6	I consider myself to be a self-starter	0.473	0.416	0.710

Factor 4: Entrepreneurial culture (CULT)

The factor *Entrepreneurial Culture* (CULT) was measured by four items. The factor returned an Eigenvalue of 2.189 and a Cronbach's alpha value of 0.727, as recorded in Table 6.10. The four items OUTADV4, CULT4, CULT1 and CULT5 are thus regarded as measurements of *Entrepreneurial Culture*.

For the purposes of this study *Entrepreneurial Culture* refers to the positive influence of family members through their advice, encouragement to start a new-venture, re-

assurance through business-talk and belief that entrepreneurship is a common career choice.

Table 6.10: Factor 4 - Entrepreneurial culture (CULT)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 2.19		% of Variance: 6.64		Cronbach's alpha: 0.73
OUTADV4	I trust the advice my family members give me regarding business decisions I make	0.715	0.578	0.637
CULT4	My family encouraged me to start a new business venture	0.654	0.502	0.676
CULT1	Business talk within my family played an important role towards my development as an entrepreneur	0.624	0.553	0.645
CULT5	Entrepreneurship is a common career choice in my family	0.525	0.448	0.709

Factor 5: Industry experience (INDEXP)

The factor *Industry Experience* (INDEXP) was measured by four items. Having analysed the items contributing to this factor, the descriptive name *Industry Experience* was allocated to this factor. The factor returned an Eigenvalue of 1.824 and a Cronbach's alpha value of 0.614, as recorded in Table 6.11. The four items INDEXP1, OPPID5, INDEXP2 and INDEXP7 contributed to the factor measuring *Industry Experience*.

For the purposes of this study, *Industry Experience* refers to working experience to gain technical and business skills, and understanding competitors.

Table 6.11: Factor 5 - Industry experience (INDEXP)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 1.82		% of Variance: 5.53		Cronbach's alpha: 0.61
INDEXP1	My experience gained working in business was important to my development as an entrepreneur	0.571	0.403	0.540
OPPID5	The industry skills I possess allow me to take advantage of new business opportunities	0.565	0.454	0.523
INDEXP2	Gaining experience from different industries was important to my development as an entrepreneur	0.512	0.443	0.506
INDEXP7	Acquiring technical skills was important to my development as an entrepreneur	0.443	0.334	0.617

Factor 6: Regulatory barriers (REGBARR)

The factor *Regulatory Barriers* (REGBARR) was measured by four items. Having analysed the items contributing to this factor, the descriptive name *Regulatory Barriers* was allocated to this factor. The factor returned an Eigenvalue of 1.635 and a Cronbach's alpha value of 0.693, as recorded in Table 6.12. The four items REGBARR3, REGBARR2, REGBARR1 and REGBARR5 contributed to the factor measuring *Regulatory Barriers*.

For the purposes of this study, *Regulatory Barriers* refers to the restrictive, bureaucratic nature of the South African Government's policies towards starting up a new business venture, which includes overly protective labour policies and high minimum wages.

Table 6.12: Factor 6 - Regulatory barriers (REGBARR)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 1.64		% of Variance: 4.95		Cronbach's alpha: 0.69
REGBARR3	Over-protective labour policies in South Africa, make starting a new business difficult	0.749	0.520	0.600
REGBARR2	South Africa regulations/laws do not actively encourage the creation of new ventures	0.585	0.526	0.600
REGBARR1	Red tape makes it difficult to start a new business	0.468	0.497	0.623
REGBARR5	Minimum wages set by Government restricts the start-up of new business ventures	0.329	0.398	0.695

Factor 7: Access to Start-up finance (STARTFIN)

The factor *Access to Start-up Finance* (STARTFIN) was measured by two items. Having analysed the items contributing to this factor, the descriptive name *Start-up Finance* was allocated to this factor. The factor returned an Eigenvalue of 1.342 and a Cronbach's alpha value of 0.728, as recorded in Table 6.13. The two items ECOBARR2 and ECOBARR5 contributed to the factor measuring *Start-up Finance*.

For the purposes of this study, *Access to Start-up Finance* refers to the limited access entrepreneurs have to new venture, start-up capital and is an indicator of the prohibitive set-up costs of a new venture.

Table 6.13: Factor 7 – Access to Start-up finance (STARTFIN)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 1.34		% of Variance: 4.07		Cronbach's alpha: 0.73
ECOBARR2	Limited access to start-up capital restricts the start-up of new ventures	-0.829	0.573	N/A
ECOBARR5	The initial cost of starting a business is restrictive to new venture creation.	-0.633	0.573	N/A

Factor 8: Business skills (BUSSKILL)

The factor *Business Skills* (BUSSKILL) was measured by four items. Having analysed the items contributing to this factor, the descriptive name *Business Skills* was allocated to this factor. The factor returned an Eigenvalue of 1.108 and a Cronbach's alpha value of 0.710, as recorded in Table 6.14. The four items BUSSKILL4, BUSSKILL3, BUSSKILL1 and BUSSKILL2 contributed to the factor measuring *Business Skills*.

For the purposes of this study, *Business Skills* refers to the skills required to run a business venture successfully, such as, business operations skills, human resource management skills, basic financial management skills and basic marketing skills.

Table 6.14: Factor 8 - Business skills (BUSKILL)

Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
Eigenvalue: 1.11		% of Variance: 3.36		Cronbach's alpha: 0.71
BUSSKILL4	Learning basic business operation skills contributed to my success as an entrepreneur	0.633	0.566	0.611
BUSSKILL3	Learning basic HR management skills	0.561	0.489	0.671

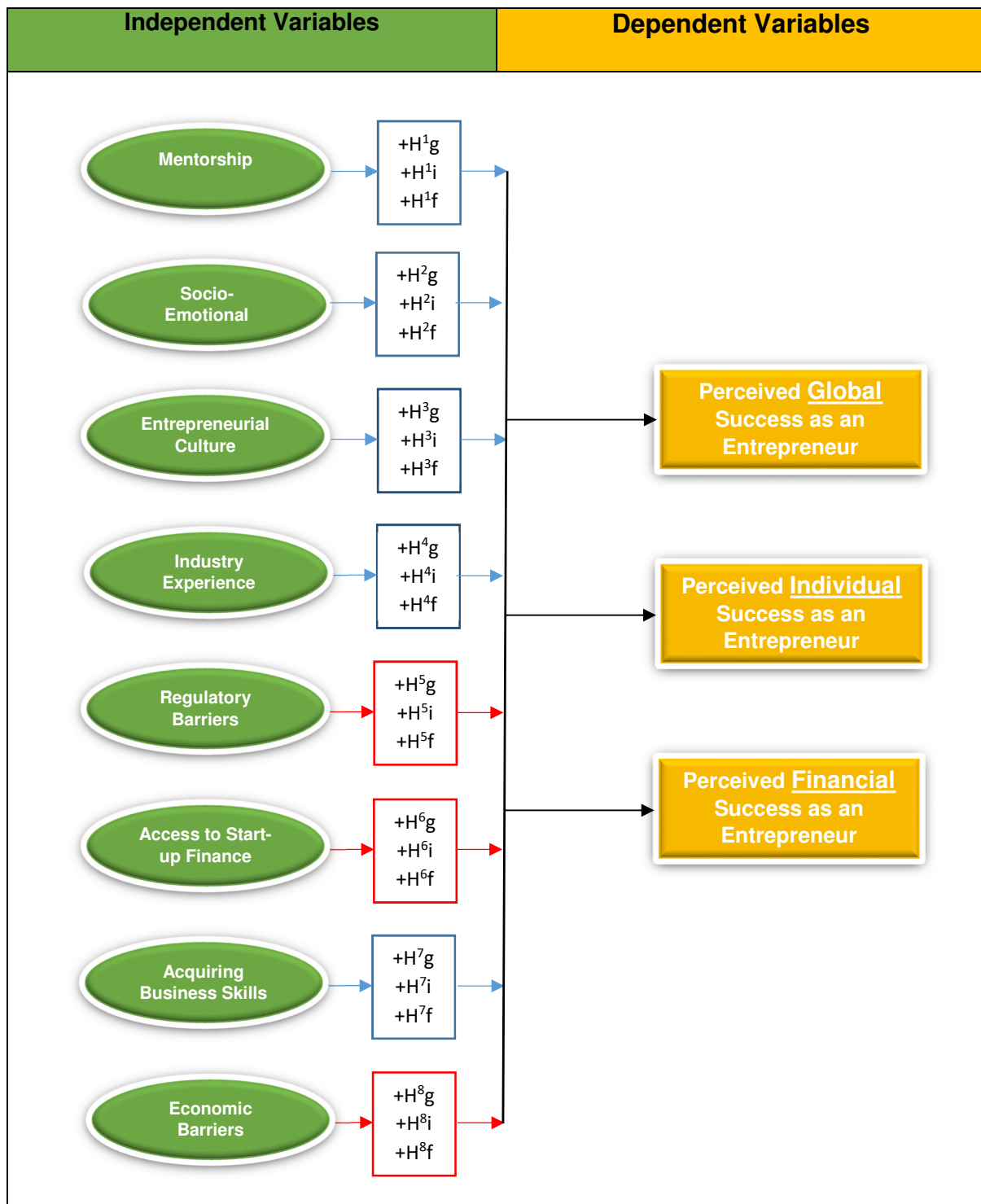
Item	Question	Factor loading	Item-total correlation	Cronbach's alpha after deletion
	contributed to my success as an entrepreneur			
BUSSKILL1	Learning basic financial management skills contributed to my success as an entrepreneur	0.537	0.458	0.674
BUSSKILL2	Learning basic marketing management skills contributed to my success as an entrepreneur	0.514	0.517	0.635

6.6 THE REVISED THEORETICAL MODEL

The proposed theoretical model as developed from the literature was presented in Chapter 4. As a result of the above exploratory factor analysis, the original theoretical model as presented in Figure 4.1 and the defined hypotheses in Chapter 4, had to be revised. The revised theoretical model is presented in Figure 6.1.

The exploratory factor analysis that was performed was unable to confirm all of the variables presented in the original theoretical model. Owing to inadequate evidence of discriminant validity or reliability the independent variables: *Opportunity identification*, *Outside Advice*, *Formal Training* and *Informal Training* were deleted. However, some of the items from the deleted independent variables did load on other factors in the exploratory factor analysis. Some items from the factor named *Opportunity Identification* loaded onto the factor named *Socio-Emotional Attributes*. Some of the items from *Outside Advice* loaded onto the factors named *Mentorship* and *Entrepreneurial Culture*. Some of the items from *Formal Training* and *Informal Training* loaded onto the factor named *Mentorship*. The revised theoretical model is shown in Figure 6.1.

Figure 6.1: The revised theoretical model



6.7 REFORMULATION OF THE HYPOTHESES

After the exploratory factor analysis had been performed and the theoretical model amended accordingly, the hypotheses that were originally formulated were revised. In this section, the revised hypotheses that will be addressed in this study are presented and discussed. Please note that the letter “g” has been used to represent the dependent variable Global Success, “i” has been used to represent the dependent variable Individual Success and “f” has been used to represent the dependent variable Financial Success. The revised hypotheses that were tested in the structural model are listed in Table 6.15 below:

Table 6.15: Revised hypotheses

H ^{1g}	There is a positive relationship between <i>Mentorship</i> and the global success of entrepreneurs in South Africa.
H ¹ⁱ	There is a positive relationship between <i>Mentorship</i> and the individual success of entrepreneurs in South Africa.
H ^{1f}	There is a positive relationship between <i>Mentorship</i> and the financial success of entrepreneurs in South Africa.
H ^{2g}	There is a positive relationship between developing <i>Socio-Emotional Attributes</i> and the global success of entrepreneurs in South Africa.
H ²ⁱ	There is a positive relationship between developing <i>Socio-Emotional Attributes</i> and the individual success of entrepreneurs in South Africa.
H ^{2f}	There is a positive relationship between developing <i>Socio-Emotional Attributes</i> and the financial success of entrepreneurs in South Africa.
H ^{3g}	There is a positive relationship between <i>Entrepreneurial Culture</i> and the global success of entrepreneurs in South Africa.
H ³ⁱ	There is a positive relationship between <i>Entrepreneurial Culture</i> and the individual success of entrepreneurs in South Africa.
H ^{3f}	There is a positive relationship between <i>Entrepreneurial Culture</i> and the financial success of entrepreneurs in South Africa.
H ^{4g}	There is a positive relationship between <i>Industry experience</i> and the global success of entrepreneurs in South Africa.

H ⁴ⁱ	There is a positive relationship between <i>Industry Experience</i> and the individual success of entrepreneurs in South Africa.
H ^{4f}	There is a positive relationship between <i>Industry Experience</i> and the financial success of entrepreneurs in South Africa.
H ^{5g}	There is a negative relationship between a <i>Regulatory Barriers</i> and the global success of entrepreneurs in South Africa.
H ⁵ⁱ	There is a negative relationship between a <i>Regulatory Barriers</i> and the individual success of support of entrepreneurs in South Africa.
H ^{5f}	There is a negative relationship between a <i>Regulatory barriers</i> and the financial success of entrepreneurs in South Africa.
H ^{6g}	There is a negative relationship between limited <i>Access to Start-up Finance</i> and the global success of entrepreneurs in South Africa.
H ⁶ⁱ	There is a negative relationship between limited <i>Access to Start-up Finance</i> and the individual success of entrepreneurs in South Africa.
H ^{6f}	There is a negative relationship between limited <i>Access to Start-up Finance</i> and the financial success of entrepreneurs in South Africa.
H ^{7g}	There is a positive relationship between <i>Acquiring Basic Business Skills</i> and the global success of entrepreneurs in South Africa.
H ⁷ⁱ	There is a positive relationship between <i>Acquiring Basic Business Skills</i> and the individual success of entrepreneurs in South Africa.
H ^{7f}	There is a positive relationship between <i>Acquiring Basic Business Skills</i> and the financial success of entrepreneurs in South Africa.
H ^{8g}	There is a negative relationship between <i>Economic barriers</i> and the global success of entrepreneurs in South Africa.
H ⁸ⁱ	There is a negative relationship between <i>Economic Barriers</i> and the individual success of entrepreneurs in South Africa.
H ^{8f}	There is a negative relationship between <i>Economic Barriers</i> and the financial success of entrepreneurs in South Africa.

In the formulation of the hypotheses, the dependent variable *Perceived Success of Developmental Training Support for Entrepreneurs* includes all three dependent variables as shown in Figure 6.1. The statistical technique of Structural Equation Modelling (SEM) was then used to test the series of relationships in the revised model

as presented in Figure 6.1. This was done after the reliability and the discriminant validity of all the remaining variables in the empirical model had been confirmed.

6.7.1 Assessment of the normality of the data

After the model had been specified, the researcher had to obtain estimates of the free parameters from the observed data (Cooper & Schindler, 2007). According to Hair *et al.* (2006) this implies a decision on what mathematical algorithm will be used to identify estimates for each free parameter. The decision on the estimation procedure is influenced by the distributional nature of the data. In this regard, Hair *et al.* (2006) recommend the use of the Maximum Likelihood Estimation method (MLE) when the assumption of multivariate normality is met. However, if the assumption of multivariate normality is not met, then Robust Maximum Likelihood (RML) is recommended, which compensates for the non-normality of the data, according to Boomsma (2000). For this purpose the software application, LISREL 8.8 (Jöreskog & Sörborn, 2006), was used to assess the normality of the data.

6.7.2 Assessment of the multivariate normality

The following hypotheses were considered in order to assess the multivariate normality of the data:

H⁰ The data distribution is a multivariate normal distribution.

H^{1b} The data distribution is not a multivariate normal distribution.

The following results were obtained by using the LISREL software application discussed earlier in Chapter 5:

- Chi-square : 1825.865
- Degrees of freedom : 852
- P-value : 0.00000
- χ^2/df ratio : 2.14 (norm < 3)
- RMSEA : 0.0588
- ECVI : 6.350

The value of the Satorra-Bentler Scaled Chi-square test was 1825.865. The associated p-value of 0.000 is smaller than 0.01 and, therefore, the above null hypothesis was rejected at the 0.01% significance level. The alternative hypothesis was accepted, which implied that the recorded data did not meet the requirement of multivariate normality. The Robust Maximum Likelihood method was therefore used for estimating both the measurement model and the structural equation model.

6.8 EMPIRICAL RESULTS AND INTERPRETATIONS OF THE STRUCTURAL MODELLING ANALYSIS

The seven stages of structural equation modelling (SEM), as describe by Hair *et al.* (1998), were discussed in section 5.7.3. The development of a theoretical model, as the first stage of SEM, was presented in Chapter 4. The remaining six stages are discussed in this chapter and include the following:

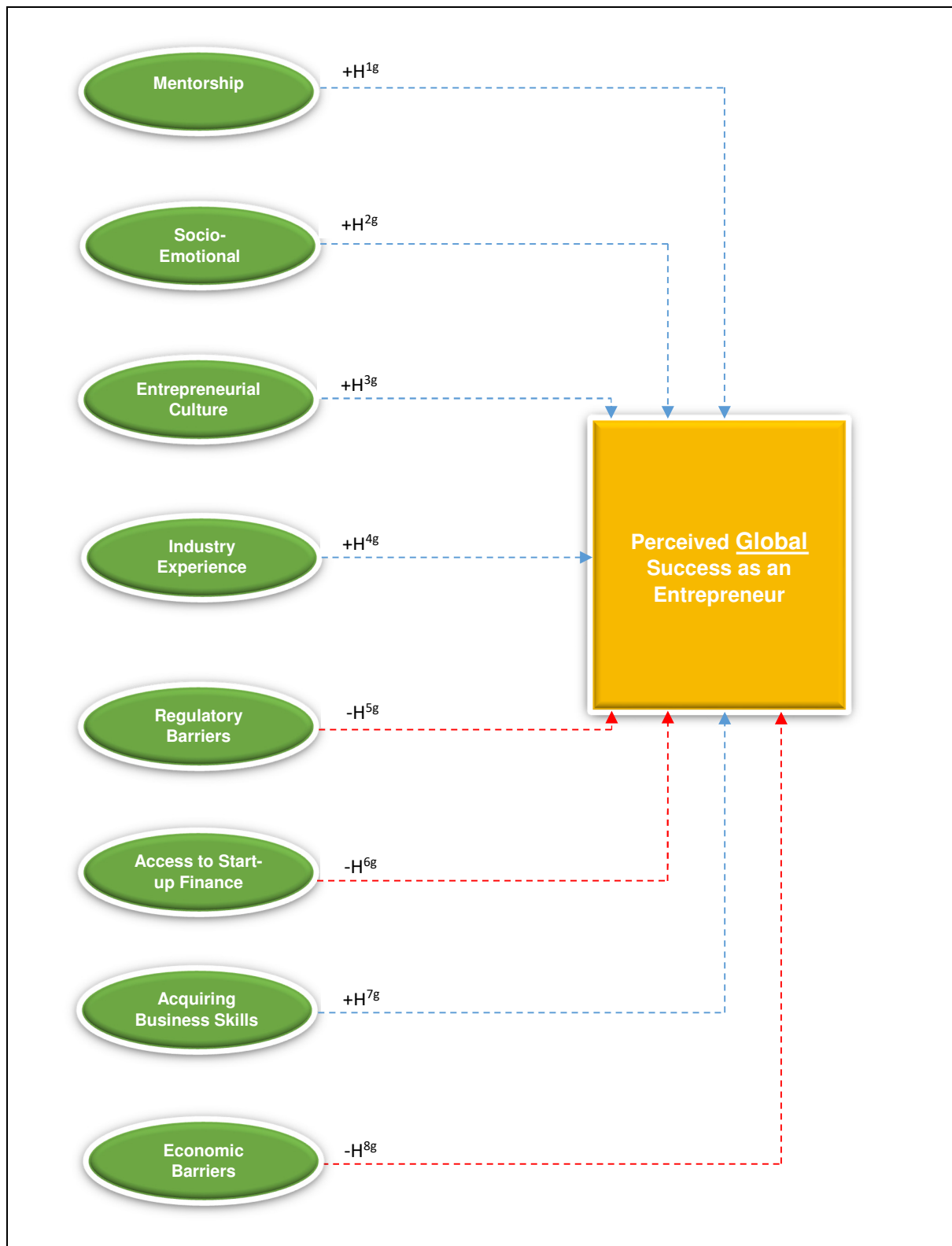
- Construct a path diagram of casual relationships;
- Convert the path diagram into a set of structural equations and measurement models;
- Choose the input matrix type and estimate the proposed model;
- Assess the identification of model equations;
- Evaluate the results for goodness-of-fit; and
- Make the indicated modifications to the model, if theoretically justified.

6.9 CONSTRUCTION OF THE PATH DIAGRAMS

Path diagrams are graphic illustrations of both the measurement and structural models (Cooper & Schindler, 2007). Hair *et al.* (2006) explain the benefits of concise theoretical models and argues that the interpretation of results might become difficult if the number of latent variables becomes too large (exceeding 20 latent variables). The path diagram of causal relationships that is proposed for this study contains 10 latent variables as shown in Figures 6.2, 6.3 and 6.4 below.

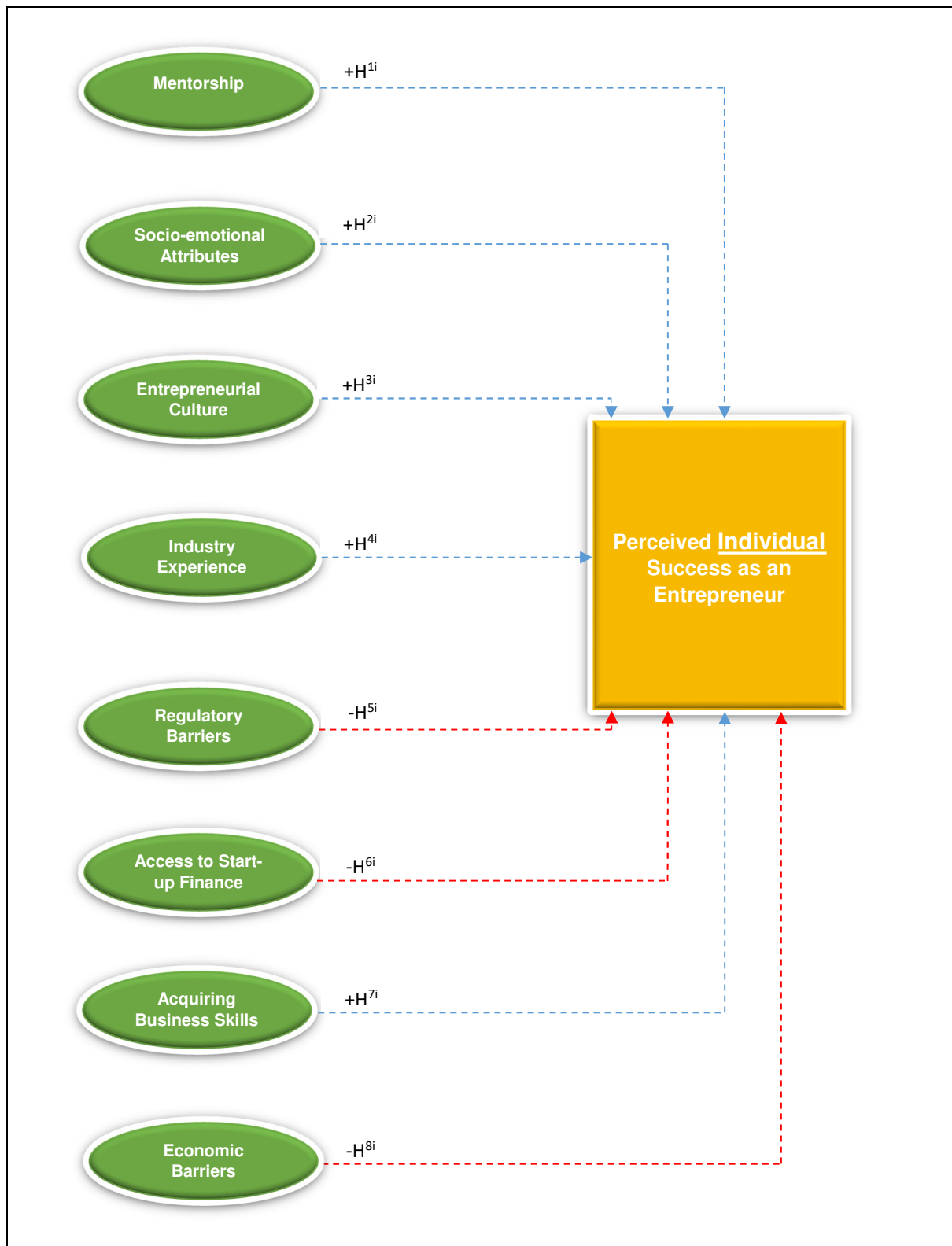
All the constructs were represented as elliptical symbols and colour was added for ease of identifying the independent (exogenous) variables, denoted by the colour green, and dependent (endogenous) variables illustrated in orange (Lee & Zhu, 2000; Shah & Goldstein, 2005). The straight arrows (pointed at one end) indicate the direction of prediction from independent to dependent variables. The single-headed arrows indicate the dependence relationships. The constructs with arrows pointed at them are called endogenous variables (dependent variables). Endogenous constructs can predict other endogenous constructs, but an exogenous construct can only be causally related to endogenous constructs. In the path diagram presented in Figure 6.2, the factor *Entrepreneurial Culture* is an example of an exogenous variable and is causally related to the endogenous variables *Perceived Individual Success as an Entrepreneur*, *Perceived Global Success of an Entrepreneur* and *Perceived Financial Success of an Entrepreneur*.

Figure 6.2: Path diagram of relationships: Revised theoretical model (Sub-model A - Global success)



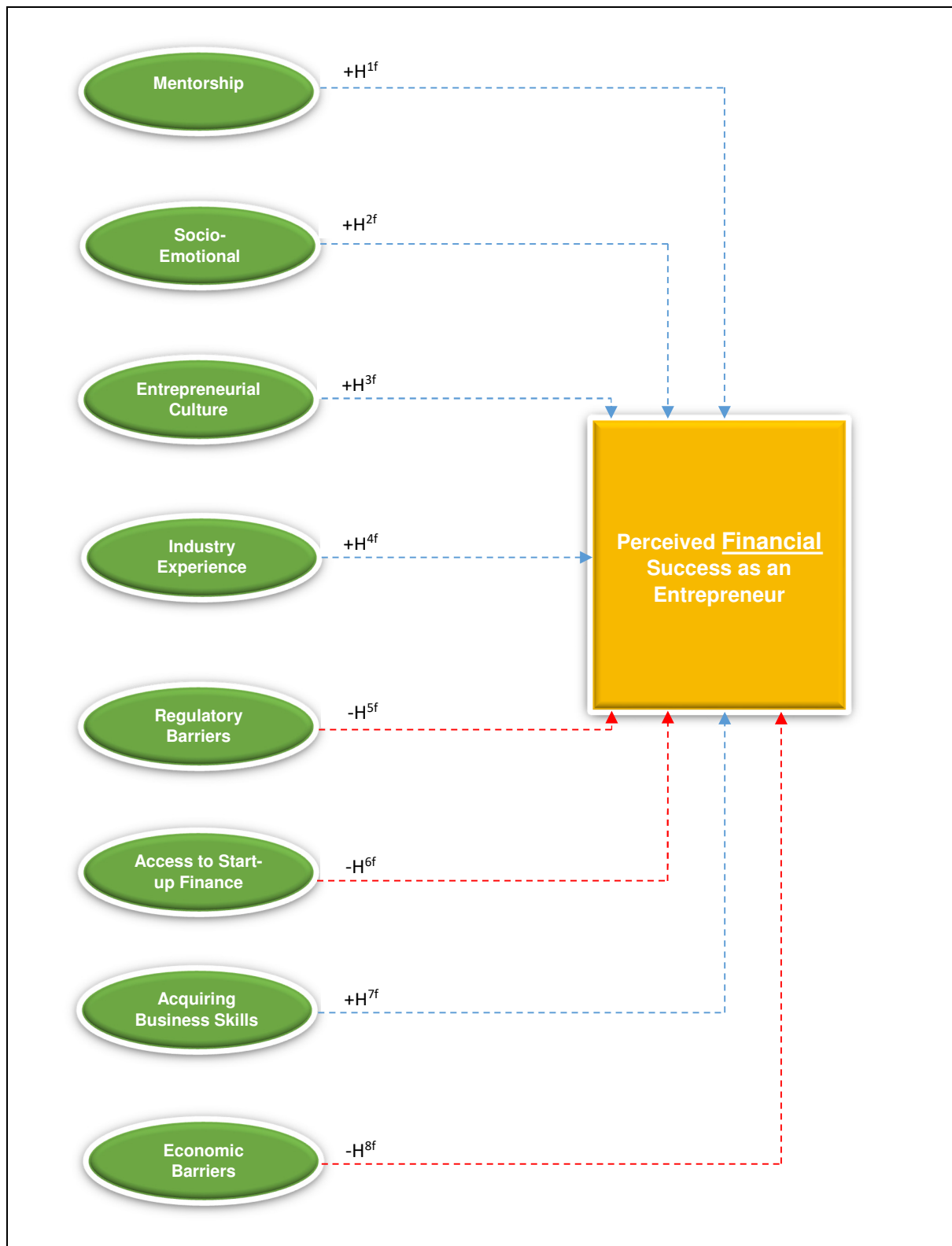
Source: Researcher's own construction, 2017

Figure 6.3: Path diagram of relationships: Revised theoretical model (Sub-model B - Individual success)



Source: Researcher's own construction, 2017

Figure 6.4: Path diagram of relationships: Revised theoretical model (Sub-model C - Financial success)



Source: Researcher's own construction, 2017

6.10 CONVERSION OF PATH DIAGRAM INTO A MEASUREMENT MODEL AND A STRUCTURAL MODEL

According to Hair *et al.* (2006), a conventional SEM model consists of two sub-models: a measurement model and a structural model. The measurement model specifies or assigns the indicator variables to the constructs they should represent, and also enables an assessment of construct validity (Hair *et al.*, 2006). The structural model is the setting of one or more dependence relationships linking the constructs of the proposed theoretical model with one another, which is most useful in representing the inter-relationships of variables between constructs (Hair *et al.*, 2006).

Therefore, the relationships indicated in Figure 6.2 need to be converted into structural equations. For each equation a structural coefficient (b) is estimated and an error term (ϵ) included to provide for the sum of the effects of specification and random selection error (Hair *et al.*, 2006). An example of such an equation is provided below for the endogenous variable Individual Success as an Entrepreneur:

$$\text{INDSUCC} = b_1 * \text{MENTSHIP} + b_2 * \text{SOCIOEM} + b_3 * \text{CULT} + b_4 * \text{INDEXP} + b_5 * \text{REGBARR} + b_6 * \text{STARTFIN} + b_7 * \text{BUSSKILL} + \epsilon_1$$

For this study, a covariance model was used to assess the measurement properties of the scale, and provides evidence of construct validity. Thereafter the relationships between the constructs in the structural model for each of sub-models A, B and C were identified. The extent to which the proposed models represent an acceptable approximation of the data was established. The LISREL 8.8 application (Jöreskog & Sörbom, 2006) was used to obtain the free parameters from the observed data for both the measurement and the structural model. As a result of the non-normality of the data, Robust Maximum Likelihood was used to obtain the estimates and to provide evidence of construct validity (Savalei & Bentler, 2010).

When estimating the structural model, the estimation of the SEM requires that the measurement and structural part of SEM be measured in one overall model (Hair *et al.*, 2006). The measurement and the structural models were assessed for significance

in indicator loadings by ensuring that the p-value associated with each loading exceeded the critical value of 1.96 at the 5% significance level.

While the golden rule exists for assessment of model fit, reporting a variety of indices is necessary because different indices reflect a different aspect of the model fit (Hooper *et al.*, 2008). Against this background, it was decided to use the Satorra-Bentler scaled Chi-Square (X^2), the normed Chi-Square, i.e. the ratio of Chi-Square to degrees of freedom (X^2/df), the Root Mean Square Error of Approximation (RMSEA), as well as, the 90% confidence interval for RMSEA for this study.

6.10.1 Chi-square (X^2)

The Chi-Square value is the measure used for evaluating overall model fit and assessing “the magnitude of discrepancy between the sample and fitted covariance matrices” (Hu & Bentler, 1999: 17). A good model fit would provide an insignificant result at a threshold of 0.05 (Hooper *et al.*, 2008), thus the Chi-Square statistic is often referred to as either a badness of fit or a lack of fit measure (Kline, 2005).

While the Chi-Square test retains its popularity as a fit statistic, a number of limitations in its use exist. Firstly, this test assumes multivariate normality and severe deviations from normality might result in model rejections even when the model is properly specified (Hooper *et al.*, 2008). Secondly, because the Chi-Square statistic is, in essence, a statistical significance test, it is sensitive to sample size, which means that the Chi-Square statistic nearly always rejects the model when large samples are used (Hooper *et al.*, 2008; Jöreskog & Sörborn, 2006). However, the Chi-Square remains a key test statistic that must be reported.

6.10.2 Root Mean Square Error of Approximation (RMSEA)

In recent years, the Root Mean Square Error of Approximation (RMSEA) has become regarded as one of the most informative fit indices because of its sensitivity to the number of estimated parameters in the model (Diamantopoulos & Schlegelmilch, 2002). The RMSEA favours parsimony in that it will favour the model with the lesser number of parameters (Hooper *et al.*, 2008). The RMSEA indicates how well the

model, with unknown but optimally chosen parameter estimates, would fit the population's covariance matrix. Recommendations for RMSEA cut-off points have been reduced considerably (from 0.08 to 0.05) in recent years (Hooper *et al.*, 2008).

Although the Model Chi-Square has many problems associated with it, it is still essential that this statistic, along with its degrees of freedom and associated p-value, should be reported at all times (Kline, 2005). Threshold levels were assessed by Hu and Bentler (1999), who suggested that a two-index presentation format be used. This includes the RMSEA or the CFI. Hair *et al.* (2006) advocates the use of the Chi-Square test, the RMSEA, the CFI and SRMR. Boomsma (2000) offers similar recommendations and, in addition, suggests that the squared multiple correlations of each equation be reported.

Based on the review of the above guidelines, use of the Chi-Square statistic was recommended with its degrees of freedom and p-value, the RMSEA and its associated confidence interval, the SRMR, the CFI and one parsimony fit index such as the PNFI. These indices were considered because they have been found to be the most insensitive to sample size, model misspecification and parameter estimates (Hooper *et al.*, 2008). In the next section, the goodness-of-fit indices are reported.

Based on an inspection of the factor loadings and the modification indices, it was decided to remove the latent variables *Opportunity Identification*, *Outside Advice*, *Formal Training* and *Informal Training* owing to construct validity concerns. The variables *Entrepreneurial Culture*, *Socio-Emotional Attributes*, *Acquiring Business Skills*, *Industry Experience*, *Regulatory Barriers*, *Economic Barriers* and the additional independent variable, *Mentorship*, were included, as well as the corresponding hypothesis as formulated in Figure 6.2.

6.11 ASSESSMENT OF GOODNESS-OF-FIT

In order to assess the extent to which the proposed model represents an acceptable approximation of the data, the goodness-of-fit indices of the model were assessed. For this the following hypotheses were formulated:

H⁰ The data fits the model perfectly

H^{1b} The data does not fit the model perfectly

The goodness-of-fit indices for both the measurement and structural models are shown in Table 6.16. Based on the Chi-square value, the hypothesis of a perfect fit was rejected, and the alternate hypothesis was accepted. However, the fit indices in Table 6.16 provide evidence of a close fitting model based on the p-value, supported by the Root Mean Square of Approximation (RMSEA) value and Comparative Fit Index (CFI). According to Hair *et al.* (2006), RMSEA is a clear indication of how well a model fits a population as it explicitly tries to correct for both model complexity and sample size by including both in its computation, where lower RMSEA values indicate better fit. The following guidelines with regard to RMSEA values are also proposed by Browne and Cudeck (1993):

- 0 - < 0.05 : close fit
- ≥ 0.05 - < 0.08 : reasonable fit
- > 0.08 : poor fit

6.11.1 Sub-Model A: Global success

The fit indices in Table 6.16 provide evidence of a reasonable fitting model. The RMSEA value of 0.0572 is between 0.05 and 0.08 which confirms that the model is a reasonable fit.

Table 6.16: Goodness-of-fit indices for the measurement and structural models - Sub-Model A

Sub-Model A (Global Success)	Measurement Model	Structural model
Sample size	332	332
Degrees of freedom	629	852
Satorra-Bentler scaled Chi-square	1310.777 (p=0.0)	1825.865 (p=0.0)

Root Mean Square Error of Approximation (RMSEA)	0.0572	0.0588
p-value for test of close fit (RMSEA < 0.05)	0.00351	0.000
Expected cross-validation index (ECVI)	4.637	6.350
90 percent confidence interval for ECVI	(4.335; 4.962)	(5.990 ; 6.734)
X ² /df ratio	2.08	2.14

6.11.2 Sub-Model B: Individual success

The fit indices in Table 6.17 provide evidence of a reasonable fitting model. The RMSEA value of 0.0595 is between 0.05 and 0.08 which confirms that the model is a reasonable fit.

Table 6.17: Goodness-of-fit indices for the measurement and structural models - Sub-Model B

Sub-Model B (Individual Success)	Measurement Model	Structural model
Sample size	332	332
Degrees of freedom	593	852
Satorra-Bentler scaled Chi-square	1287.293 (p=0.0)	1825.865 (p=0.0)
Root Mean Square Error of Approximation (RMSEA)	0.0595	0.0588
p-value for test of close fit (RMSEA < 0.05)	0.000273	0.000
Expected cross-validation index (ECVI)	4.554	6.350
90 percent confidence interval for ECVI	4.252; 4.878	(5.990 ; 6.734)
X ² /df ratio	2.17	2.14

6.11.3 Sub-Model C: Financial success

The fit indices in Table 6.18 provide evidence of a reasonable fitting model. The RMSEA value of 0.0585 is between 0.05 and 0.08 which confirms that the model is a reasonable fit.

Table 6.18: Goodness-of-fit indices for the measurement and structural models - Sub-Model C

Sub-Model C (Financial Success)	Measurement Model	Structural model
Sample size	332	332
Degrees of freedom	524	852
Satorra-Bentler scaled Chi-square	1116.662 (p=0.0)	1825.865 (p=0.0)
Root Mean Square Error of Approximation (RMSEA)	0.0585	0.0588
p-value for test of close fit (RMSEA < 0.05)	0.00191	0.000
Expected cross-validation index (ECVI)	4.014	6.350
90 percent confidence interval for ECVI	3.735; 4.316	(5.990 ; 6.734)
X ² /df ratio	2.31	2.14

6.12 MEASUREMENT OF THE STRUCTURAL MODELS

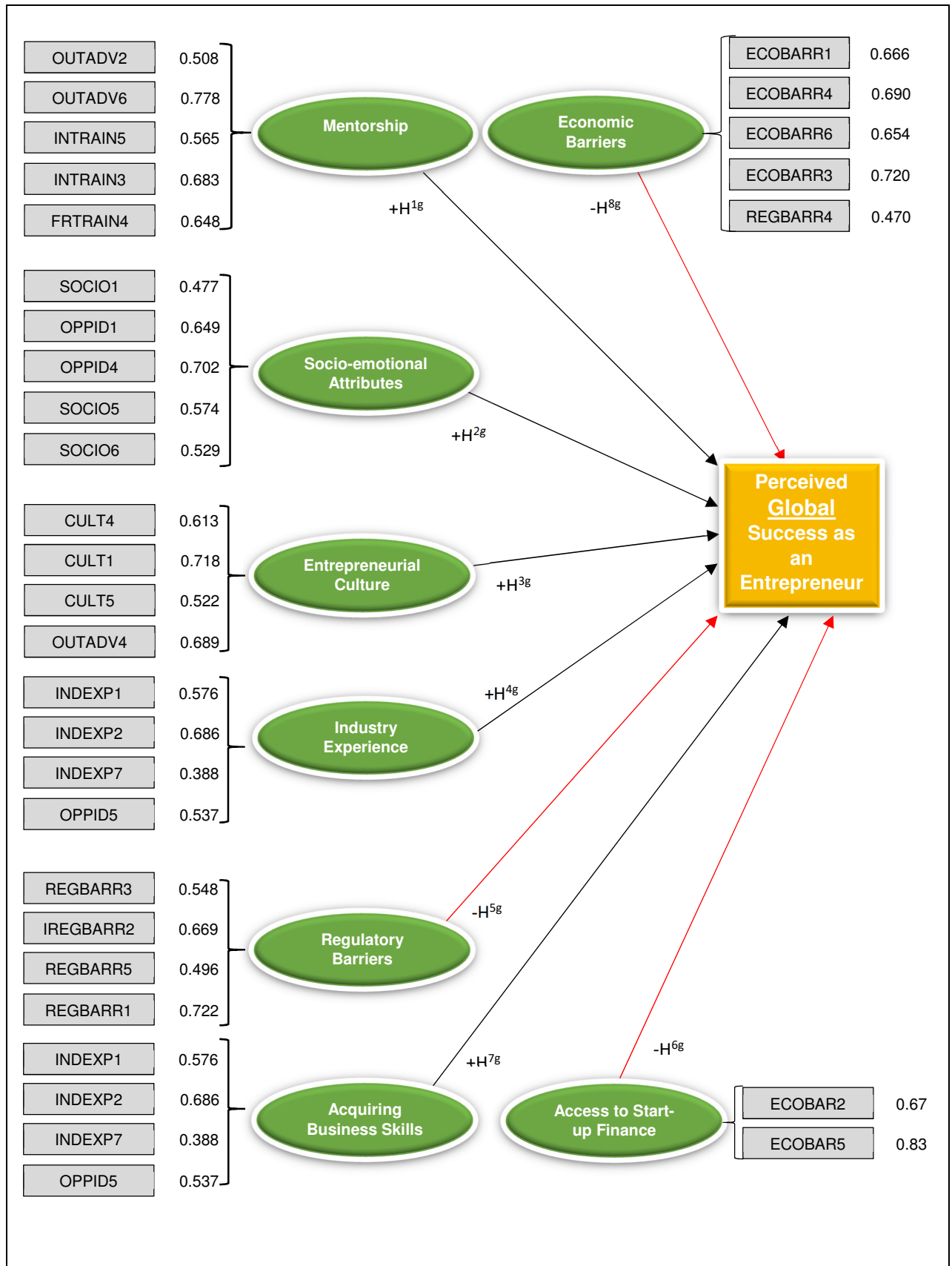
The revised model's latent and manifest variables (excluding the deleted variables *Opportunity Identification*, *Outside Advice*, *Formal Training* and *Informal Training*), which were used as the inputs for the LISREL software application, are shown in Table 6.19 below:

Table 6.19: Structural and measurement model - Sub-Model A

Structural model – Global Success	
Latent variables	Manifest variables
Global Success as an Entrepreneur	Mentorship, Economic Barriers, Socio-Emotional Skills, Entrepreneurial Culture, Industry Experience, Regulatory Barriers, Start-up Finance and Acquiring Business Skills
Mentorship	OUTADV6, INFTRAIN3, FTRAIN4, OUTADV2, INFTRAIN5
Socio-Emotional Skills	OPPID1, SOCIO5, OPPID4, SOCIO1, SOCIO6
Entrepreneurial Culture	OUTADV4, CULT4, CULT1, CULT5
Industry Experience	INDEXP1, OPPID5, INDEXP2, INDEXP7
Regulatory Barriers	REGBARR3, REGBARR2, REGBARR1 REGBARR5
Start-up Finance	ECOBARR2, ECOBARR5
Acquiring Business Skills	BUSSKILL4, BUSKILL3, BUSKILL1 BUSKILL2
Economic barriers	ECOBARR1, ECOBARR4, ECOBARR6, ECOBARR3, ECOBARR4

The structural model estimation is shown in Figure 6.5.

Figure 6.5: Structural model estimation (Sub-Model A - Global success)



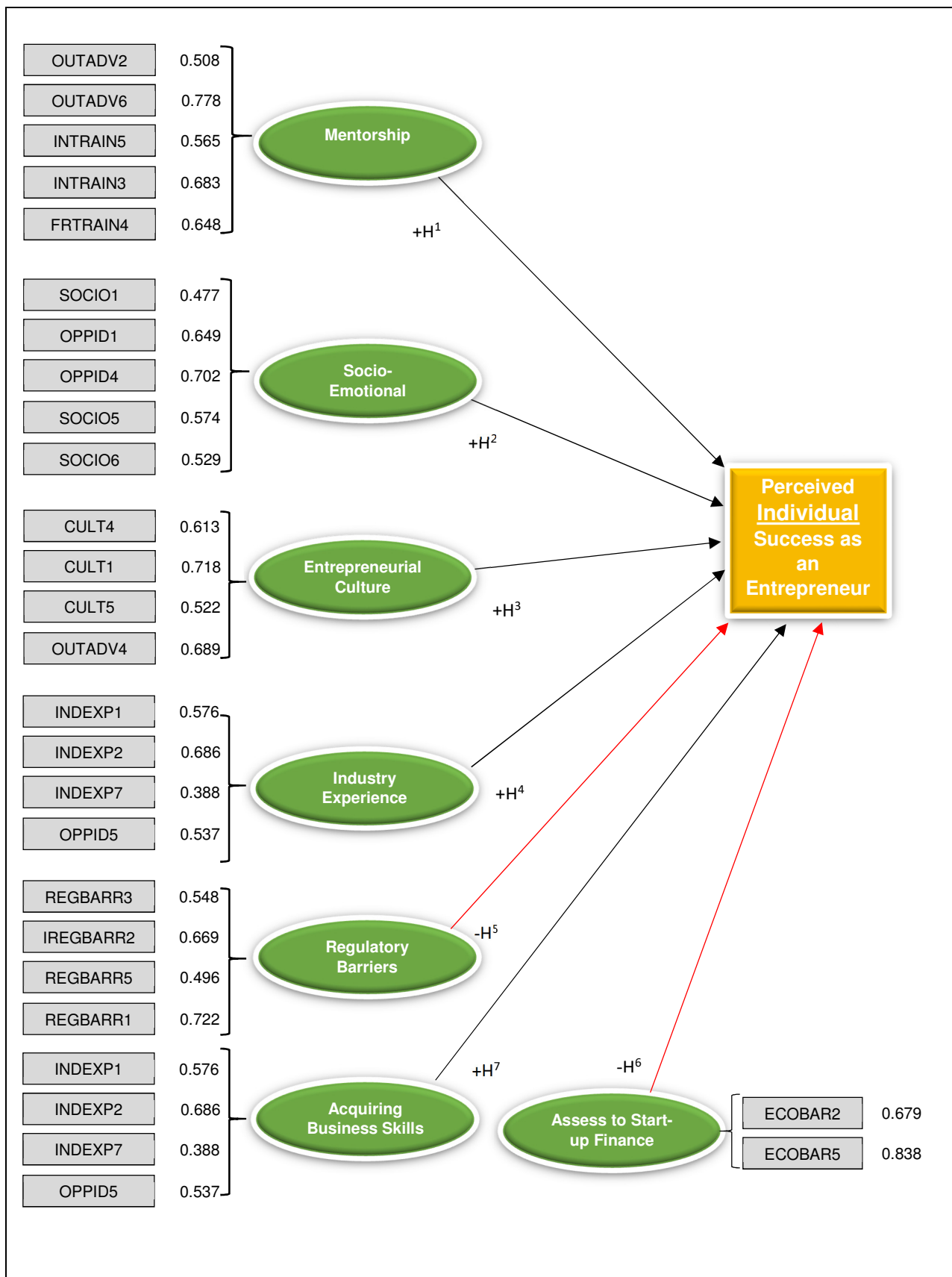
Source: Researcher's own construction, 2017

Table 6.20: Structural and measurement model - Sub-Model B

Structural model – Individual Success	
Endogenous variables	Predictor variables
Individual Success as an Entrepreneur	Mentorship, Socio-emotional Skills, Entrepreneurial Culture, Industry Experience, Regulatory Barriers, Start-up Finance and Acquiring Business Skills
Mentorship	OUTADV6, INFTRAIN3, FTRAIN4, OUTADV2, INFTRAIN5
Socio-emotional Skills	OPPID1, SOCIO5, OPPID4, SOCIO1, SOCIO6
Entrepreneurial Culture	OUTADV4, CULT4, CULT1, CULT5
Industry Experience	INDEXP1, OPPID5, INDEXP2, INDEXP7
Regulatory Barriers	REGBARR3, REGBARR2, REGBARR1 REGBARR5
Start-up Finance	ECOBARR2, ECOBARR5
Acquiring Business Skills	BUSSKILL4, BUSKILL3, BUSKILL1 BUSKILL2

The structural model estimation is shown in Figure 6.6.

Figure 6.6: Structural model estimation (Sub-Model B - Individual success)



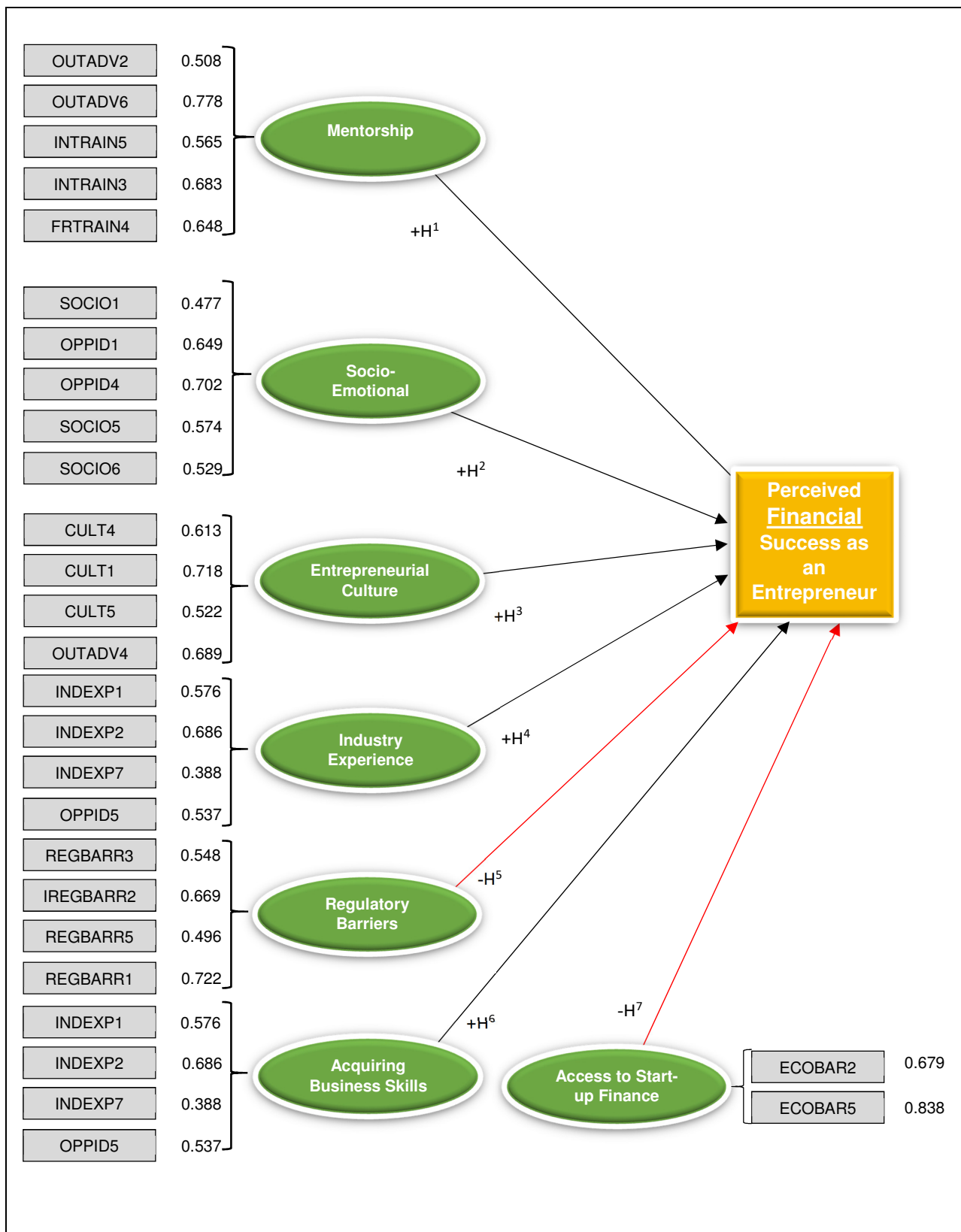
Source: Researcher's own construction, 2017

Table 6.21: Structural and measurement model - Sub-Model C

Structural model – Financial Success	
Latent variables	Manifest variables
Individual Success as an Entrepreneur	Mentorship, Socio-emotional Skills, Entrepreneurial Culture, Industry Experience, Regulatory Barriers, Start-up Finance and Acquiring Business Skills
Global Success as an Entrepreneur	Mentorship, Economic Barriers, Socio-emotional Skills, Entrepreneurial Culture, Industry Experience, Regulatory Barriers, Start-up Finance and Acquiring Business Skills
Financial Success as an Entrepreneur	Mentorship, Socio-emotional Skills, Entrepreneurial Culture, Industry Experience, Regulatory Barriers, Start-up Finance and Acquiring Business Skills
Mentorship	OUTADV6, INFTRAIN3, FTRAIN4, OUTADV2, INFTRAIN5
Socio-emotional Skills	OPPID1, SOCIO5, OPPID4, SOCIO1, SOCIO6
Entrepreneurial Culture	OUTADV4, CULT4, CULT1, CULT5
Industry Experience	INDEXP1, OPPID5, INDEXP2, INDEXP7
Regulatory Barriers	REGBARR3, REGBARR2, REGBARR1 REGBARR5
Start-up Finance	ECOBARR2, ECOBARR5
Acquiring Business Skills	BUSSKILL4, BUSKILL3, BUSKILL1 BUSKILL2

The structural model estimation is shown in Figure 6.7.

Figure 6.7: Structural model estimation (Sub-Model C - Financial success)



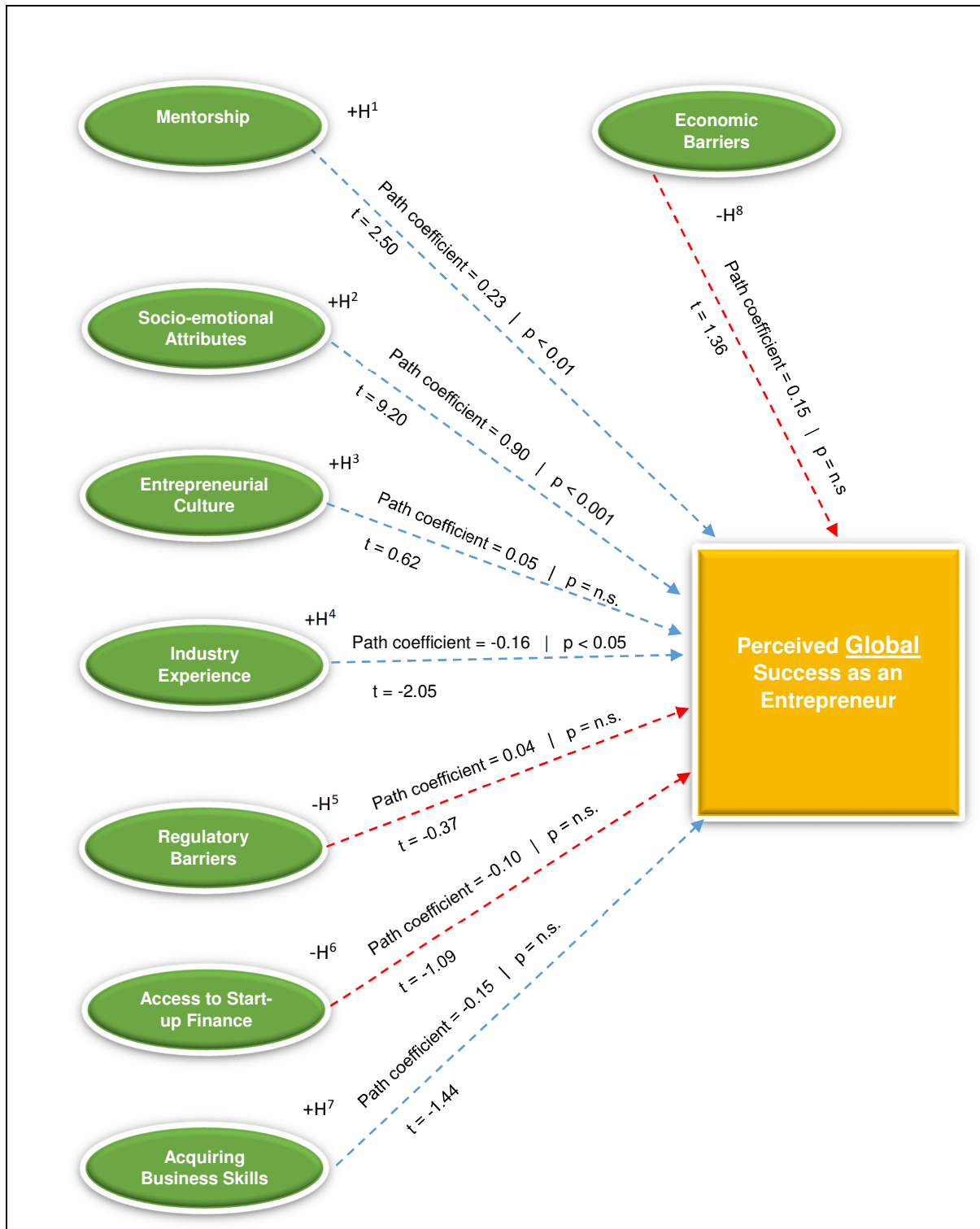
Source: Researcher's own construction, 2017

6.13 ESTIMATIONS OF THE STRUCTURAL MODEL

The process of model estimation includes a t-value, which is used to determine the statistical significance between a sample distribution mean and a parameter (Cooper & Schindler, 2007). According to Zikmund (2003), the t-distribution is used for hypothesis testing with small samples when standard deviation of the population is unknown. The t-values with regard to the revised model are shown in Figure 6.8. All hypotheses are directional hypothesis, with a t-value of ≥ 1.64 for the one-tailed test that represents a 5% level of significance, and indicates the minimum acceptable value for hypothesis acceptance.

It should be noted that the relationships between *Economic Barriers* (coded ECOBARR) and *Individual Success* (coded INDSUCC), and between *Economic Barriers* (coded ECOBARR) and *Financial Success* (coded FINSUCC), could not be assessed because of multi-collinearity concerns.

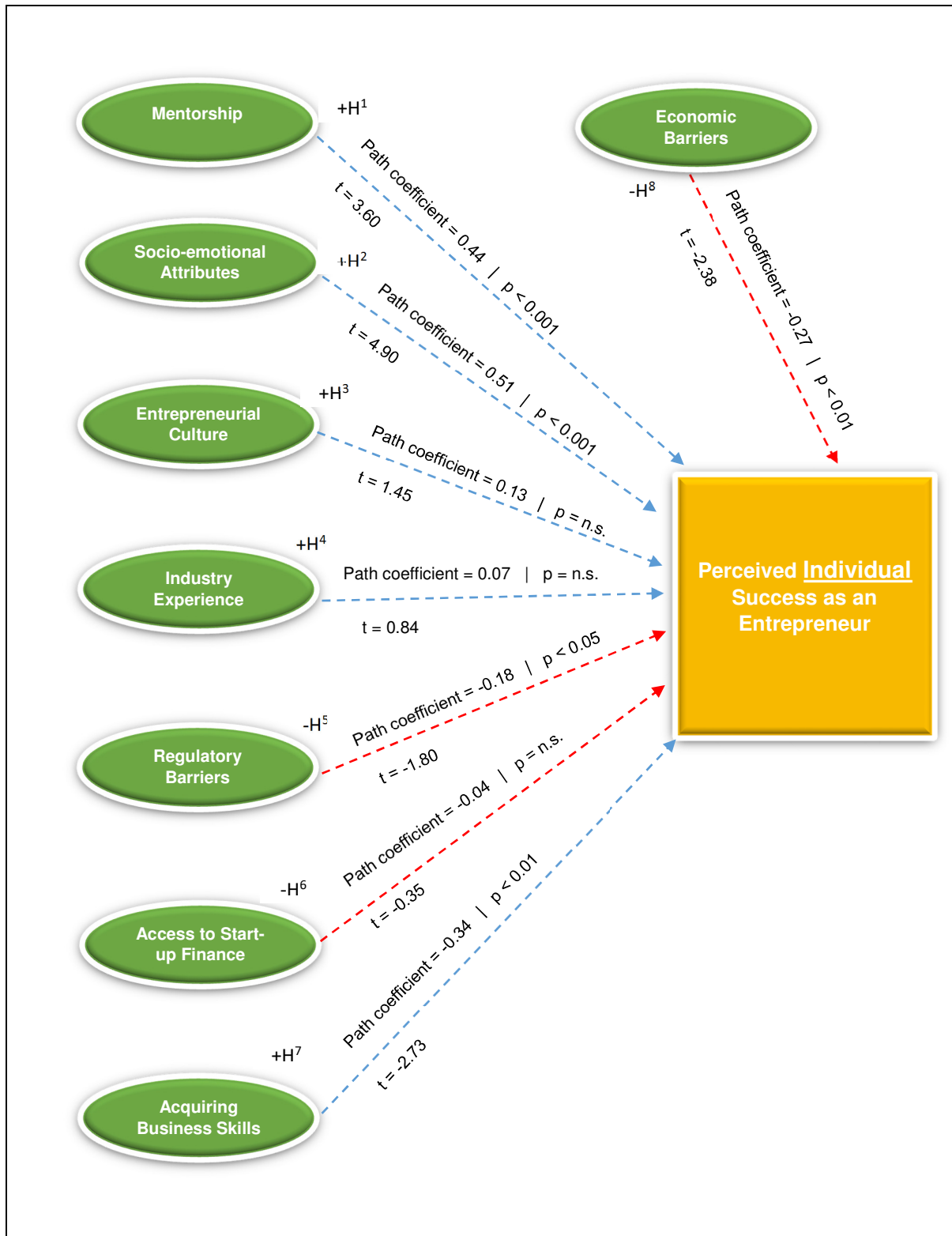
Figure 6.8: Structural model estimation (including t-values) Sub-Model A - Global success



Source: Researchers own construction, 2017

Please note: All hypotheses were assessed using a one-tailed test.

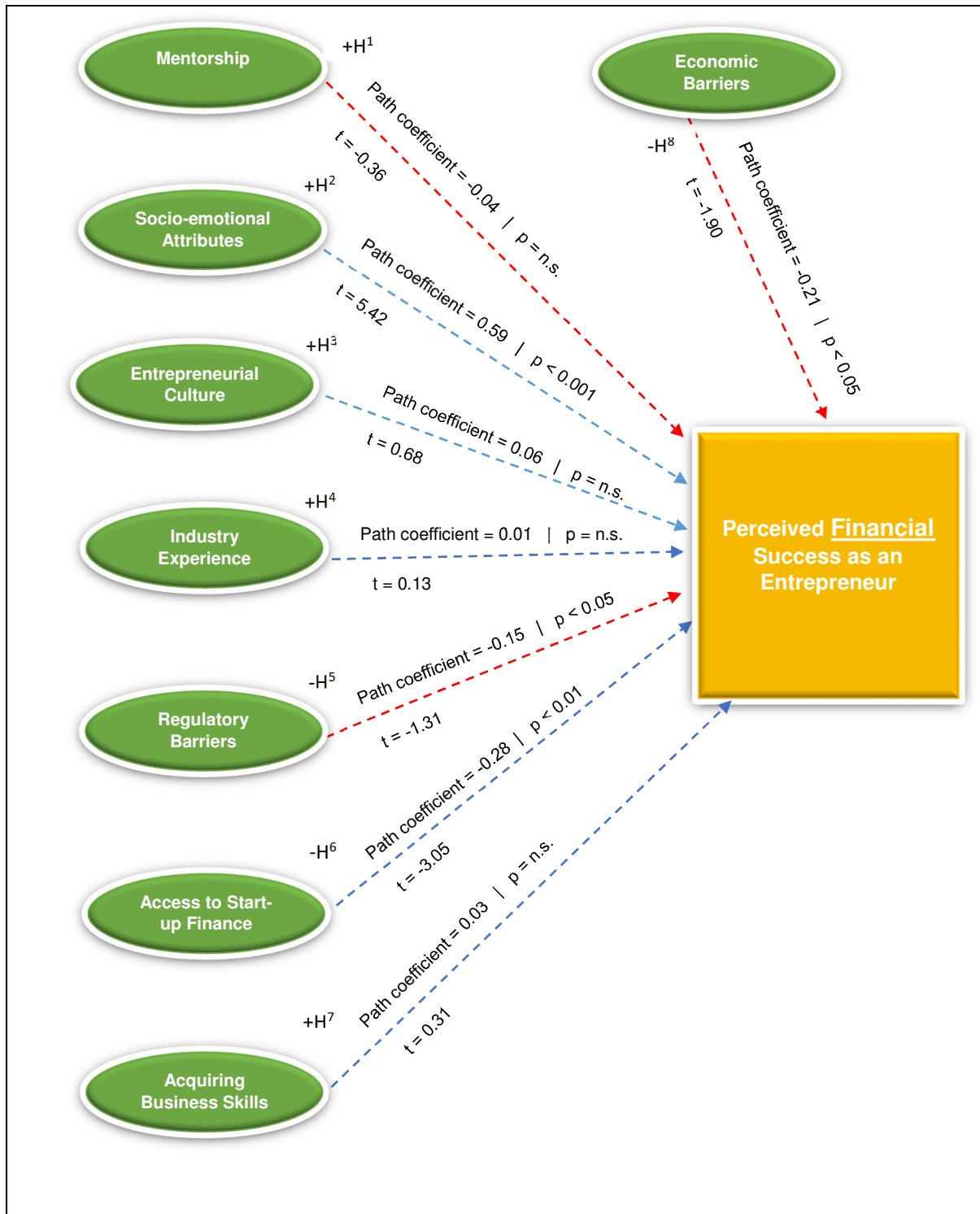
Figure 6.9: Structural model estimation (including t-values) Sub-Model B - Individual success



Source: Researchers own construction, 2017

Please note: All hypotheses were assessed using a one-tailed test.

Figure 6.10: Structural model estimation (including t-values) Sub-Model C - Financial success



Source: Researchers own construction, 2017

Please note: All hypotheses were assessed using a one-tailed test.

6.14 DISCUSSION OF SIGNIFICANT RELATIONSHIPS

Three significant and five non-significant relationships were identified between the independent and dependent variables. These significant relationships, shown in Figures 6.6, 6.7 and 6.8, therefore, identify the factors influencing the perceived success of developmental training support for entrepreneurs. This section contains a discussion of these findings, including a discussion of the statistical relationships, the stated hypotheses, and the decisions to accept or reject the hypotheses. Where necessary, supporting arguments are also provided.

6.14.1 Mentorship

6.14.1.1 Global success – Model A

H^{1g} There is a positive relationship between Mentorship and Global Success as an Entrepreneur in South Africa.

The results shown in Figure 6.6 indicate that there is a positive relationship (path coefficient 0.23; t-value = 2.50; $p < 0.01$) between the level of *Mentorship* and *Global Success as an Entrepreneur*.

The hypothesis H^{1g} is therefore accepted. The results suggest that *Mentorship* has a significant, positive influence on Global Success as an Entrepreneur.

6.14.1.2 Individual success – Model B

H¹ⁱ There is a positive relationship between Mentorship and Individual Success as an Entrepreneur in South Africa.

The results shown in Figure 6.7 indicate that there is a positive relationship (path coefficient 0.44; t-value = 3.60; $p < 0.001$) between the level of *Mentorship* and *Individual Success as an Entrepreneur*.

The hypothesis H¹ⁱ is therefore accepted. The results suggest that *Mentorship* has a significant positive influence on Individual Success as an Entrepreneur.

6.14.1.3 Financial success – Model C

H^{1f} There is a positive relationship between Mentorship and Financial Success as an Entrepreneur in South Africa.

The results shown in Figure 6.8 indicate that there is no relationship (path coefficient -0.04; t-value = -0.36; p = n.s.) between the level of *Mentorship* and *Financial Success as an Entrepreneur*.

The hypothesis H^{1f} is therefore rejected. The results suggest that *Mentorship* does not influence Financial Success as an Entrepreneur.

6.14.2 Socio-Emotional Attributes

6.14.2.1 Global success – Model A

H^{2g} There is a positive relationship between developing Socio-Emotional attributes and Global Success as an Entrepreneur in South Africa.

The results shown in Figure 6.6 indicate that there is a positive relationship (path coefficient 0.90; t-value = 9.20; p < 0.001) between the level of *Socio-Emotional Attributes* and *Global Success as an Entrepreneur*.

The hypothesis H^{2g} is therefore accepted. The results suggest that *Socio-Emotional Attributes* have a positive influence on Global Success as an Entrepreneur.

6.14.2.2 Individual success – Model B

H²ⁱ There is a positive relationship between developing Socio-Emotional attributes and Individual Success as an Entrepreneur in South Africa.

The results shown in Figure 6.7 indicate that there is a positive relationship (path coefficient 0.51; t-value = 4.90; $p < 0.001$) between the level of *Socio-Emotional Attributes* and *Individual Success as an Entrepreneur*.

The hypothesis H²ⁱ is therefore accepted. The results suggest that *Socio-Emotional Attributes* have a positive influence on *Individual Success as an Entrepreneur*.

6.14.2.3 Financial success – Model C

H^{2f} There is a positive relationship between developing *Socio-Emotional attributes* and *Financial Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.8 indicate that there is a positive relationship (path coefficient 0.59; t-value = 5.42; $p < 0.001$) between the level of *Socio-Emotional Attributes* and *Financial Success as an Entrepreneur*.

The hypothesis H^{2f} is therefore accepted. The results suggest that *Socio-Emotional Attributes* have a positive and significant influence on *Financial Success as an Entrepreneur*.

6.14.3 Entrepreneurial Culture

6.14.3.1 Global success – Model A

H^{3g} There is a positive relationship between developing an *Entrepreneurial Culture* and *Global Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.6 indicate that there is no relationship (path coefficient 0.05; t-value = 0.62; $p = \text{n.s.}$) between the level of *Entrepreneurial Culture* and *Global Success as an Entrepreneur*.

The hypothesis H^{3g} is therefore rejected. The results suggest that *Entrepreneurial Culture* does not influence *Global Success as an Entrepreneur*.

6.14.3.2 Individual success – Model B

H³ⁱ There is a positive relationship between developing Entrepreneurial Culture and Individual Success as an Entrepreneur in South Africa.

The results shown in Figure 6.7 indicate that there is no relationship (path coefficient 0.13; t-value = 1.45; p = n.s.) between the level of *Entrepreneurial Culture* and *Individual Success as an Entrepreneur*.

The hypothesis H³ⁱ is therefore rejected. The results suggest that *Entrepreneurial Culture* does not influence Individual Success as an Entrepreneur.

6.14.3.3 Financial success – Model C

H^{3f} There is a positive relationship between developing Entrepreneurial Culture and Financial Success as an Entrepreneur in South Africa.

The results shown in Figure 6.8 indicate that there is no relationship (path coefficient 0.06; t-value = 0.68; p = n.s.) between the level of *Entrepreneurial Culture* and *Financial Success as an Entrepreneur*.

The hypothesis H^{3f} is therefore rejected. The results suggest that *Entrepreneurial Culture* does not influence Financial Success as an Entrepreneur.

6.14.4 Industry Experience

6.14.4.1 Global success – Model A

H^{4g} There is a positive relationship between developing Industry Experience and Global Success as an Entrepreneur in South Africa.

The results shown in Figure 6.6 indicate that there is a negative relationship (path coefficient -0.16; t-value = -2.05; $p < 0.05$) between the level of *Industry Experience* and *Global Success as an Entrepreneur*.

The hypothesis H^{4g} is therefore rejected. The results suggest that *Industry Experience* exerts a negative influence on *Global Success as an Entrepreneur*.

6.14.4.2 Individual success – Model B

H^{4g} There is a positive relationship between developing *Industry Experience* and *Individual Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.6 indicate there is no relationship (path coefficient 0.07; t-value = 0.84; $p = \text{n.s.}$) between the level of *Industry Experience* and *Global Success as an Entrepreneur*.

The hypothesis H⁴ⁱ is therefore rejected. The results suggest that *Industry Experience* does not influence *Individual Success as an Entrepreneur*.

6.14.4.3 Financial success – Model C

H^{4f} There is a positive relationship between developing *Industry Experience* and *Financial Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.8 indicate that there is no relationship (path coefficient 0.01; t-value = 0.13; $p = \text{n.s.}$) between the level of *Industry Experience* and *Financial Success as an Entrepreneur*.

The hypothesis H^{4f} is therefore rejected. The results suggest that *Industry Experience* does not influence *Financial Success as an Entrepreneur*.

6.14.5 Regulatory Barriers

6.14.5.1 Global success – Model A

H^{5g} There is a negative relationship between Regulatory Barriers and Global Success as an Entrepreneur in South Africa.

The results shown in Figure 6.6 indicate that there is no relationship (path coefficient 0.04; t-value = -0.37; p = n.s.) between the level of *Regulatory Barriers* and *Global Success as an Entrepreneur*.

The hypothesis H^{5g} is therefore rejected. The results suggest that *Regulatory Barriers* do not influence Global Success as an Entrepreneur.

6.14.5.2 Individual success – Model B

H⁵ⁱ There is a negative relationship between Regulatory barriers and Individual Success as an Entrepreneur in South Africa.

The results shown in Figure 6.7 indicate that there is a negative relationship (path coefficient -0.18; t-value = -0.18; p<0.05) between the level of *Regulatory Barriers* and *Individual Success as an Entrepreneur*.

The hypothesis H⁵ⁱ is therefore accepted. The results suggest that *Regulatory Barriers* do negatively affect Individual Success as an Entrepreneur.

6.14.5.3 Financial success – Model C

H^{5g} There is a negative relationship between Regulatory Barriers and Financial Success as an Entrepreneur in South Africa.

The results shown in Figure 6.8 indicate that there is no relationship (path coefficient -0.15; t-value = -1.31; p = n.s.) between the level of *Regulatory Barriers* and *Financial Success as an Entrepreneur*.

The hypothesis H^{5f} is therefore rejected. The results suggest that *Regulatory Barriers* do not affect the *Financial Success as an Entrepreneur*.

6.14.6 Access to Start-up Finance

6.14.6.1 Global success – Model A

H^{6g} There is a negative relationship between limitations on *Access to Start-up Finance* and *Global Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.6 indicate there is no relationship (path coefficient -0.10; t-value = -1.09; p = n.s.) between limitations on *Access to Start-up Finance* and *Global Success as an Entrepreneur*.

The hypothesis H^{6g} is therefore rejected. The results suggest that limitations on *Access to Start-up Finance* do not influence the *Global Success as an Entrepreneur*.

6.14.6.2 Individual success – Model B

H⁶ⁱ There is a negative relationship between limitations on *Access to Start-up Finance* and *Individual Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.7 indicate that there is no relationship (path coefficient -0.04; t-value = -0.35; p = n.s.) between limitations on *Access to Start-up Finance* and *Individual Success as an Entrepreneur*.

The hypothesis H⁶ⁱ is therefore rejected. The results suggest that limited *Access to Start-up Finance* does affect the *Individual Success as an Entrepreneur*.

6.14.6.3 Financial success – Model C

H^{6f} There is a negative relationship between limitations on Access to Start-up Finance and Financial Success as an Entrepreneur in South Africa.

The results shown in Figure 6.8 indicate that there is a negative relationship (path coefficient -0.28; t-value = -3.05; $p < 0.01$) between limitations on *Access to Start-up Finance* and *Financial success as an Entrepreneur*.

The hypothesis H^{6f} is therefore accepted. The results suggest that limitations on *Access to Start-up Finance* have a negative influence on Financial Success as an Entrepreneur.

6.14.7 Acquiring Business Skills

6.14.7.1 Global success – Model A

H^{7g} There is a positive relationship between Acquiring Basic Business Skills and Global Success as an Entrepreneur in South Africa.

The results shown in Figure 6.6 indicate that there is no relationship (path coefficient -0.15; t-value = -1.44; $p = \text{n.s.}$) between the level of *Acquiring Basic Business Skills* and *Global Success as an Entrepreneur*.

The hypothesis H^{7g} is therefore rejected. The results suggest that *Acquiring Basic Business Skills* has no influence on Global Success as an Entrepreneur.

6.14.7.2 Individual success – Model B

H⁷ⁱ There is a positive relationship between Acquiring Basic Business Skills and Individual Success as an Entrepreneur in South Africa.

The results shown in Figure 6.7 indicate that there is a negative relationship (path coefficient -0.34; t-value = -2.73; $p < 0.01$) between the level of *Acquiring Basic Business Skills* and *Individual Success as an Entrepreneur*.

The hypothesis H^{7i} is therefore rejected. The results suggest that *Acquiring Basic Business Skills* has a negative influence on *Individual Success as an Entrepreneur*.

6.14.7.3 Financial success – Model C

H^{7f} There is a positive relationship between *Acquiring Basic Business Skills* and *Financial Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.8 indicate that there is no relationship (path coefficient 0.03; t-value = 0.31; $p = \text{n.s.}$) between the level of *Acquiring Basic Business Skills* and *Financial Success as an Entrepreneur*.

The hypothesis H^{7f} is therefore rejected. The results suggest that *Acquiring Basic Business Skills* does not influence *Financial Success as an Entrepreneur*.

6.14.8 Economic Barriers

6.14.8.1 Global success – Model A

H^{8g} There is a negative relationship between *Economic Barriers* and *Global Success as an Entrepreneur* in South Africa.

The results shown in Figure 6.6 indicate that there is no relationship (path coefficient 0.15; t-value = 1.36; $p = \text{n.s.}$) between the level of *Economic Barriers* and *Global Success as an Entrepreneur*.

The hypothesis H^{8g} is therefore rejected. The results suggest that *Economic Barriers* do not influence *Global Success as an Entrepreneur*.

6.14.8.2 Individual success – Model B

H⁸ⁱ There is a negative relationship between Economic Barriers and Individual Success as an Entrepreneur in South Africa.

The results shown in Figure 6.7 indicate that there is a negative relationship (path coefficient -0.27; t-value = -2.38; $p < 0.01$) between the level of *Economic Barriers* and *Individual Success as an Entrepreneur*.

The hypothesis H⁸ⁱ is therefore accepted. The results suggest that *Economic Barriers* have a negative effect on Individual Success as an Entrepreneur.

6.14.8.3 Financial success – Model C

H^{8f} There is a negative relationship between Economic Barriers and Financial Success as an Entrepreneur in South Africa.

The results shown in Figure 6.8 indicate that there is a negative relationship (path coefficient -0.21; t-value = -1.90; $p < 0.05$) between the level of *Economic Barriers* and *Financial Success as an Entrepreneur*.

The hypothesis H^{8f} is therefore accepted. The results suggest that *Economic Barriers* have a negative effect on Financial Success as an Entrepreneur.

6.15 ASSESSING THE IDENTIFICATION OF THE STRUCTURAL MODEL

During this stage of model assessment, the researcher assesses whether or not the software application has produced any meaningless or illogical results in the identification of the structural model (Hair *et al.*, 2006). The solution proposed by Hair *et al.* (1998) is to impose more constraints on the model in an attempt to eliminate some of the estimated coefficients. However, according to Hair *et al.* (2006), a model can never estimate more coefficients than the number of non-redundant correlations or covariances, which implies that zero is the lower limit for the degrees of freedom for

any model. Degrees of freedom are the number of estimated coefficients and represent the amount of mathematical information available to estimate model parameters (Hair *et al.*, 2006). The objective must be to maximise the degrees of freedom available, while still obtaining the best fitting model (Hair *et al.*, 2006). For the revised model, the degrees of freedom were 711, which is significantly greater than zero.

6.16 MAKING THEORETICALLY JUSTIFIED MODIFICATION TO THE MODEL

Based on the empirical results as presented in Figures 6.6, 6.7 and 6.8, each of the defined hypotheses were assessed for correspondence to the proposed theory. It was not necessary to make any modifications to the original model. Should it have been necessary to make modifications, they would have been justified and would have been empirically significant. A summary of the hypotheses in the revised model that were assessed, and the decisions to accept or reject them is presented in Tables 6.22, 6.23 and 6.24.

Table 6.22: Summary of the hypotheses tested in the revised models (Sub-Model A - Global success)

Hypothesis	Decision
H ^{1g} There is a positive relationship between <i>Mentorship</i> and Global Success as an Entrepreneur in South Africa.	Accepted
H ^{2g} There is a positive relationship between developing <i>Socio-Emotional Attributes</i> and Global Success as an Entrepreneur in South Africa.	Accepted
H ^{3g} There is a positive relationship between <i>Entrepreneurial Culture</i> and Global Success as an Entrepreneur in South Africa.	Rejected
H ^{4g} There is a positive relationship between <i>Industry experience</i> and Global Success as an Entrepreneur in South Africa.	Rejected
H ^{5g} There is a negative relationship between <i>Regulatory Barriers</i> and Global Success as an Entrepreneur in South Africa.	Rejected

H ^{6g}	There is a negative relationship between limited <i>Access to Start-up Finance</i> and Global Success as an Entrepreneur in South Africa.	Rejected
H ^{7g}	There is a positive relationship between <i>Acquiring Basic Business Skills</i> and Global Success as an Entrepreneur in South Africa.	Rejected
H ^{8g}	There is a negative relationship between <i>Economic Barriers</i> and Global Success as an Entrepreneur in South Africa.	Rejected

Table 6.23: Summary of the hypotheses tested in the revised models (Sub-Model B - Individual success)

Hypothesis		Decision
H ¹ⁱ	There is a positive relationship between <i>Mentorship</i> and Individual Success as an Entrepreneur in South Africa.	Accepted
H ²ⁱ	There is a positive relationship between developing <i>Socio-Emotional Attributes</i> and Individual Success as an Entrepreneur in South Africa.	Accepted
H ³ⁱ	There is a positive relationship between <i>Entrepreneurial Culture</i> and Individual Success as an Entrepreneur in South Africa.	Rejected
H ⁴ⁱ	There is a positive relationship between <i>Industry Experience</i> and Individual Success as an Entrepreneur in South Africa.	Rejected
H ⁵ⁱ	There is a negative relationship between <i>Regulatory Barriers</i> and Individual Success as an Entrepreneur in South Africa.	Accepted
H ⁶ⁱ	There is a negative relationship between limited <i>Access to Start-up Finance</i> and Individual Success as an Entrepreneur in South Africa.	Rejected
H ⁷ⁱ	There is a positive relationship between <i>Acquiring Basic Business Skills</i> and Individual Success as an Entrepreneur in South Africa.	Rejected
H ⁸ⁱ	There is a negative relationship between <i>Economic Barriers</i> and Individual Success as an Entrepreneur in South Africa.	Rejected

**Table 6.24: Summary of the hypotheses tested in the revised models
(Sub-Model C - Financial success)**

Hypothesis		Decision
H ^{1f}	There is a positive relationship between <i>Mentorship</i> and Financial Success as an Entrepreneur in South Africa.	Rejected
H ^{2f}	There is a positive relationship between developing <i>Socio-Emotional Attributes</i> and Financial Success as an Entrepreneur in South Africa.	Accepted
H ^{3f}	There is a positive relationship between <i>Entrepreneurial Culture</i> and Financial Success as an Entrepreneur in South Africa.	Rejected
H ^{4f}	There is a positive relationship between <i>Industry Experience</i> and Financial Success as an Entrepreneur in South Africa.	Rejected
H ^{5f}	There is a negative relationship between <i>Regulatory barriers</i> and Financial Success as an Entrepreneur in South Africa.	Rejected
H ^{6f}	There is a negative relationship between limited <i>Access to Start-up Finance</i> and Financial Success as an Entrepreneur in South Africa.	Accepted
H ^{7f}	There is a positive relationship between <i>Acquiring Basic Business Skills</i> and Financial Success as an Entrepreneur in South Africa.	Rejected
H ^{8f}	There is a negative relationship between <i>Economic Barriers</i> and Financial Success as an Entrepreneur in South Africa.	Accepted

6.17 SUMMARY

Chapter 6 contains the empirical results for the study. The proposed theoretical model presented in Chapter 4 was empirically tested using structural equation modelling (SEM), and the results were assessed against the formulated hypotheses. A revised model was then proposed and assessed. Both validity and reliability were assessed and the results showed that the following eight factors potentially influence the dependent variables being: *Perceived Global Success of Entrepreneurs*, *Perceived Individual Success of Entrepreneurs* and the *Perceived Financial Success of Entrepreneurs* in South Africa:

- Mentorship;
- Socio-Emotional Attributes;
- Entrepreneurial Culture;
- Industry Experience;
- Regulatory Barriers;
- Access to Start-up Finance;
- Acquiring Business Skills; and
- Economic Barriers.

For both the Global and Individual success models, it was accepted that *Mentorship* positively influences success as an entrepreneur. However, this was not the case for the Financial success as an entrepreneur. In all three sub-models (Global, Individual and Financial success as an entrepreneur), *Socio-Emotional Attributes* have a significantly positive effect on success as an entrepreneur.

In all three sub-models, it was found that *Industry Experience* does not contribute to success as an entrepreneur. This is contrary to the findings in the literature reviews. A possible explanation is that there are no experience restrictions on South African entrepreneurs prior to starting a business, unlike Germany where nascent entrepreneurs are required to have a minimum of fifteen years' experience before opening a business. A further explanation might be that South African entrepreneurs may embark on a new venture without having any experience in the industry. For example, winning a tender and then outsourcing the skilled work to provide the deliverables.

Regulatory Barriers were found to have a negative influence on Individual success as an entrepreneur, but showed no influence on Global or Financial success as an entrepreneur.

The results showed that *Acquiring Basic Business Skills* did not influence Global, Individual or the Financial success as an entrepreneur. This finding was also contrary to the findings in the literature reviews. It is possible that the use of the words "basic" business skills in this set of questions might have skewed the responses from those who felt more advanced skills were required from an entrepreneurial perspective.

The results showed that Individual and Financial success as an entrepreneur in South Africa is dependent on the degree of negative *Economic Barriers* faced by entrepreneurs.

Finally, limitations on *Access to Start-up Finance* were shown to hinder the likelihood of entrepreneurial activity in South Africa.

The interpretation of the findings, as well as, their expected implications for the perceived success of *Developmental Training Support for Entrepreneurs in South Africa* is presented in Chapter 7. The chapter includes consideration of the specific limitations of this study and concludes with specific managerial recommendations to ensure effective developmental training support for entrepreneurs in South Africa.

CHAPTER 7

SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

A research report should be concluded with an interpretation of the findings, based on the data obtained, against the background of the original research problem (Mouton, 1996). Mouton (1996) believes that the criterion of objectivity demands that this interpretation should not be selective, and that the data should be reported in full. A valid conclusion is one where the empirical data and evidence provide both sufficient and relevant grounds for the conclusion.

Research question RQ₆ and RQ₉ and research objective RO₉ are addressed in this chapter. The findings of the study are interpreted and evaluated on the basis of both the empirical data and insights gained. The first part of the chapter provides an overview of the study. The focus of the second part is on the interpretation of the findings against the background of the original research problem and research objectives with the aim of providing a valid conclusion. The role of the non-significant relationships is also considered. In the final part of the chapter the implications of the empirical results are discussed and specific recommendations are made with regard to future research in the field of study. The limitations of the study are also considered.

7.2 OVERVIEW OF THE STUDY

This study was concerned with the factors affecting the success of developmental training for entrepreneurs in South Africa and the key role entrepreneurs play in the South African economy. The main research problem, as formulated and presented in Chapter 1, was:

To identify the major contributors to the developmental training support of successful entrepreneurs in South Africa.

In order to address the research problem, a global literature research was conducted and ten independent variables were identified which potentially influenced success as an entrepreneur. The specific factors identified were: entrepreneurial culture, socio-emotional attributes, acquiring industry skills, industry experience, opportunity identification, regulatory barriers, economic barriers, outside advice, formal training and informal training. The research framework of areas that were investigated is illustrated in Figure 1.1. The literature study comprises the following chapters:

- Chapter 2 : Global, developmental, training support for entrepreneurs; and
- Chapter 3 : Developmental training support of entrepreneurs in South Africa.

From the above literature study, the most appropriate methodology to investigate developmental training support for entrepreneurs was identified and this methodology provided a framework for this study. In this way, a best practice method was developed to accelerate the development of nascent entrepreneurs in South Africa. The factors identified above were then tested by developing a theoretical model that is presented in Chapter 4.

Given the multi-dimensional nature of developmental training support for entrepreneurs, and the number of inter-related factors that can influence the success of entrepreneurial activity, the study aimed to:

- Identify the potential impact of the successful development of entrepreneurs in South Africa;
- Address the perceptions of existing entrepreneurs of the factors which they identify as having a potentially positive or negative effect on developmental training support for entrepreneurs in South Africa;
- Promote a “best practice” approach to encouraging nascent entrepreneurial activity in South Africa;
- Develop recommendations to Government and the private sector regarding which factors would primarily influence developmental training support for successful entrepreneurs in South Africa; and
- To provide a prioritised approach, based on an analysis of the findings of the study, for when resources are allocated to developmental training support for entrepreneurs in South Africa.

The primary objective of this research, as presented in Chapter 1, was to investigate the contributing factors which influence developmental training support for entrepreneurs in South Africa, and subsequently to develop a theoretical, developmental training support model for entrepreneurial growth in South Africa. The following research design objectives were identified to address the primary objective:

- To develop a theoretical model which comprises the factors that will promote developmental training support for entrepreneurs in South Africa;
- To develop an appropriate measuring instrument that will test empirically the relationships described in the theoretical model;
- To test the proposed model and the suggested hypotheses empirically by sourcing data from relevant role-players in entrepreneurship in South Africa;
- To analyse the sourced data statistically; and
- To propose specific recommendations based on the results of the statistical analysis and research findings.

The primary research objective was supported further by a number of secondary objectives that are listed and described in Table 7.1.

The dependent variables were identified as: the perceived success of developmental training support for global entrepreneurs; and the perceived success of developmental training support for individual entrepreneurs. A total of 10 independent variables were identified which could influence the dependent variables. These independent variables included: Entrepreneurial Culture, Socio-Emotional Attributes, Acquiring Industry Skills, Industry Experience, Opportunity Identification, Regulatory Barriers, Economic Barriers, Outside Advice, Formal Training and Informal Training. The relationships between these factors or variables were illustrated in the theoretical model as presented in Chapter 4 and then hypothesised. Each factor was then operationalised by carefully defining each variable within the context of the theory in which it appears. In this regard it was accepted that these operational definitions do not guarantee accuracy of the proposed model, but served the purpose of gaining a better understanding, especially of abstract constructs, by means of operationally defined, concrete variables.

The relationships illustrated in the theoretical model were then tested empirically, and the primary and secondary objectives 1 to 9 of the study were thus achieved.

Table 7.1: Secondary research objectives

RO ₁	To undertake an in-depth re-assessment of developmental training support for entrepreneurs globally.
RO ₂	To undertake an in-depth re-assessment of the methods used in South Africa for developmental training support for entrepreneurs.
RO ₃	To analyse the specific requirements of the South African environment.
RO ₄	To analyse the role the South African private sector might have in developmental training support for entrepreneurs.
RO ₅	To analyse the role the South African public sector might have in developmental training support for entrepreneurs.
RO ₆	To construct a theoretical model that will describe the relationships between the independent and dependent variables.
RO ₇	To prioritise the factors affecting developmental training support for entrepreneurs.
RO ₈	To test empirically the proposed theoretical model amongst the main factors contributing to the developmental training of entrepreneurs in South Africa.
RO ₉	To analyse the results and interpretations of the research, and to make appropriate and meaningful recommendations based on the results of the statistical analysis.

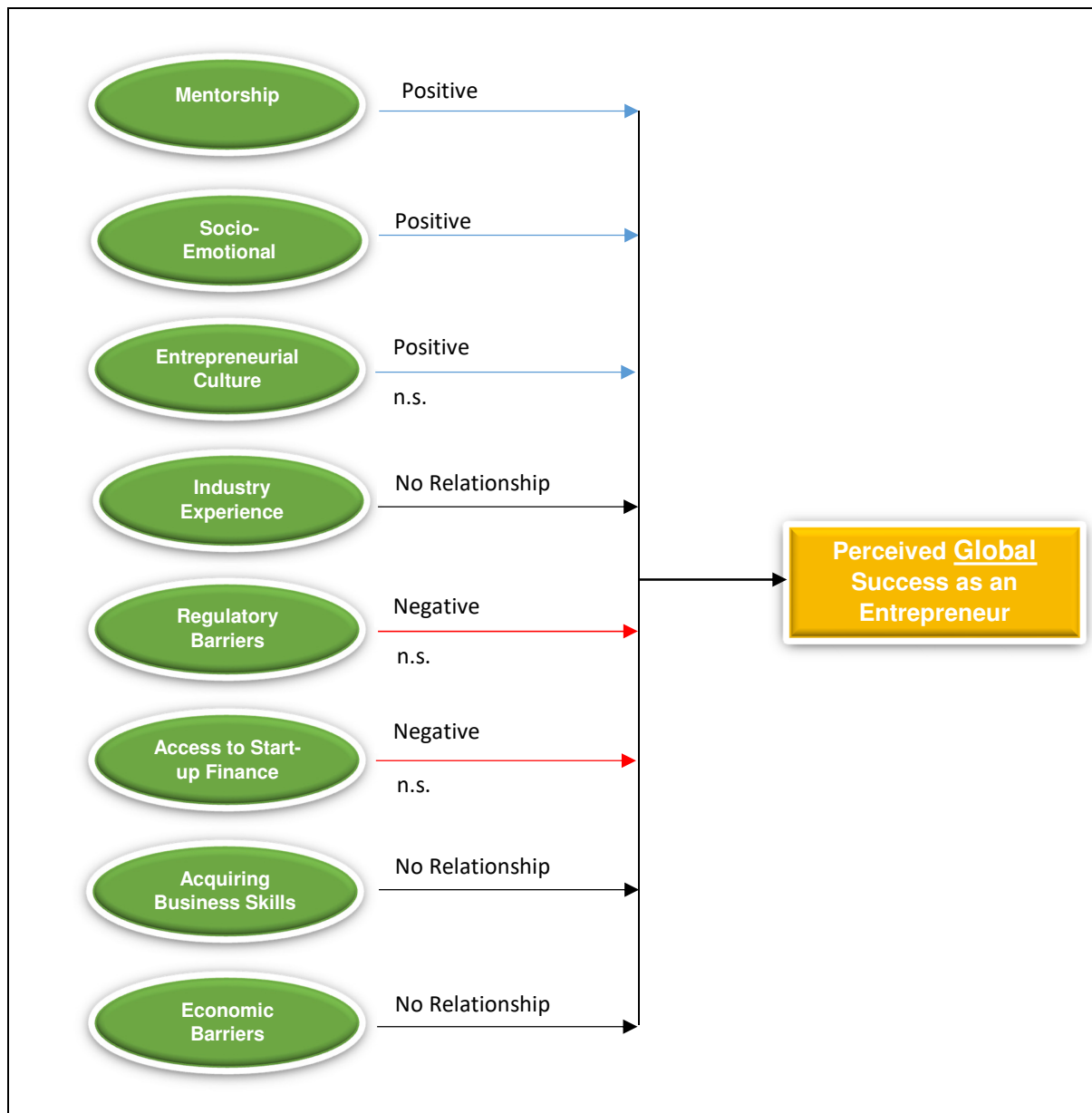
7.3 CONCLUSION FROM THE RESEARCH METHODOLOGY

To develop and test the theoretical model, a positivistic research paradigm was implemented in this study. In order to test the proposed theoretical model, as well as the hypothesised relationships depicted in the theoretical model, a structured questionnaire was developed to source the primary data. A pilot survey was conducted amongst a sample of 25 South African business owners so that minor changes could be made to the questionnaire if necessary. Respondents were invited to participate by e-mail which directed them to QuestionPro.com which hosted the questionnaire and

retained the data collected. After ensuring the necessary support, a random sampling technique was adopted with the sample collection for this study that amounted to 332 respondents. All data was collected electronically and stored on QuestionPro.com.

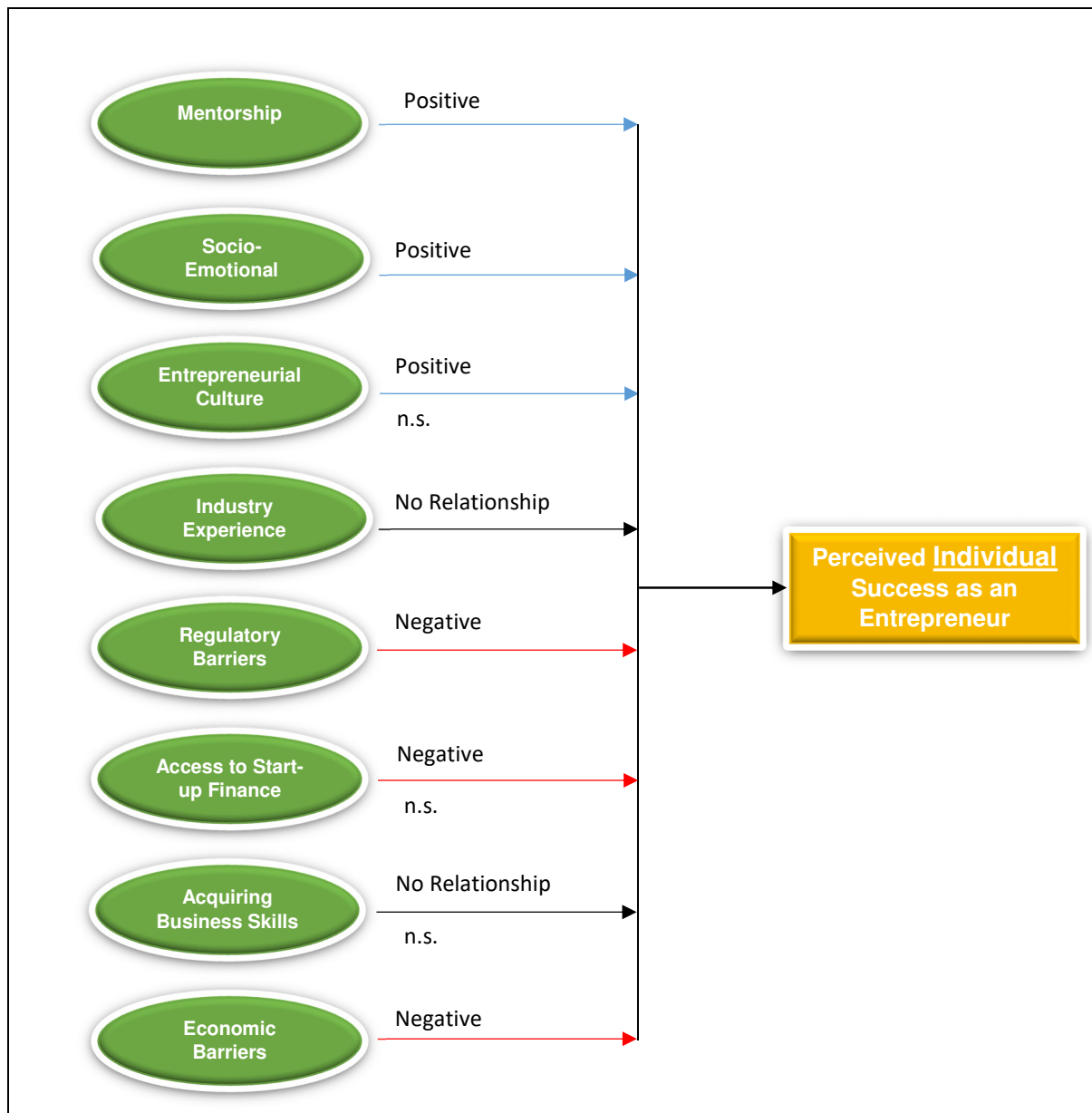
The collected data was then subjected to further testing. Firstly, exploratory factor analyses (EFA) was conducted to assess the discriminant validity of the research instrument, and to confirm whether or not the data contained the expected underlying dimensions of the perceived success of developmental training support for entrepreneurs. The EFA analysis was unable to confirm all variables as presented in the original theoretical model. As a result, a third dependent variable emerged from the EFA. Based on the items that loaded on the new dependent variable, this factor was named Financial Success. Based on an inspection of the factor loadings and the modification indices, it was decided to remove the latent variables: Opportunity Identification, Outside Advice, Formal Training and Informal Training because of construct validity concerns. However, some of the items from the dependent variables did load on other factors in the exploratory factor analysis. As a result of the EFA, the following eight factors emerged with sufficient evidence of discriminant validity: Mentorship, Socio-Emotional Attributes, Entrepreneurial Culture, Industry Experience, Regulatory Barriers, Access to Start-up Finance, Acquiring Business Skills and Economic Barriers. Figures 7.1, 7.2 and 7.3 depict the significant relationships identified in this study.

Figure 7.1: Factors influencing developmental training support for entrepreneurs in South Africa (Sub-Model A - Global success)



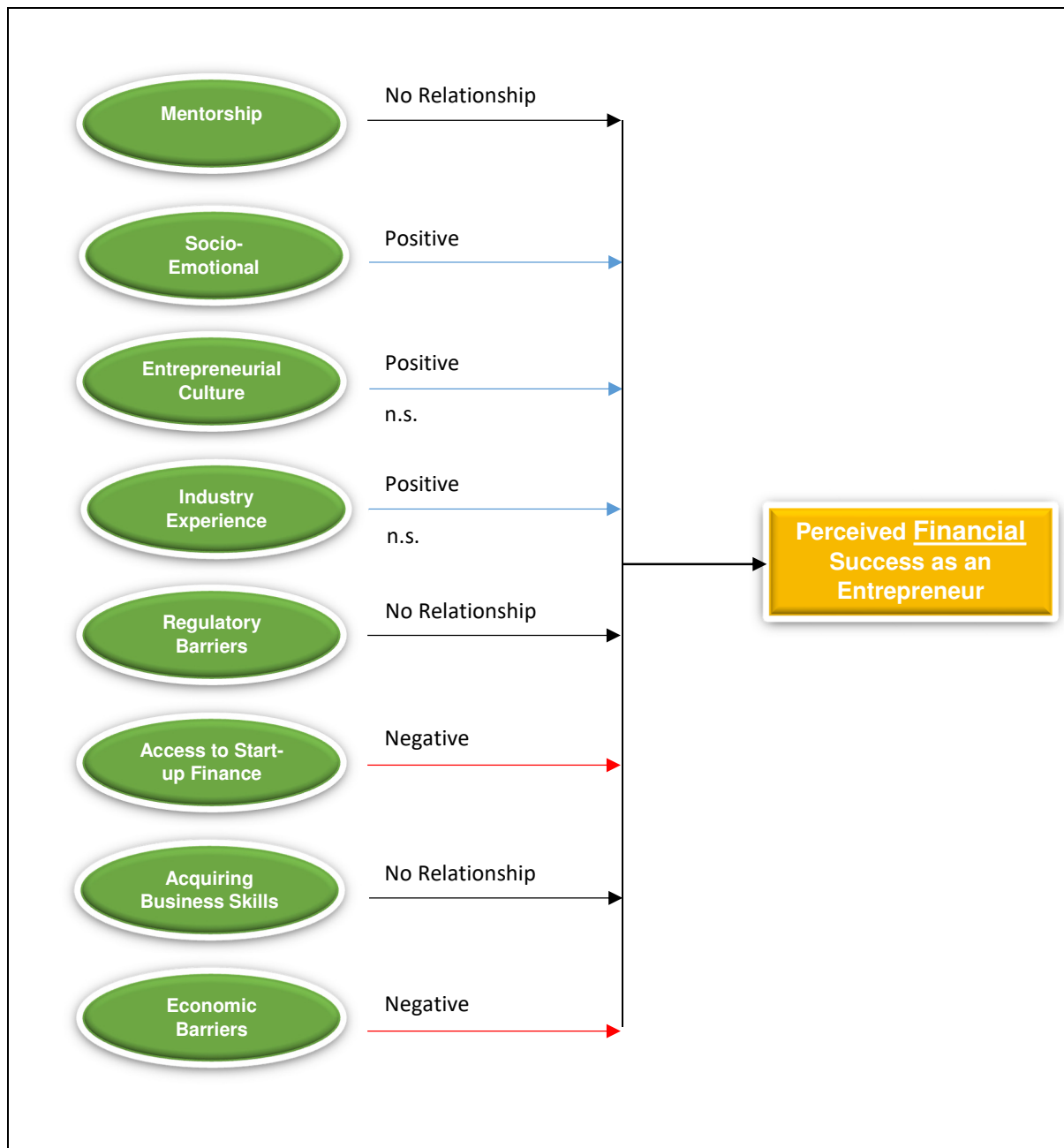
Source: Researcher's own construction, 2017

Figure 7.2: Factors influencing developmental training for entrepreneurs in South Africa (Sub-Model B - Individual success)



Source: Researcher's own construction, 2017

Figure 7.3: Factors influencing developmental training for entrepreneurs in South Africa (Sub-Model C - Financial success)



Source: Researcher's own construction, 2017

7.4 INTERPRETATION AND CONCLUSIONS ABOUT THE RESEARCH PROBLEM AND RESEARCH QUESTIONS

The identification of the factors that influence the success of developmental training support for entrepreneurs in South Africa forms the basis of the research problem. The low levels of entrepreneurial activity in South Africa (in comparison with global trends), as well as the need for the stimulation of economic growth in the country, form the basis of this study. By taking into account global methodology for the stimulation of entrepreneurs, this study addresses the factors which should be considered important to the development of entrepreneurs in South Africa. The factors which have a significant influence on the dependent variables were identified and reported in Chapter 6 and the relationships were summarised in Figures 7.1, 7.2 and 7.3. A contribution to the body of knowledge is therefore evident in this study.

The main research problem was further supported by a number of secondary research questions as presented in Table 1.2. The secondary research questions that were answered in the study are listed and described in Table 7.2.

Table 7.2: Secondary research questions addressed

RQ ₁	An extensive literature review provided the global approach and a South African approach to successful developmental training support for entrepreneurs.
RQ ₂	The findings of this study, as well as South African literature on the topic, provided evidence about the South African methodology for developing and training entrepreneurs.
RQ ₃	Various barriers to developmental training for entrepreneurs were identified and should be addressed to stimulate entrepreneurial activity in South Africa.
RQ ₄	The evidence shows that the private sector plays a significant role, such as mentorship, developing an entrepreneurial cultural, and assisting to provide industry experience.
RQ ₅	The study shows that the public sector (Government) can assist developmental training for entrepreneurs by providing start-up entrepreneurs with less entry barriers, more access to start-up finance and minimising economic barriers felt by entrepreneurs.

RQ ₆	The developmental training of entrepreneurs in South Africa should focus on factors such as: socio-emotional attributes, mentorship, entrepreneurial culture and reducing economic barriers in order to maximise the impact on start-up entrepreneurs.
RQ ₇	A theoretical model was developed that provides unambiguous definitions of central concepts, which provides researchers with an underlying theoretical framework that can guide and direct future research efforts.
RQ ₈	The theoretical model was tested by using a structured questionnaire administered to South African business owners with 332 responses. In addition, the responses were validated by using the SEM technique, which is also considered significant.
RQ ₉	The study not only identified key success factors with regard to the proposed model, but also highlighted predominant factors necessary for successful, developmental training support for South African entrepreneurs.

The next section contains a discussion on the statistically significant relationships as presented in Figures 6.6, 6.7 and 6.8, with the interpretations and recommendations for each relationship made within the context of the research problem and supporting research questions. The hypotheses have also been reworded and presented appropriately from a management perspective. The section is followed by a discussion of the non-significant relationships and their contribution to the study.

7.4.1 Mentorship

For the purposes of this study, Mentorship refers to the extent an entrepreneur receives advice from mentors and role models both within and outside the family circle and includes the influences of training facilitators and discussions with others. Mentorship plays an integral part in directing an entrepreneur and providing confidence to pursue entrepreneurial activities. In this study, this factor was the most significant factor influencing success as an entrepreneur. Family mentors, as well as facilitators or outside advisers, proved to be an essential part of developmental training for entrepreneurs.

Hypothesis H^{1g} from the revised model states:

There is a positive relationship between Mentorship and Global Success as an entrepreneur in South Africa.

Hypothesis H¹ⁱ from the revised model states:

There is a positive relationship between Mentorship and Individual Success as an entrepreneur in South Africa.

Hypothesis H^{1f} from the revised model states:

There is a positive relationship between Mentorship and Financial Success as an Entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

Mentorship should play a significant role in developmental training for global, individual and financial success as an entrepreneur in South Africa.

7.4.2 Socio-emotional attributes

For the purposes of this study, the term Socio-Emotional Attributes refers to the likelihood an entrepreneur will be: a self-starter, willing to take risks, able to identify opportunities and solve problems which will result in profitable business ventures. The findings of this study show that socio-emotional attributes have a significant influence on the success of entrepreneurs. Some socio-emotional attributes can be taught, such as taking risks and identifying opportunities or solving problems. The developmental training support for these attributes should be encouraged to influence nascent entrepreneurs positively. However, the willingness of an entrepreneur to be a self-starter and take risks might not be influenced easily through a model intended to develop or train an entrepreneur.

Hypothesis H^{2g} from the revised model states:

There is a positive relationship between developing Socio-Emotional Attributes and Global Success as an entrepreneur in South Africa.

Hypothesis H²ⁱ from the revised model states:

There is a positive relationship between developing Socio-Emotional Attributes and Individual Success as an entrepreneur in South Africa.

Hypothesis H^{2f} from the revised model states:

There is a positive relationship between developing Socio-Emotional Attributes and Financial Success as an Entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

Developmental training should encourage individuals who display the positive socio-emotional attributes which affect global, individual and financial success as an entrepreneur in South Africa.

7.4.3 Entrepreneurial culture

For the purposes of this study, Entrepreneurial Culture refers to the positive influence of family members through their advice, encouragement to start a new-venture, reassurance through business-talk and belief that entrepreneurship is a rewarding career choice. Although statistical evidence for Entrepreneurial Culture affecting global, individual and financial success as an entrepreneur was not significant, the empirical relationships for all three dependent variables were in the expected direction (positive). Potential entrepreneurs are likely to embark on an entrepreneurial career if they see other family members making entrepreneurship a career choice and succeeding. Being able to talk about business in family and social circles provides potential entrepreneurs with the necessary developmental training support they require to start ventures of their own.

Hypothesis H^{3g} from the revised model states:

There is a positive relationship between Entrepreneurial Culture and Global Success as an Entrepreneur in South Africa.

Hypothesis H³ⁱ from the revised model states:

There is a positive relationship between Entrepreneurial Culture and Individual Success as an Entrepreneur in South Africa.

Hypothesis H^{3f} from the revised model states:

There is a positive relationship between Entrepreneurial Culture and Financial Success as an Entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

For global, individual and financial successes as entrepreneurs, South African households need to encourage entrepreneurship at family level as a healthy career choice and stimulate entrepreneurship through business discussions at home and socially.

7.4.4 Industry experience

For the purposes of this study, Industry Experience refers to working experience that develops technical and business skills and understanding competitors. The findings of this study show that there was a negative relationship between industry experience and global success as an entrepreneur in South Africa. This was surprising as the literature supports a positive relationship between industry experience and success as entrepreneur. Although not statistically significant, the individual and financial sub-models did show a positive relationship between industry experience and success as an entrepreneur.

Hypothesis H^{4g} from the revised model states:

There is a positive relationship between developing Industry Experience and Global Success as an Entrepreneur in South Africa.

Hypothesis H⁴ⁱ from the revised model states:

There is a positive relationship between developing Industry Experience and Individual Success as Entrepreneur in South Africa.

Hypothesis H^{4f} from the revised model refers to:

There is a positive relationship between developing Industry Experience and Financial Success as an entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

The findings of this study do not support the findings in literature which indicate that success as an entrepreneur is dependent on the experience gained from working within industry.

7.4.5 Regulatory barriers

For the purposes of this study, the term Regulatory Barriers refers to the restrictive, bureaucratic nature of the South African Government's policies affecting the start-up of new business ventures, which include overly protective labour policies and high minimum wages. The results showed no significant, statistical evidence for the hypotheses of the global, individual or financial sub-models. A possible explanation for this was that the questions were ambiguous and thus elicited responses that were not expected. A positive relationship existed in the individual and financial sub-models but, in both cases, this was not significant.

Hypothesis H^{5g} from the revised model states:

There is a negative relationship between Regulatory Barriers and Global Success as an Entrepreneur in South Africa.

Hypothesis H⁵ⁱ from the revised model states:

There is a negative relationship between Regulatory Barriers and Individual Success as an Entrepreneur in South Africa.

Hypothesis H^{5f} from the revised model states:

There is a negative relationship between Regulatory Barriers and Financial Success as an Entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

Governmental bureaucracy and overly protective labour policies, inhibiting the start-up of new ventures should be reviewed in order to encourage developmental training support for entrepreneurs in South Africa.

7.4.6 Access to start-up finance

For the purposes of this study Access to Start-up Finance refers to the limited access entrepreneurs have to new venture start-up capital and is an indicator of the prohibitive set-up costs of a new venture. All three sub-models (global, individual and financial) showed that access to start-up finance negatively influences success as an entrepreneur. The results do show that the relationship of start-up finance to global, individual and financial success as an entrepreneur was in the expected direction (negative). Nascent entrepreneurial development is thus negatively affected by the availability of start-up capital and the prohibitive costs of starting a new venture.

Hypothesis H^{6g} from the revised model states:

There is a negative relationship between Access to Start-up Finance and Global Success as an entrepreneur in South Africa.

Hypothesis H⁶ⁱ from the revised model states:

There is a negative relationship between Access to Start-up Finance and Individual Success as an Entrepreneur in South Africa.

Hypothesis H^{6f} from the revised model states:

There is a negative relationship between Access to Start-up Finance and Financial Success as an Entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

In order to encourage nascent entrepreneurs in South Africa, the costs of starting a new venture should be kept to a minimum and access to start-up capital should be made more readily available, by the Government and private institutions.

7.4.7 Acquiring business skills

For the purposes of this study, the term Business Skills refers to the skills required to run a business venture successfully, such as business operations skills, human resource management skills, basic financial management skills and basic marketing skills. For all three models, the results showed that there was a negative relationship between acquiring business skills and the dependent variables. This was contrary to

the findings in literature which show that business skills play a positive role in developmental training support for entrepreneurs.

Hypothesis H^{7g} from the revised model states:

There is a positive relationship between Acquiring Basic Business Skills and Global Success as an Entrepreneur in South Africa.

Hypothesis H⁷ⁱ from the revised model states:

There is a positive relationship between Acquiring Basic Business Skills and Individual Success as an Entrepreneur in South Africa.

Hypothesis H^{7f} from the revised model states:

There is a positive relationship between Acquiring Basic Business Skills and Financial Success as an Entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

Although contrary to prior research, the findings of this study do not support the need for entrepreneurs to acquire basic, relevant business skills such as marketing, finance, HR or operations.

7.4.8 Economic barriers

For the purposes of this study, the term Economic Barriers refers to the barriers that affect the development of entrepreneurs negatively in South Africa. They include inflation, crime, rising exchange rates, under-developed infrastructure and the “brain drain” causing a loss of skills within the economy. These barriers are largely driven by Government policy and the economic environment of South Africa. The findings of this study showed that there was a significant, negative relationship in all three sub-models tested (global, individual and financial), indicating that the South African environment is not conducive to the success of entrepreneurs.

Hypothesis H^{8g} from the revised model states:

There is a negative relationship between Economic Barriers and Global Success as an Entrepreneur in South Africa.

Hypothesis H⁸ⁱ from the revised model states:

There is a negative relationship between Economic Barriers and Individual Success as an Entrepreneur in South Africa.

Hypothesis H^{8f} from the revised model states:

There is a negative relationship between Economic Barriers and Financial Success as an Entrepreneur in South Africa.

The hypothesis can be expressed in management terms as follows:

The South African Government needs to consider policies, such as affordable interest rates and easier procedures to starting a formal business, in order to encourage entrepreneurial development and training and, in so doing, provide an economic environment which will attract and nurture nascent entrepreneurs.

7.5 THE DEPENDENT VARIABLES

7.5.1 Perceived global success as an entrepreneur

For the purposes of this study, the perceived global success as an entrepreneur relates to the positive impact an entrepreneur has on creating employment, uplifting the well-being of communities and being willing to act as a role model for future entrepreneurs. In addition, the profitability of the entrepreneur's business has contributed to the growth of the country's economy (by paying taxes) and has improved the competitiveness and innovativeness of the industry in which the entrepreneur actively operates. Thus, in order for Government to ensure sustained growth in taxes and to create employment and develop an innovation-driven nation, a favourable environment that will stimulate profitable entrepreneurship is required. By encouraging and viewing entrepreneurs in a positive light, Government will also be assisting successful entrepreneurs to provide the necessary mentorship for future industrial growth. The removal of bureaucratic barriers to starting new ventures and making start-up funds easier to access would be beneficial to the country's economic and social well-being.

7.5.2 Perceived individual success as an entrepreneur

For the purposes of this study, perceived individual success as an entrepreneur relates to whether the entrepreneur: is able to retire sooner than if employed elsewhere and therefore has a better lifestyle and has more free time than if employed elsewhere; has more control over his/her financial destiny; has the ability to mentor other entrepreneurs and has the resources to start additional new ventures. Lastly, the entrepreneur might be in a position to pass down the business to family members. In order to stimulate entrepreneurship, both public and private education and development initiatives should focus efforts on teaching individuals how to capitalise on new ideas and pursue opportunities in the market place. The very concept of entrepreneurs benefiting financially from a preferred lifestyle, as a result of being entrepreneurial, should be encouraged if South Africa is to compete globally.

7.5.3 Perceived financial success as an entrepreneur

Financial success as an entrepreneur refers to an entrepreneur's ability to provide financially for his/her family, as well as, whether the business venture is profitable. A more aggressive approach could be taken in developmental training for entrepreneurs in that a business which sustains an entrepreneur's family is considered successful as this would imply that the business is also profitable. Government and public development agencies could assist the development of entrepreneurs by understanding that small businesses which are profitable, can be assisted to grow. That is, a business could start out small, but with financial assistance, profitable businesses could be developed into larger concerns, which in turn could provide much needed employment.

7.6 CONTRIBUTION OF THE STUDY TO THE BODY OF KNOWLEDGE

The primary objective and supporting secondary objectives of the study were achieved as summarised in Table 7.1. The contribution of this study relates to the research that was performed in global, developmental training for entrepreneurs which is a trend worldwide because Governments internationally are seeking to find sustainable ways to stimulate innovation through a capitalistic approach driven by entrepreneurial

activity. This study investigated how other economies are promoting the growth of entrepreneurs and then researched how the South African economy is attempting to do the same. The literature provided the basis for comparison in an effort to highlight areas in which South Africa could improve. In addition, this study revealed that individual success factors for entrepreneurs could be a catalyst to stimulate entrepreneurship both globally and within the South African context.

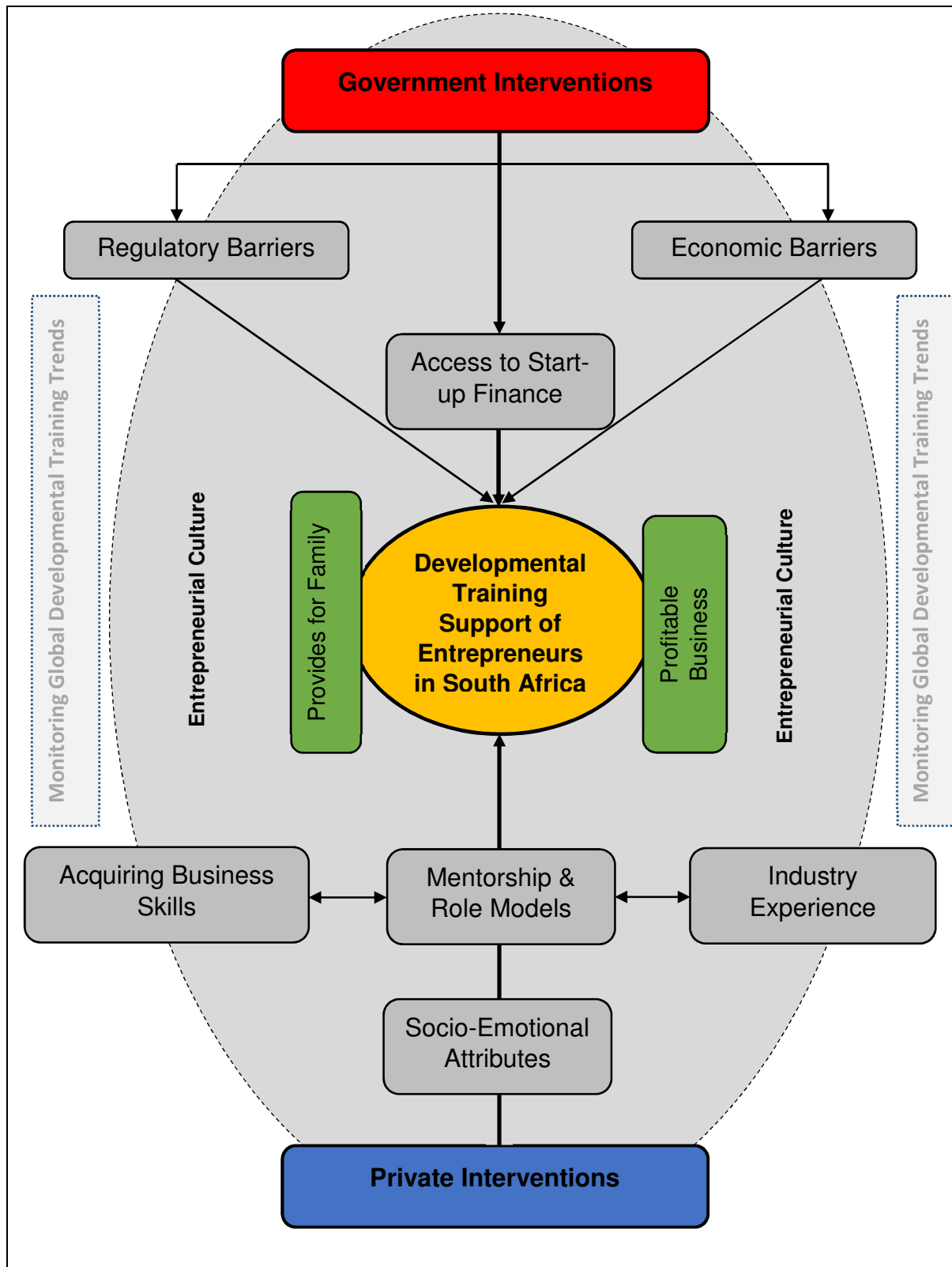
A theoretical model that was constructed and tested empirically contributes towards a better understanding of the factors which affect the success of entrepreneurship and the motivators of individual entrepreneurs. The advanced statistical technique of structural equation modelling (SEM) was important in analysing the factors significant to the global and individual success as an entrepreneur. Exploratory factor analysis (EFA) also identified a third dependent variable of financial success as an entrepreneur.

From this study it was evident that socio-emotional attributes play a significant, positive role in developmental training for entrepreneurs. Furthermore, mentorship plays an important part in global success as an entrepreneur, whilst economic barriers imposed by Government hinder the stimulation of entrepreneurship. The results of the study, therefore, offer specific findings on how private and Government agencies could help in developmental training for entrepreneurs in South Africa. The study's contribution to developmental training support for entrepreneurs in South Africa is presented graphically in Figure 7.4 below.

The illustration shows that there are two distinct interventions required in developmental training for entrepreneurs in South Africa: 1) Public interventions, and 2) Private interventions. A spirit of entrepreneurial culture is central to the growth and stimulation of entrepreneurship. This culture should exist at both a national and family/private business level. Whilst regulatory and economic barriers need to be reviewed by Government in order for a more enticing entrepreneurial environment to exist, access to start-up finance is considered to be central to financial success, i.e. to enable entrepreneurs to start and run profitable businesses that are able to provide for their families' needs. Private interventions, specifically by families, need to foster a culture of problem solving and risk taking.

The culture of the family helps the potential entrepreneur to view entrepreneurship as an acceptable and viable career option. Whilst the findings of this study did not support the literature regarding the need for entrepreneurs to acquire business skills and industry experience, mentorship was found to be significantly important for global entrepreneurs indicating that mentorship, which is related to the acquisition of business skills and industry experience, be viewed as a high priority in the developmental training for entrepreneurs in South Africa. Furthermore, it is recommended that both public and private actors involved in entrepreneurial, developmental training remain up-to-date with global trends, so as to ensure that South Africa's global entrepreneurial competitiveness remains both current and sustainable.

Figure 7.4: Contribution to developmental training support for entrepreneurs in South Africa



Source: Researcher's own construction, 2017

7.7 LIMITATIONS OF THE STUDY

This study attempted to make a contribution to the body of knowledge regarding developmental training for entrepreneurs in South Africa. However, certain limitations became evident that should be taken into account when drawing conclusions.

The population for this study comprised all business owners in South Africa. For this reason, the sample of business owners was randomly selected from a list of e-mail addresses. No attempt was made to select specific respondents for demographic or other reasons. As mentioned in Chapter 6, according to the research conducted by the Department of Trade and Industry (2013), the respondents who answered the questionnaire voluntarily did however provide a reasonable representation of the demographics of South African business owners. In addition, in order to solicit responses to the questionnaire, the researcher personally presented a pamphlet to business owners, which included a link to the online questionnaire. The responses in these cases remained voluntary, as did those receiving an e-mail request to respond and were thus considered not to have materially affected the responses.

As mentioned in Chapter 6, there is no obvious explanation for why the survey findings for Industry Experience and Acquiring Basic Business Skills returned negative relationships within the global and individual sub-models. These are considered still to be important factors according to other research reported to date. With regard to the questions posed for the independent variable, “business skills”, it is possible that the use of the words “basic” business skills in the questions might have distorted the responses received. A future study could be more specific about the skills required of an entrepreneur. The negative relationship between industry experience and global and individual success might be explained by the fact that South Africans may embark on a new venture in an industry in which they have no experience, for example, they can make use of sub-contracted skills in order to capitalise on an identified opportunity.

7.8 RECOMMENDATIONS FOR FUTURE RESEARCH

Although supported by the literature, statistically negative results emerged for the independent variables: Industry Experience and Acquiring Basic Business Skills. These results might be explained by a possible misinterpretation of the questions

posed in the questionnaire. However, the factors, Industry Experience and Acquiring Basic Business Skills might need further research.

From the literature findings, it was also expected that Entrepreneurial Culture would emerge as a positive factor. However, in all three sub-models for global, individual and financial success as an entrepreneur, non-significant relationships emerged. This factor could also be investigated further.

The third dependent variable which emerged from the EFA analysis, Financial Success as an Entrepreneur, could also be researched further. The factor was defined as an entrepreneur's ability to provide financially for his/her family, as well as, the profitability of the business venture. This suggests that a business owned by an entrepreneur needs to be profitable and viable (i.e. provide adequately for his/her family needs).

7.9 CONCLUDING REMARKS

Research question RQ₆ and RQ₉ and research objective RO₉ are addressed in this chapter. The focus of the study was on the factors that influence entrepreneurial success from an entrepreneur's perspective. Based on the empirical results it will be possible to develop a developmental training programme for entrepreneurs. Having reviewed the literature from a global perspective, the purpose was specifically to understand what is required for developmental training for entrepreneurs from a South African perspective. The findings of this study made it clear that entrepreneurial development can be undertaken by both Government and the private sector.

Globally, Governments are trying to find ways to stimulate entrepreneurial activity in order to grow their economies and remain competitive. South Africa is no exception to this phenomenon. However, the problem is even more urgent from a South African perspective, with an official unemployment rate of 27.7% and an economy which was deemed to be in technical recession as from June 2017. For these reasons, South Africa urgently has to find ways to cultivate a culture of entrepreneurship, which will generate jobs and thus circumvent the potential social unrest that is inevitable, if action is not taken. Government should heed the findings of this survey that regulatory barriers, such as overly protective labour policies and the bureaucracy associated with

starting a business should be reviewed and relaxed in order to create an environment conducive to new venture creation. In a similar way, the South African Government should seek to provide an economic environment that is attractive to nascent and existing entrepreneurs by reducing inflation and stabilising exchange rates, clamping down on crime and investing in infrastructure. In addition, incentives should be formulated to limit the “brain drain” which is removing skills and experience from South Africa, to the benefit of competing economies. This would also mean that the South African Government should seek to provide a stable and growth-oriented micro- and macro-economic environment. This environment should open access to markets both within Africa and globally so that entrepreneurs can compete outside of the local market environment.

Private enterprise must also take responsibility for nurturing and developing entrepreneurs. Existing small businesses have the responsibility to impart, through mentorship, the skills necessary for future South African generations to continue and flourish. Whilst the findings of this study did not support the literature regarding gaining industry experience and acquiring business skills, these matters should not be discarded as being irrelevant to developmental training for entrepreneurs. Education, which begins at school level and continues through to tertiary level, and ultimately lifelong learning, should foster the notion of individuals aspiring towards wealth creation through the identification of opportunities and then taking the risk to start a business.

The study showed that many entrepreneurs found that access to start-up finance is a barrier to starting a business venture. The South African Government, as well as private venture capitalists, should open avenues to financial assistance for new and existing businesses. The study shows that mentorship plays a significant role in developmental training for entrepreneurs. The lending of capital to start-ups and existing businesses should be accompanied by the necessary mentorship, thus maximising the likelihood of success, as well as monitoring and providing accountability for funds allocated. Preferably, mentorship should be provided by experienced entrepreneurs from the private sector. In this way, the knowledge and skills gaps between nascent entrepreneurs and industry could be reduced significantly, improving the likelihood of start-up success. Given the significance of this

study's findings, it is clear that mentorship should form the foundation of entrepreneurial developmental training in South Africa.

This study also revealed that socio-emotional attributes possessed by an entrepreneur (a self-starter, willing to take risks, identify opportunities and creatively solving problems) significantly affect the likelihood of nascent entrepreneurial activity. The South African education system could identify individuals at an early age, who possess these essential entrepreneurial, socio-emotional attributes. Those individuals who are identified, should be given special support to master the required industry skills and, at the same time receive mentorship from experienced entrepreneurs who are successful in their own right. Some of these broad skills might include management, finance, marketing, HR and operations. For example, the South African TVET college system is a good example where scholars are studying practical technical skills such as woodwork or plumbing to name a few. These types of colleges could provide the source of new, nascent entrepreneurs if cultivated and supported. Once the much needed practical and theoretical skills have been acquired, the private sector should be encouraged to provide access to the industry skills and mentorship that new business owners need to flourish. A proactive approach to identifying potential entrepreneurs will also minimise the Government's need to pay social grants. Many of the youth fall victim to collecting a monthly social grant as opposed to being encouraged to identify a business opportunity and then, with the support of Government and private interventions, to start-up new business ventures.

By encouraging and supporting risk taking through start-up ventures, entrepreneurs are likely to grow the South African economy, reduce unemployment and curtail social unrest.

Innovation is the cornerstone to an economy which will determine South Africa's economic longevity. The reward for innovation is wealth creation. Tax benefits, employment and social stability would be improved, allowing Government to invest further into an infrastructural landscape, designed for greater economic growth whilst, at the same time, minimising the burden of less fortunate individuals. An environment which actively promotes and celebrates innovation will undoubtedly promote entrepreneurship at all levels of society. Furthermore, a nation focused on innovation is also likely to compete on world markets, earning much needed foreign exchange.

Both the Government and the private sector should seek to promote innovative thinking as a means of encouraging South Africans to start new ventures. This concept will require differentiated skill sets, which will need to be identified and could be further nurtured through developmental training interventions.

South African entrepreneurial culture also needs to shift if economic prosperity is to be experienced by all its citizens. Entrepreneurially minded individuals do exist within the country, but a culture where individuals look for a job after leaving school predominates – often dampening the entrepreneurial spirit which currently lacks national support. Many of the same individuals expect Government to provide jobs and other benefits to which they might believe they are entitled. A public and private culture which promotes and supports the concept of self-employment, knowing full well that some entrepreneurial ventures will be more successful than others, is essential for viable nascent entrepreneurial development. Entrepreneurs should become the champions of society. A culture of entrepreneurship begins at home, where business talk should be encouraged, promoting the notion of wealth creation through business ownership. The youth, both male and female, should see self-employment and building a small business as both achievable and admirable.

In conclusion, as stated earlier, the ratio of entrepreneurs to employees in South Africa is 1:52, compared with most developed countries, which have approximately 1:10 entrepreneurs to employees. This should be a concern for all South Africans. By creating a culture of entrepreneurship, backed by Government and private industry, the youth of South Africa should be encouraged to adopt entrepreneurship as a worthy career choice. The urgency to foster entrepreneurial activity, through opportunity identification and risk taking cannot be over emphasised, both from a perspective of social stability and, equally importantly, from an economic sustainability angle. As Adam Smith wrote in his book, *An enquiry into the nature and causes of the wealth of nations* (1776), “England is a nation of shopkeepers”. Whilst this statement was made at the onset of the global industrialisation period, it is worthy to note that small, profitable, family-run businesses were the very foundation of the economic power of England at that time. From a candlestick maker to a barber, the English economy built its strength through an apprenticeship or mentorship system, where a master imparted both the skills and knowledge of his/her trade. The very strength of the system was derived from the industrious nature of each individual, small business owner, whose

success was measured by financially sustaining his/her household. South Africa would be wise to adopt a similar mind-set when it comes to germinating entrepreneurs – focusing on the creation of many smaller, self-sustaining entrepreneurs, rather than a few large corporations, as this will lead to a more balanced and sustainable economy which will be competitive both locally and globally.

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APPENDIX A: GLOSSARY OF RESEARCH TERMS

Alpha: reliability coefficient that indicates the probability of committing a Type 1 error, expressed as a number between 0 and 1 as in Cronbach's alpha.

Bias: occurs when respondents tend to answer in a certain direction and, by doing so, consciously or unconsciously misrepresent the truth.

Causal relationships: relationships between the constructs or variables of interest in which the presence or absence of one variable determines the presence or absence of another (variables are causally related).

Chi-square test: a statistical test commonly used to compare observed data with expected data according to specific hypotheses; a criterion commonly used for model fit.

Conceptualisation: the clarification and analysis of the key concepts in a study.

Cronbach's alpha: reliability index that reflects the extent to which all the items in a test measure the same concept or construct.

Construct validity: the degree to which an instrument measures the construct intended.

Degrees of freedom: the number of estimated coefficients which represent the amount of mathematical information available to estimate model parameters.

Dependent variable: a variable that is predicted or caused by any other variable.

Eigenvalue: the column sum of squared loadings for a specific factor, and which represents the amount of variance accounted for by a factor.

Exploratory study: a type of study designed to explore or gain insights into a phenomenon.

Factor analysis: a statistical procedure for reducing a large set of variables into smaller sets of related variables.

Factor loadings: the correlation between the original variables and the factors, and which assists in understanding the nature of a specific factor.

Hypothesis: a specific statement about the relationship between two or more variables.

Independent variable: a variable that is not predicted or caused by another variable.

Intervening variable: a variable which either affects or is caused by another variable.

Latent variable: a construct that cannot be measured directly, but can be represented or measured by one or more variables.

Likert scale: an attitude scale based on different assumptions about the relationship between individuals, their attitudes and their responses to the items; a measurement in which respondents are asked to respond to statements on how they agree or disagree.

Literature study: a process of searching published work to find out what is known about a specific research topic or area.

Multiple regression model: a regression model with two or more independent variables.

Measurement error: refers to the degree to which the data values do not truly measure the characteristic being represented by the variable.

Null hypothesis: a statement that no relationships exist between the study variables.

Path diagram: a visual representation of a model representing the relationships of the variables.

Pilot study: a small-scale research project that involves sampling, but for which the rigorous standards used to obtain precise, quantitative estimates from large, representative samples are relaxed.

Primary data: data gathered and assembled specifically for the research project at hand.

Quantitative research: research that involves the collection and analysis of numerical data and the application of statistical tests.

Questionnaire: a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample.

Reliability: refers to a measure when similar or consistent results are obtained over time and across situations.

Research design: a set of guidelines and instructions that need to be followed in addressing the research problem.

Response rate: the number of respondents that participated in the study.

Sampling: the random selection of elements of a target population.

Sample: a sub-set of a population or a group of participants carefully selected to represent the population or the main interest of the study.

Secondary data: data that has been previously collected for some project other than the one at hand from books, government sources, media sources and commercial sources.

Significance level: represents the probability the researcher is willing to accept that the estimated coefficient is classified as different from zero when it actually is not (also known as a Type 1 error).

Snowball sampling: a sampling process where the researcher approaches a few individuals from the relevant population, who then act as informants and identify other members from the same population for inclusion in the sample.

Standard score (z-score): refers to how many standard deviations away from the mean a particular score is located.

T-test: a statistical test used for comparing the means of two samples to test if they are significantly different or not.

t-value: a value used to determine the statistical significance between a sample distribution mean and a parameter.

Validity: the ability of a measuring instrument to measure what it is intended to measure; the extent to which a measure or set of measures represents the study concept.

Variable: a logical characteristic, attribute or outcome.

Variance: a measure of how far a set of numbers or observations are spread out.

APPENDIX B: LETTER AND FLYER



Letter sample

A DEVELOPMENTAL TRAINING SUPPORT MODEL FOR ENTREPRENEURS IN SOUTH AFRICA (Sep. 2016)

As a Doctoral student of Business Administration (DBA), of the Nelson Mandela Metropolitan University (NMMU), Port Elizabeth, this research paper seeks to identify the factors which contribute to the successful developmental training of entrepreneurs in South Africa.

Your participation would be greatly appreciated as the research hopes to create a model for future entrepreneurial development in South Africa and thereby create jobs, economic growth and reduce unemployment.

There are 84 Likert scale questions which will take approximately 10 minutes to complete. All questions require an answer. Your responses will be strictly confidential. If you have questions at any time about the survey or the procedures, you may contact me at graham@award.co.za.

Once again I thank you for the valuable time you are giving to this important research study.

Yours sincerely

Graham Ward

(Student No: 207016270)



Flyer sample

A DEVELOPMENTAL TRAINING SUPPORT MODEL
FORENTREPRENEURS IN SOUTH AFRICA
(Sep. 2016)

I would like to ask you to assist me in developing the necessary research information needed to complete this direction of Study.

As a *Doctoral student* of Business Administration (DBA), of the Nelson Mandela Metropolitan University (NMMU), Port Elizabeth, this research paper seeks to identify

"The factors which contribute to the successful developmental training of entrepreneurs in South Africa.

Your participation would be greatly appreciated as the research hopes to create a model for future entrepreneurial development in South Africa and thereby create jobs, economic growth and reduce unemployment. I have provided the link below...

www.award.co.za/dba.html

Thank you!

Graham Ward
(Student No: 207016270)
Contact No.: 27(0)82 7074 287

E-mail Address: Graham Ward: graham@award.co.za

APPENDIX C: QUESTIONNAIRE

Instructions

Dear Survey Participant,

Thank you for your willingness to contribute to the developmental training of South African entrepreneurs.

Please answer the questions carefully in order to ensure accuracy. Answers are required for all questions, in order for the response to be considered valid. There is only one answer per question.

The questionnaire should take you no longer than 7-10 minutes to complete.

Q No	CODE	STATEMENTS	Strongly Agree	Agree	Mildly agree	Undecided	Mildly disagree	Disagree	Strongly disagree
1	DQ1	Are you a South African business owner?	1	2	3	4	5	6	7
2	IS2	My success as an entrepreneur has given me more <u>free time</u> than if I was employed elsewhere.	1	2	3	4	5	6	7
3	EC4	My <u>family encouraged</u> me to start a new business venture.	1	2	3	4	5	6	7
4	RB3	Over-protective <u>labour policies</u> in South Africa, make starting a new business difficult.	1	2	3	4	5	6	7
5	SE2	I am <u>self-confident</u> .	1	2	3	4	5	6	7
6	EB1	Inflation has a negative effect on the start-up of new ventures.	1	2	3	4	5	6	7
7	BS1	Learning basic <u>financial management skills</u> contributed to my success as an entrepreneur.	1	2	3	4	5	6	7
8	GS1	My entrepreneurial activities have provided others with <u>employment</u> .	1	2	3	4	5	6	7
9	EC1	<u>Business talk</u> within my family played an important role towards my development as an entrepreneur.	1	2	3	4	5	6	7
10	SE1	I am willing to take <u>calculated risks</u> in business.	1	2	3	4	5	6	7
11	OI1	Identifying business opportunities is something that <u>comes naturally</u> to me.	1	2	3	4	5	6	7
12	IE5	My knowledge of <u>competitors' activities</u> was important to my development as an entrepreneur.	1	2	3	4	5	6	7

13	OA3	Before I make an important decision as an entrepreneur, I seek <u>advice outside my family circle</u> .	1	2	3	4	5	6	7
14	GS7	My success as an entrepreneur has contributed to the <u>competitiveness</u> of my industry.	1	2	3	4	5	6	7
15	EB5	The initial <u>cost of starting a business</u> is restrictive to new venture creation.	1	2	3	4	5	6	7
16	GS8	My success as an entrepreneur has contributed to the <u>innovativeness</u> of my industry.	1	2	3	4	5	6	7
17	IS6	My success as an entrepreneur gives me the confidence to <u>mentor other entrepreneurs</u> .	1	2	3	4	5	6	7
18	BS2	Learning basic <u>marketing management skills</u> contributed to my success as an entrepreneur.	1	2	3	4	5	6	7
19	RB2	South Africa regulations/laws do <u>not actively encourage</u> the creation of new ventures.	1	2	3	4	5	6	7
20	OA2	I received <u>entrepreneurial mentorship</u> from others outside my family circle.	1	2	3	4	5	6	7
21	IT4	I read <u>business journals</u> to stay up to date with industry trends.	1	2	3	4	5	6	7
22	GS4	My success as an entrepreneur has contributed to the <u>wellbeing of my community</u> .	1	2	3	4	5	6	7
23	FT3	I make use of <u>short courses</u> to keep my business knowledge relevant.	1	2	3	4	5	6	7
24	SE3	When I undertake a task, I <u>persevere</u> until I have achieved it.	1	2	3	4	5	6	7
25	OI4	I am able to identify a <u>profitable new business opportunity</u> .	1	2	3	4	5	6	7
26	EC5	Entrepreneurship is a <u>common career choice</u> in my family.	1	2	3	4	5	6	7
27	SE4	It is natural for me <u>lead</u> others.	1	2	3	4	5	6	7
28	IS7	My success as an entrepreneur has provided me the <u>platform to open other new ventures</u> .	1	2	3	4	5	6	7
29	BS4	Learning basic <u>business operation skills</u> contributed to my success as an entrepreneur.	1	2	3	4	5	6	7
30	IE3	A strong <u>relationship with my suppliers</u> was important to my development as an entrepreneur.	1	2	3	4	5	6	7
31	RB5	<u>Minimum wages</u> set by government restricts the start-up of new business ventures.	1	2	3	4	5	6	7
32	IT1	The <u>influence of my parents</u> were instrumental in my entrepreneurial education.	1	2	3	4	5	6	7
33	OA4	I trust the <u>advice my family members give</u> me regarding business decisions I make.	1	2	3	4	5	6	7
34	BS3	Learning basic <u>HR management skills</u> contributed to my success as an entrepreneur.	1	2	3	4	5	6	7
35	IE4	Gaining experience <u>in the same industry</u> as my business venture was important to my development as an entrepreneur.	1	2	3	4	5	6	7
36	IS3	My success as an entrepreneur gives me more control over my <u>financial destiny</u> .	1	2	3	4	5	6	7

37	EC3	My family enjoys the <u>independence</u> experienced from starting a new business.	1	2	3	4	5	6	7
38	IE1	My experience gained <u>working in business</u> was important to my development as an entrepreneur.	1	2	3	4	5	6	7
39	OI6	My entrepreneurial development relies on my ability to <u>regularly</u> identify new business opportunities.	1	2	3	4	5	6	7
40	GS6	My entrepreneurial business/es is/are <u>profitable</u> .	1	2	3	4	5	6	7
41	IE2	Gaining experience from <u>different industries</u> was important to my development as an entrepreneur.	1	2	3	4	5	6	7
42	EB4	<u>Crime</u> poses a substantial barrier to start-up ventures.	1	2	3	4	5	6	7
43	IS4	My success as an entrepreneur will most likely allow me to <u>retire sooner</u> than if I was employed elsewhere.	1	2	3	4	5	6	7
44	FT5	My <u>formal education</u> was important to my development as an entrepreneur.	1	2	3	4	5	6	7
45	SE5	I am able to <u>creatively solve problems</u> .	1	2	3	4	5	6	7
46	OA1	My <u>social network</u> contributed to my development as an entrepreneur.	1	2	3	4	5	6	7
47	IE6	I gained <u>managerial experience</u> before starting my own business venture.	1	2	3	4	5	6	7
48	RB1	<u>Red tape</u> makes it difficult to start a new business.	1	2	3	4	5	6	7
49	OA6	Advice received from <u>mentors</u> has positively influenced my development as an entrepreneur.	1	2	3	4	5	6	7
50	GS2	My entrepreneurial activities have contributed to the <u>growth of my country's economy</u> .	1	2	3	4	5	6	7
51	BS5	Learning how to <u>create a business plan</u> contributed to my success as an entrepreneur.	1	2	3	4	5	6	7
52	EB6	Unstable <u>exchange rates</u> negatively affects the start-up of new ventures.	1	2	3	4	5	6	7
53	EC2	My <u>family values</u> played an important role towards my development as an entrepreneur.	1	2	3	4	5	6	7
54	EB2	Limited access to <u>start-up capital</u> restricts the start-up of new ventures.	1	2	3	4	5	6	7
55	GS5	My success as an entrepreneur has allowed others to view me as a <u>role model</u> .	1	2	3	4	5	6	7
56	EB7	The lack of <u>tax incentives</u> in South Africa do not encourage the start-up of new ventures.	1	2	3	4	5	6	7
57	FT2	I received entrepreneurial education at <u>tertiary</u> level.	1	2	3	4	5	6	7
58	GS3	Taxes from my entrepreneurial activities have contributed to the development of my country's <u>infrastructure</u> .	1	2	3	4	5	6	7
59	OI3	I constantly stay up to date with <u>industry trends</u> in order to identify new business opportunities.	1	2	3	4	5	6	7
60	IT5	<u>Discussions with others</u> helped guide me with my development as an entrepreneur.	1	2	3	4	5	6	7

61	IS1	My success as an entrepreneur has allowed me to enjoy a better <u>lifestyle</u> than if I were employed elsewhere.	1	2	3	4	5	6	7
62	FT1	I received entrepreneurial education at <u>school</u> level.	1	2	3	4	5	6	7
63	IT2	<u>Casual work</u> has contributed to my entrepreneurial development.	1	2	3	4	5	6	7
64	IE7	Acquiring <u>technical skills</u> was important to my development as an entrepreneur.	1	2	3	4	5	6	7
65	OI2	I <u>was taught</u> how to identify business opportunities.	1	2	3	4	5	6	7
66	IS5	My success as an entrepreneur allows me the <u>option to hand my business</u> down to my children.	1	2	3	4	5	6	7
67	EB3	Poor <u>infrastructure</u> restricts the start-up of new ventures.	1	2	3	4	5	6	7
68	SE6	I consider myself to be a <u>self-starter</u> .	1	2	3	4	5	6	7
69	RB4	The " <u>brain-drain</u> " experienced in South Africa has negatively affected the start-up of new ventures.	1	2	3	4	5	6	7
70	IT3	<u>Role models</u> have significantly assisted with my business knowledge.	1	2	3	4	5	6	7
71	FT4	Facilitator/s positively affected <u>my attitude</u> to start a new business venture.	1	2	3	4	5	6	7
72	IS8	My success as an entrepreneur allows me to <u>provide</u> financially for my household.	1	2	3	4	5	6	7
73	OA5	I take the advice received from <u>professional consultants</u> seriously when making business decisions.	1	2	3	4	5	6	7
74	OI5	The <u>industry skills</u> I possess allow me to take advantage of new business opportunities.	1	2	3	4	5	6	7
75	DQ2	How many <u>years</u> have you been running your own business?	1	2	3	4	5	6	7
76	DQ3	What <u>geographical area</u> is your business primarily located in?	1	2	3	4	5	6	7
77	DQ4	What <u>industry sector</u> does your business fall under?	1	2	3	4	5	6	7
78	DQ5	Is your business primarily run by <u>family members</u> ?	1	2	3	4	5	6	7
79	DQ6	What is your highest level of <u>education</u> ?	1	2	3	4	5	6	7
80	DQ7	What is your <u>gender</u> ?	1	2	3	4	5	6	7
81	DQ8	What is your <u>ethnic group</u> ?	1	2	3	4	5	6	7
82	DQ9	What <u>age</u> were you when you started your first business?	1	2	3	4	5	6	7
83	DQ10	What is your <u>current age</u> ?	1	2	3	4	5	6	7
84	DQ11	Which <u>annual turnover range</u> best describes your business?	1	2	3	4	5	6	7