Developing evaluation constructs
in management and entrepreneurship
for women construction SMMEs

he by

Cornelius Tobias Verwey

Submitted in partial fulfilment
of the requirements for the degree:
Doctor of Business Administration (DBA)

in the Faculty of

Economic and Management Sciences

Department of Business Management

University of Pretoria

April 2003

Promoter: Prof Jurie van Vuuren

Acknowledgements:

Firstly I wish to express my profound gratitude to my study leader Prof Jurie van Vuuren for his expert advice, guidance and support and for the staff at the Department of Business Management who updated me during the last three years with the latest information on entrepreneurship and business management.

Secondly I am grateful to my colleagues and friends for their professional assistance and my sincere gratitude to the Development Bank of Southern Africa for their financial assistance.

Thirdly, I would like to convey a word of thanks to my children and family for their support and patience during my lifelong learning process. To Marina Verwey and Marissa Prinsloo who assisted with the typing and technical care and for Wilma Breytenbach who assisted with the statistics, my appreciation.

I would specifically like to thank my wife Ingrid for her professional and moral support and sacrifice during the study. Her backing with the field studies was valuable and without her continuous encouragement and love this study would not be possible.

Lastly, my gratitude to our Lord for His spiritual guidance, love and forgiveness.

sometimes whistle-blowers, they also need 'ombudspersons and godparents' to

Abstract for DBA Thesis: Developing evaluation constructs in management and entrepreneurship for women construction SMMEs. April 2003 C T Verwey

This thesis demonstrated how business management could benefit from evaluation constructs. The constructs 'Outcomes' and 'Logframes' proved to be helpful exploring effectiveness. Logframes and evaluation constructs can enhance business plans.

Gender empowerment regulations present a window of opportunity for women construction entrepreneurs, but to qualify for national or international business opportunities, agencies require Logframes in business plans. To open this window of opportunity, women entrepreneurs should be ready regarding their plans, skills, outcomes, acceptability and utilization, by taking note of evaluation constructs.

Two instruments were developed to test the outcome construct empirically, and two case studies done to illustrate Logframes. Given the excellent results of the Cronbach Alpha and Factor Analysis, the instruments developed proved to be reliable and valid and could be used for similar studies.

The study found that women construction entrepreneurs still have a long way to go before they will be accepted and fully utilised. Even female respondents were negative about women's technical skills. The four constructs testing education and management skills pointed out that neither males nor females are acceptable. Training should therefore include technical, entrepreneurial and managerial training.

In some areas officials adjudicating tenders are far more negative than inspectors handling feedback from clients, and the private sector are far more positive than some other sectors in accepting women entrepreneurs. The ANOVA pointed out statistical and practical differences regarding opportunities. The findings are in line with the opinion of women in construction that they do not get adequate access.

There was a significant positive attitude from the survey respondents towards SAWiC as an association. The acceptability, utilisation and outcomes of their training and networking opportunities by both male and female entrepreneurs in all nine provinces are high. SAWiC can thus have a positive influence on the further development of women construction entrepreneurs.

Evaluation becomes big business. As enterprise it can also benefit from management theory. The roles of the Corporate Evaluator and Corporate Entrepreneur are similar regarding innovation, new ideas, alternatives, efficiency and effectiveness. As evaluators are sometimes whistle-blowers, they also need 'ombudspersons and godparents' to protect them from managerial manipulation and harassment. (349 words)

Glossary:

AA Affirmative Action AccountAbility

ADB Asian Development Bank

AFD American Evaluation Association
Agence francaise de developpement
AfDB African Development Bank ADB (Asia);

APDF African Project Development Facility, World Bank

ANOVA Analysis of Variance

ARDE Annual Review of Development Effectiveness, World Bank

ASAQS Association of SA Quantity Surveyors

AusAid Australian Agency for International Development

BCR Benefit Cost Ratio

BEE Black Economic Empowerment

BIFSA Building Industries Federation South Africa

BMZ German Ministry for Economic Cooperation and Development

CDF Comprehensive Development Framework

CBO Community Based Organisations
CDD Community Driven Development
CE Corporate Entrepreneurship

CETA Construction Education and Training Authority
CIDA Canadian International Development Aid
CIDB Construction Industry Development Board

CPM Critical Path Methods

CORE Corporate Recording System of DBSA
CWIQ Core Welfare Indicators Questionnaire
DANIDA Danish International Development Agency
DBSA Development Bank of Southern Africa

DFID British Department for International Development

DPW Department of Public Works
DFIs Development Finance Institutions
DTI Department of Trade and Industry
E&D Evaluation and Development

EBRD European Bank for Reconstruction and Development

ECD Evaluation Capacity Development

EDI Economic Development Institute, World Bank

ETR Evaluation Team Rating

EU European Union

ERR Economic Rate of Return

FINNIDA Finnish International Development Agency
GSSP Gender-mainstreaming Sector Strategy Paper
GTZ Germany's technical cooperation agency
IBLF International Business Leaders Forum

IC Intellectual Capital

ICB International competitive bidding
IDB Inter-American Development Bank
IDC Industrial Development Corporation

IDRC International Development Research Centre in Canada IDEAS International Development Evaluation Association

IFAD
 IFC
 International Finance Corporation
 ILO
 International Labour Organisation
 IMF
 International Monetary Fund

IPDET International Program for Development Evaluation Training

IRR Internal Rate of Return

ITAD International Training and Development Institute

JICA Japan's International Cooperation Agency

KM Knowledge Management
KPI Key Performance Indicators
LF Logical Framework or Logframe
LFA Logical Framework Approach
LFM Logical Framework Matrix

LSMS Living Standards Measurement Survey

MAP Millennium Partnership for the African Recovery Programme

MDGs Millennium Development Goals
M&E Monitoring and Evaluation

MIT Massachusetts Institute for Technology
NAWIC North American Women in Construction

NEPAD The New Partnership For Africa's Development

NGO Non-Government Organisation
NORAD Norway's Agency for Development

NPV Net Present Value

NURCHA National Urban Reconstruction and Housing Agency

OEU Operations Evaluation Unit at DBSA

OED Operations Evaluation Department at the World Bank
OECD Organisation for Economic Cooperation and Development

OXO Observation, Experimentation, Observation

PCM Project Cycle Management
PES Program Evaluation Standards

PERT Program Evaluation and Review Technique

PETS Public expenditure tracking surveys
PME Participatory Monitoring and Evaluation

PPM Project-planning matrix
PPP Public Private Partnerships
PPP People, Planet, Prosperity

PRSPs Poverty Reduction Strategy Papers

QQT Quality, quantity, time

RFIs Retail Financial Intermediaries

RRA Rapid rural appraisal

R&D Research and Development

SA South Africa

SA Social Assessment

SAM Social Accountancy Matrix
SAS Statistical Analysis System

SAWEF South African Women's Empowerment Foundation
SAWEN South African Women Entrepreneurs Network
SAWIC South African Women in Construction Association

SEWA Self Employed Women's Association

SIDA Sweden's International Development Agency

SL Sustainable Livelihood

SMMEs Small Medium and Micro Enterprises

TP Targeted Procurement

TWIB Technology for Women in Business

UN United Nations

UNCED United Nations Conference on Environment and Development

USAID United States Agency for International Development

vs. versus

WBS Work Breakdown Structure
WiC Women in Construction
WID Women in Development
WKKF WK Kellogg Foundation

WSSD World Summit for Sustainable Development

ZOPP 'Zielorientierte Projektplanung', Objectives-oriented Project Planning

Table of Contents:

Chapt	er 1: Introduction	1
1.1	Research orientation	1
1.2	Background to thesis theme and author's related experience	2
1.3	Problem statement and research questions	3
1.3.1	Problem statement	3
1.3.2	Research questions	3
1.4	Research objectives	3
1.4.1	Aim and purpose of this study	3
1.4.2	Hypotheses Monard Nepad	4
1.4.3.	Beneficiaries and benefits	4
1.5	Design and methodology	5
1.5.1	Research design and schematic outlay	5
1.5.2	Information management and data collection	6
1.5.3	Deliverables, findings, recommendations and budget	6
Chap	ter 2. Evaluation as science and as enterprise	7
2.1	Introduction and a feed where the state of t	7
2.2	Defining evaluation and related concepts	8
2.3	Evaluation, monitoring and surveillance	9
2.4	Valuation versus evaluation	10
2.5	Evaluation versus accountability, responsiveness and triple bottom line	11
2.6	Ethical versus legal concepts in evaluation	13
2.7	Standards and guiding principles for evaluations	14
2.8	Evaluation as inspection versus evaluation as research	16
2.9	Types of evaluations: Cluster, multi-site and sectoral (theme) evaluations	17
2.10	The Evaluation Process: How, what, and when to evaluate	17
2.11	Evaluation as enterprise; developing a niche and scope	19
2.12	The use, utilisation and influence of evaluation findings	21
2.13	Misusing and harassment of evaluators for misrepresentation	23
2.14	Misevaluations and misunderstanding evaluations and evaluators	25
2.15	Enhancing the usefulness and influence of evaluation	26
2.16	Similarities between the corporate entrepreneur and corporate evaluator	28
2.17	Conclusions Ment social assessment and SMMEs	30

Chap	ter 3. Evaluation and economic development	31
3.1	Introduction a modus operands of international funders	31
3.2	Economic development defined was de Balance Sheet	32
3.3	Sustainable development	33
3.4	The changing development fraternity	34
3.5	The changing concept of development and new economics	35
3.6	Evaluation, development and judgement	36
3.7	Development evaluation versus classical evaluation	37
3.8	Millennium 2000 Development Goals	37
3.9	The African Union and Nepad	38
3.10	The place of evaluation in development	40
3.11	Inefficiency of development performance	41
3.12	Improving development performance through evaluations	42
3.13	Applying the fundamentals of evaluation to poverty alleviation	43
3.14	The World Bank policy on evaluating development	45
3.15	Evaluation, beneficiary assessment and participation	46
3.16	Ownership of development programmes	47
3.17	Evaluating development effectiveness	48
3.18	Conclusions rempowerment as empowerment evaluation	50
	Misusing empowerment evaluation	
Chap	ter 4. Evaluation, management and entrepreneurship	52
4.1	Introduction monols for empowering women	52
4.2	Entrepreneurial versus managerial concepts	53
4.3	Similarities between evaluation and entrepreneurial concepts	54
4.4	Entrepreneurship creating economic growth and development	55
4.5	Evaluation of development projects versus SMME endeavours	55
4.6	The role of evaluators in entrepreneurship and management	56
4.7	Evaluation and knowledge management	57
4.8	Evaluation and management of change	59
4.9	The new evaluation world of an entrepreneur and manager	61
4.10	Why are managers reluctant to do evaluations?	61
4.11	What are the costs for management of not using evaluation?	62
4.12	Impact assessment, social assessment and SMMEs	63

4.13	Accountability and SMMEs	63
4.14	Ethical vulnerability of SMMEs	64
4.15	Managing the modus operandi of international funders	65
4.16	Assessing and evaluating the "Invisible" Balance Sheet	66
4.17	Evaluating job creation in SMMEs	66
4.18	Evaluation enterprise flexibility to suit management and entrepreneurs	67
4.19	Paving the way for a wider use of the evaluation enterprise	68
4.20	Mainstreaming evaluation in organisations	69
4.21	The evaluation enterprise itself is becoming big business	71
4.22	Conclusions and Information pains	72
Chap	ter 5. Evaluation concepts and women construction SMMEs	74
5.1	Introduction a modelling	74
5.2	Women and construction SMMEs	75
5.3	Assessing the uniqueness of women entrepreneurs	75
5.4	Assessing the barriers women face and its negative	
	impact on their entrepreneurial performance	77
5.5	HOW can the hidden resource of women entrepreneurs be uncovered?	78
5.6	Evaluation for empowerment vs. empowerment evaluation	79
5.7	Misusing empowerment evaluation	80
5.8	Empowerment and social justice	81
5.9	Empowerment through equal education and health	82
5.10	Evaluation concepts for empowering women	83
5.11	Evaluation concepts empowering women construction entrepreneurs	84
5.12	International focus on women construction entrepreneurs	85
5.13	Evaluation of gender sensitivity and impact	86
5.14	Evaluating World Bank projects for gender sensitivity and impact	86
5.15	Gender sensitivity in evaluation practice	88
5.16	Development and the gender development agenda	89
5.17	Evaluation for development and women construction entrepreneurs	90
5.18	Prescriptions of international donors and DFIs	92
5.19	A window of opportunity for women construction entrepreneurs	93
5.20	Conclusions Conclu	94

Chapt	ter 6. Evaluation tools, constructs, logic models and outcomes	96
6.1	Introduction	96
6.2	Why Evaluation Tools and Models?	96
6.3	The concept of Reality testing	97
6.4	The 'outcomes' concept	98
6.5	Logical thinking as concept	99
6.5.1	Defining logical thinking	99
6.5.2	Vertical logic and results chains	100
6.5.3	Horizontal logic and information trains	101
6.5.4	Cause-effect logic	101
6.5.5	Internal and external logic	101
6.6	The concept of logic modelling and logic modelling	102
6.6.1	Defining logic modelling	102
6.6.2	The relationships and long poweribing to use an edition and to memory services.	102
6.6.3	The uses of logic modelling	102
6.7	Outcomes mapping concept	104
6.8	ZOPP, a participatory Logframe	105
6.9	TeamUp, a team based ZOPP	107
6.10	A glossary of other tools of the trade in use by evaluators	108
6.11	Conclusions	113
Chap	ter 7. The Logframe as evaluation tool	114
7.1	Introduction question	114
7.2	The Logframe approach	114
7.2.1	Defining the Logframe approach	114
7.2.2	Using the Logframe approach	114
7.2.3	Problem analysis and the Logframe approach	115
7.2.4	Problem tree analysis and the Logframe approach	115
7.2.5	Logframe Approach (LFA) versus the Logframe Matrix (LFM)	115
7.3	Logframe matrix and for the confirmation of validity and reliability	116
7.3.1	Defining Logframes	116
7.3.2	The aim, origin, need and development of Logframes	116
7.3.3	The Logframe 4x4 matrix	117

7.3.4	The description column of the Logframe 4x4 matrix	118
7.3.5	The indicator column of the Logframe 4x4 matrix	120
7.3.6	The means of verification column of the Logframe 4x4 matrix	122
7.3.7	The assumption column of the Logframe 4x4 matrix	122
7.3.8	Logframe halves	122
7.4	The Advantages of Logframe	122
7.5	The Limitations of Logframe	124
7.6	Computer models for Logframe	125
7.6.1	Computer tools needed for Logframes	125
7.6.2	PC/Logframe IVsIII of the constructs	125
7.6.3	PC/Logframe R&D standing plans, drawings, layouts & levels	125
7.6.4	The PC/Team UP	125
7.7.	Summarised guidelines for the 4x4 logframe matrix	126
7.8	Logical model's range and scope	127
7.9	International organisations prescribing logical models and frameworks	129
7.10	Logframe and M&E at the Development Bank (DBSA)	130
7.11	Conclusions Proving goad works, curbing and gables	131
Chapt	ter 8. A survey to analyse the outcomes of women and flooring	
	Construction entrepreneurs against and terminology	132
8.1	Introduction 2 Future directed, Innovation, creativity, business planning	132
8.2	Research design and methodology for this chapter	132
8.2.1	Statistical methodology	132
8.2.2	Managerial question	132
8.2.3	Respondents targeted	133
8.2.4	Responses used	133
8.2.5	Respondents per sector	133
8.2.6	Respondents per gender	134
8.2.7	Development of questions in questionnaire	134
8.2.8	Example of the outlay of the questionnaire	134
8.3	Statistical tools used for the confirmation of validity and reliability	135
8.3.1	Cronbach Alpha analysis on deleted results of each question	135
8.3.2	Cronbach Alpha analysis of the constructs	137
8.3.3.	Factor analysis on the constructs	137

8.4	Statistical tools applied in analysing the responses	139
8.4.1	Computer programme	139
8.4.2	Means and standard deviations	139
8.4.3	T-tests ar programme	139
8.4.4	Paired t-tests	140
8.4.5	Probability Values (p values) measuring statistical significance	140
8.4.6	Cohen-d values measuring practical significance	141
8.4.7	ANOVA (Analysis of variance)	141
8.5	Hypotheses alvels of variance)	141
8.6.	Statistical analysis of the constructs	143
8.6.1	Construct 1: Understanding plans, drawings, layouts & levels	143
8.6.2	Construct 2: Brickwork, bricklaying, plastering and 'wet-work'	145
8.6.3	Construct 3: General carpentry, doors, ceiling and roofing	146
8.6.4	Construct 4: Plumbing, drainage and piping	147
8.6.5	Construct 5: Electricity, tubing, wiring and lighting	148
8.6.6	Construct 6: Wall tiling, glazing, painting and floor tiling	149
8.6.7	Construct 7: Paving, road works, curbing and gabion	150
8.6.8	Construct 8: Road maintenance, cleaning and grass cutting	151
8.6.9	Construct 9: Traditional African building, thatching, painting and flooring	152
8.6.10	Construct 10: General Education, language and terminology	153
8.6.11	Construct 11: General managerial, finance and business	154
8.6.12	Construct 12: Future directed, innovation, creativity, business planning	155
8.6.13	Construct 13: Tender, pricing, legal, tax and procurement	156
8.7	Findings AWIC translated into Legirame terminology	157
Chap	ter 9: A survey on the acceptability and utilization of SAWiC by	
	construction entrepreneurs	160
0.4	Activities of SAWIC	160
9.1	Introduction g Logirame methodology on SAMIC	160
9.2	Research design and methodology for this chapter	160 160
9.2.1	Statistical methodology	
9.2.2	Managerial question	161
9.2.3	Respondents targeted Development of questions in questionnaire	161 161
9.2.4	Development of questions in questionnaire Statistical tools used for the confirmation of validity and reliability	162
	Cronbach Alpha analysis on deleted results of each question	162
(1,1)	DIVIDAGE AIDEA ALARIA DE VELUCICO ESUES DE CAGE DECIDO	10/

9.3.2	Cronbach Alpha analysis of the constructs	162
9.3.3.	Factor analysis on the constructs	163
9.4	Statistical tools applied in analysing the responses	163
9.4.1	Computer programme	164
9.4.2	Means and standard deviations	164
9.4.3	T-tests in 454 matrix for Tachinkon Protona Project Phase 1	164
9.4.4	Probability Values (p values) measuring statistical significance	164
9.4.5	Cohen-d values measuring practical significance	164
9.4.6	ANOVA (Analysis of variance)	164
9.5	Hypotheses	165
9.5.1	Construct A: Acceptability of SAWiC	165
9.5.2	Construct T: Utilization of training opportunities through SAWiC	165
9.5.3	Construct N. Utilization of network opportunities through SAWiC	165
9.6.	Statistical analysis of the constructs	166
9.6.1	Construct A: Acceptability of SAWiC	166
9.6.2	Construct T: Utilization of training opportunities through SAWiC	168
9.6.3	Construct N: Utilization of network opportunities through SAWiC	169
9.7	Findings	170
Chap	ter 10. Case study 1: Implementing Logframes on SAWiC	171
10.1	Introduction	171
10.2	Background of SAWiC	171
10.3	Methodology	172
10.4	Goal of SAWiC translated into Logframe terminology	172
10.5	Objectives of SAWiC translated into Logframe terminology	172
10.6	Outputs of SAWiC	173
10.7	Activities of SAWiC	174
10.8	Implementing Logframe methodology on SAWiC	176
10.9	Conclusions	179
Chap	oter 11. Case study 2: Implementing Logframes on construction	
	projects	180
11.1	Introduction	180
11.2	Background	180

11.3 Methodology	181
11.4 Project Logframe Goal or expected impact description	181
11.5 Purpose, Objectives or Outcomes description	182
11.6 Outputs (or Deliverables) description	182
11.7 Activities (& inputs) description	183
11.8 Logframe 4x4 matrix for Technikon Pretoria Project Phase 1	184
11.9 Evaluation of Key Performance Indicators (KPIs) for the	
Before, Envisaged and After situation	186
11.10 Conclusions a invisible balance sheet	189
Chapter 12. Findings, recommendations, conclusions, limitations	
and further research opment activities	190
12.1 Findings and recommendations from the literature review chapters	190
12.2 Findings and recommendations from the empirical study chapters	195
12.3 Findings and recommendations from the case study chapters	197
12.4 Conclusions	197
12.5 Limitations of the thesis and further research	198
References Database acceptability	200
Interviews Annual report acceptability	207
Website references for DFIs, evaluations and Logframes	208
Questionnaires	
Table 8.1 Questions from which the constructs were developed and	

List of Figures

Figure 1.1:	Research design and schematic outlay	5
Figure 2.1:	The niche and scope of the evaluation practice	20
Figure 3.1:	The changing concept of development	35
Figure 3.2:	The project cycle	40
Figure 3.3:	Evaluation within a research framework	41
Figure 4.1:	Traditional, current and future entrepreneurship realities	61
Figure 4.2:	Nokia's invisible balance sheet	66
Figure 4.3:	Role of evaluation to improve excellence	70
Figure 5.1:	The SMME construction sector	75
Figure 6.1:	Results chain for development activities	100
Figure 6.2:	Horizontal logic and information trains	101
Figure 7.1:	Logframe 4x4 matrix	117
Figure 7.2:	Summarised guidelines for the 4x4 Logframe matrix	126
Figure 7.3:	Three-dimensional Logframe matrix	127
Figure 7.4:	Logframes in relation to projects, programmes and national goals	127
Figure 7.5:	Logframe range limitations from lemale male respondence	128
Figure 7.6:	Logframe 4x4 logo of OEU	130
Figure 9.1:	Membership acceptability	166
Figure 9.2:	Membership acceptability per province	166
Figure 9.3:	Database acceptability	166
Figure 9.4:	Annual report acceptability	166
Table 8.33:		
List of Tabl	es aired t-last on construct 6, from female male respondents	
Table 8.1	Questions from which the constructs were developed and	
	Cronbach Alpha deleted results of the individual questions	135
Table 8.2	Cronbach Alpha results of the constructs	137
Table 8.3	Factor analysis of the constructs, male and female	138
Table 8.4:	Means, standard deviation and t-test on construct 1	143
Table 8.5:	Paired t-test on construct 1, of men & women entrepreneurs	143
Table 8.6:	Paired t-test on construct 1, from female male respondents	144
Table 8.7:	ANOVA for construct 1, per sector classification of respondents	144
Table 8.8:	Means, standard deviation and t-test on construct 2	145

Table 8.9:	Paired t-test on construct 2, of men & women entrepreneurs	145
Table 8.10:	Paired t-test on construct 2, from female male respondents	145
Table 8.11:	ANOVA for construct 2, per sector classification of respondents	145
Table 8.12:	Means, standard deviation and t-test on construct 3	146
Table 8.13:	Paired t-test on construct 3, of men & women entrepreneurs	146
Table 8.14:	Paired t-test on construct 3, from female male respondents	146
Table 8.15:	ANOVA for construct 3, per sector classification of respondents	146
Table 8.16:	Means, standard deviation and t-test on construct 4	147
Table 8.17:	Paired t-test on construct 4, of men & women entrepreneurs	147
Table 8.18	Paired t-test on construct 4, from female male respondents	147
Table 8.19:	ANOVA for construct 4, per sector classification of respondents	147
Table 8.20:	Means, standard deviation and t-test on construct 5	148
Table 8.21:	Paired t-test on construct 5, of men & women entrepreneurs	148
Table 8.22:	Paired t-test on construct 5, from female male respondents	148
Table 8.23:	ANOVA for construct 5, per sector classification of respondents	148
Table 8.24:	Means, standard deviation and t-test on construct 6	149
Table 8.25:	Paired t-test on construct 6, of men & women entrepreneurs	149
Table 8.26:	Paired t-test on construct 6, from female male respondents	149
Table 8.27:	ANOVA for construct 6, per sector classification of respondents	149
Table 8.28:	Means, standard deviation and t-test on construct 7	150
Table 8.29:	Paired t-test on construct 7, of men & women entrepreneurs	150
Table 8.30:	Paired t-test on construct 7, from female male respondents	150
Table 8.31:	ANOVA for construct 7, per sector classification of respondents	150
Table 8.32:	Means, standard deviation and t-test on construct 8	151
Table 8.33:	Paired t-test on construct 8, of men & women entrepreneurs	151
Table 8.34:	Paired t-test on construct 8, from female male respondents	151
Table 8.35:	ANOVA for construct 8, per sector classification of respondents	151
Table 8.36:	Means, standard deviation and t-test on construct 9	152
Table 8.37:	Paired t-test on construct 9, of men & women entrepreneurs	152
Table 8.38:	Paired t-test on construct 9, from female male respondents	152
Table 8.39:	ANOVA for construct 9, per sector classification of respondents	152
Table 8.40:	Means, standard deviation and t-test on construct 10	153
Table 8.41:	Paired t-test on construct 10, of men & women entrepreneurs	153
Table 8.42:	Paired t-test on construct 10, from female male respondents	153
Table 8.43:	ANOVA for construct 10, per sector classification of respondents	153

Table 8.44:	Means, standard deviation and t-test on construct 11	154
Table 8.45:	Paired t-test on construct 11, of men & women entrepreneurs	154
Table 8.46:	Paired t-test on construct 11, from female male respondents	154
Table 8.47:	ANOVA for construct 11, per sector classification of respondents	154
Table 8.48:	Means, standard deviation and t-test on construct 12	155
Table 8.49:	Paired t-test on construct 12, of men & women entrepreneurs	155
Table 8.50:	Paired t-test on construct 12, from female male respondents	155
Table 8.51:	ANOVA for construct 12, per sector classification of respondents	155
Table 8.52:	Means, standard deviation and t-test on construct 13	156
Table 8.53:	Paired t-test on construct 13, of men & women entrepreneurs	156
Table 8.54:	Paired t-test on construct 13, from female male respondents	156
Table 8.55:	ANOVA for construct 13, per sector classification of respondents	156
Table 8.56:	Summary and findings	157
Table 9.1:	Questions from which the Constructs were developed and	
	Cronbach Alpha deleted results of the individual questions	162
Table 9.2:	Cronbach Alpha results of the constructs	163
Table 9.3:	Factor analysis of the constructs	163
Table 9.4:	Summary of hypotheses	165
Table 9.5:	T-test for Construct A: Acceptability of SAWiC per gender	167
Table 9.6:	ANOVA for Construct A: Acceptability of SAWiC per province	167
Table 9.7:	T-test for Construct T: Utilisation of training opportunities	
	through SAWiC per gender	168
Table 9.8:	ANOVA for Construct T: Utilisation of training opportunities	
	through SAWiC per province	168
Table 9.9:	T-test for Construct N: Utilisation of network opportunities	
	through SAWiC per gender	169
Table 9.10:	ANOVA for Construct N: Utilisation of network opportunities	
	through SAWiC per province	168
Table 9.11:	Summary of hypotheses results and findings	170
Table 10.1:	Logframe matrix for an institution's design at appraisal phase	176
Table 11.1:	Logframe matrix for a project's design at appraisal phase	184
Table 11.2:	Logframe matrix for a project's evaluation	186