

A comparative analysis between SA and USA
women entrepreneurs in construction

by

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To God the glory!

Executive summary

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Key words:

Women's entrepreneurship, positive pull-, negative push-, barriers-, success- and motivational factors

Women increasingly 'make the leap' into 'traditionally male' entrepreneurial ventures. This dissertation reviews relevant literature on what, how many, why and where women entrepreneurs in construction found their niche markets, which aspects make women unique, how poverty and unemployment hurt women and what entrepreneurial barriers women experience, comparing a developed (USA) and developing country (SA).

A survey instrument was developed to test the constructs empirically and case studies illustrate the models of success. Given the excellent results of the Cronbach Alpha and Factor Analysis, the instrument developed proved to be reliable and valid and could be used for similar studies.

The case- and empirical studies analyse women ownership attitudes and push and pull factors to determine why women became entrepreneurs in construction.

The main findings are:

1. Women took up their rightful place as construction entrepreneurs. It is a myth that they are only labourers.
2. Differences and similarities; SA-USA: In the USA women are mostly 'Corporate Entrepreneurs' and in SA they are mainly 'Entrepreneurs'. They agree that their associations are successful in promoting women in construction.
3. Positive pull factors are the main reason why women are in construction as they demonstrate entrepreneurial behaviour and characteristics.
4. Negative push factors, e.g. "need to make a living" are a lesser reason.
5. Gender discrimination can become fatal barriers for successful women entrepreneurs.
6. The majority of respondents see themselves as successful and intent on developing key aspects of their businesses to expand their competitive edge.
7. SAWiC played a pioneering role in developing a database to prevent clients from justifying their non-compliance of the law in terms of non-availability of women entrepreneurs in construction

Samevatting

‘n Vergelykende analise tussen SA en die VSA vroue entrepreneurs in konstruksie

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Sleutelwoorde:

Vroue entrepreneurs, aanlok-, noop-, struikelblok-, sukses- en motiverings faktore.

Vroue betrokkenheid as entrepreneurs in tradisioneel ‘manlike’ ondernemings soos konstruksie is aan die toeneem. Hierdie proefskrif bestudeer uit die literatuur wat, hoeveel, waarom en waar vroue entrepreneurs in konstruksie hulle nis markte vind, asook waar, hoe, waarom en sedert wanneer diskriminasie voorkom. Hierdie vergelykende studie tussen SA (ontwikkelende land) en die VSA (ontwikkelde land) beskryf watter aspekte vroue entrepreneurs uniek maak, hoedat armoede en werkloosheid hul raak en watter struikelblokke hulle as entrepreneurs ervaar.

‘n Navorsings instrument is ontwerp om die konstrunkte empiries te toets en gevalle -studies illustreer die suksesmodelle. Die uitstekende Cronbach Alpha en faktor analise resultate

dui op die betroubaarheid en aanvaarbaarheid van die navorsings instrument wat vir soortgelyke studies aangewend kan word.

‘n Empiriese analise word gemaak van waarom vroue konstruksie ondernemings begin in terme van lok- of noop faktore. Die hoof bevindinge is:

1. Vroue beklee deesdae hul regmatige plek in konstruksie as entrepreneurs en dis ‘n mite dat hul hoofsaaklik arbeiders is.
2. Daar is betekenisvolle verskille en ooreenstemmings in die bevindinge oor waarom vroue betrokke is by konstruksie in SA en die VSA, byvoorbeeld in die VSA is vroue merendeels korporatiewe entrepreneurs (KE) terwyl vroue in SA merendeels entrepreneurs (E) is. Daarenteen stem hulle saam oor hoe suksesvol hul assosiasies is om vroue in konstruksie te bemark.
3. Die aanlok faktore het ‘n groot invloed op vroue betrokkenheid in konstruksie omdat hulle gedragpatrone en karaktereienskappe van ‘n entrepreneur openbaar.
4. Hoewel vroue in sekere gevalle genoop word om hul tot die konstruksie bedryf te wend vir ‘n bestaan, is die rede ondergeskik aan hul voorliefde vir konstruksie wat uitdagings en innovasie bied.
5. Die erns van diskriminasie teen suksesvolle vroue het aan die lig gekom uit die gevalle studies, waar dit in sekere gevalle fataal was vir die suksesvolle vrou.
6. Die meeste respondente beskou hulself as suksesvol en ontwikkel doelgerig sleutelaspekte in hul besighede om hul mededingende voordeel uit te bou.
7. SAWIC het baanbrekerswerk verrig om ‘n databasis daar te stel sodat kliënte nie meer kan skuil agter die nie-beskikbaarheid van vroue entrepreneurs en sodoende wetlike vereistes van gelykheid omseil nie.

Table of Contents:
A comparative analysis between SA and USA
women entrepreneurs in construction:

Chapter 1:	Introduction and research design	1
1.1	Research orientation	1
1.2	Background, demarcation, scope, limitations & author's related experience	2
1.3	Problem statement	3
1.4	Research objectives: Aim, purpose, beneficiaries and benefits	3
1.5	Research questions	4
1.6	Research design, methodology, information management & deliverables	5
1.7	Descriptors and classification of research design	7
1.8	Hypotheses and proposition formulation	8
1.8.1	The thesis hypothesis design	8
1.8.2	The thesis design flow chart	10
1.8.3	The propositions of SA versus USA on the constructs regarding Yourself, Men and Women in general are as follows	11
1.8.4	The propositions of SA's nine provinces versus USA on the constructs regarding Yourself, Men and Women in general are as follows	13
1.8.5	Proposition summary of SA - USA combined on the constructs regarding Yourself, Men, and Women in general	15
1.9	Schematic layout of the research design	16
1.10	Definitions setting the scene	17
Chapter 2:	Women entrepreneurs in construction in a development context	18
2.1	Introduction	18
2.2	Entrepreneurship: America's secret weapon	18
2.3	Uniqueness of women entrepreneurs	19

2.4	Women in non-traditional work (What?)	21
2.4.1	International scene	21
2.4.2	USA scene	22
2.4.3	African scene	23
2.4.4	South African scene	23
2.5	International and USA tendencies of women in the construction industry	24
2.5.1	International tendencies	24
2.5.2	USA tendencies	25
2.6	SA tendencies of women in the construction industry	27
2.7	Women's niches as construction entrepreneurs	31
2.8	Comparison of women and men entrepreneurs	32
2.9	Comparative summary table between women and men entrepreneurs	35
2.10	Conclusions	37

Chapter 3: Initiating factors: Why are women involved in

construction?

39

3.1	Introduction	39
3.2	Procurement in South Africa: A window of opportunity	40
3.3	Exploratory research on the question 'why involved in construction?'	40
3.4	Triggering events	41
3.5	Distinguishing between pull and push factors	42
3.6	Positive pull factors (+)	44
3.7	Need for achievement (nAch) and motivation as positive pull factors	45
3.7.1	Economic growth, nAch and entrepreneurial behaviour as positive pull factors	46
3.7.2	The notion of entrepreneurship, nAch and role models as positive pull	47
3.7.3	Thematic Apperception Test (TAT) assessing nAch as a positive drive	48
3.7.4	Entrepreneurial behaviour and nAch as positive pull factors	48
3.7.5	The need to do things better as a positive motivating drive	49
3.8	Other sources of positive pull factors	50
3.9	Negative push factors (-)	51
3.10	Conclusion	52

Chapter 4: Factors that influence performance; Barriers(-) and success (+)	53
4.1 Introduction	53
4.2 Barriers (-) and discrimination against women defined	53
4.2.1 The 'glass ceiling' as an entrepreneurial barrier for women	56
4.2.2 Discrimination, gender neutrality and democracy	57
4.2.3 Women, gender, sex, breadwinners and human rights	57
4.2.4 Uniqueness of women vs. business barriers	58
4.2.5 Historical discrimination, trends and challenges over millenniums	60
4.2.6 Violence against women limiting their entrepreneurial performance	60
4.2.7 Women entrepreneurs and the poverty trap	62
4.2.8 The misuse of religion in discriminating against women	65
4.2.9 Marital practices inhibiting women's entrepreneurial performance	66
4.2.10 Traditional and ethnical related discriminatory practices inhibiting women's entrepreneurial performance	67
4.2.11 Social and societal discrimination against women and women entrepreneurs	68
4.2.12 The economics of gender discrimination and oppression	69
4.3 Success (+) of women entrepreneurs in construction	70
4.3.1 Defining and measuring success	71
4.3.2 Model of achievement behaviour	73
4.3.3 Five Key Successoneur™ Model of Business Success	75
4.3.4 Networking for success: The dynamic model of relationship building	77
4.3.5 Mentoring as a success factor	85
4.4 Conclusion	86
 Chapter 5: Case studies and the entrepreneurial process	 89
5.1 Introduction	89
5.2 Case studies and how it links to the entrepreneurial process	91
5.2.1 Innovation	92

5.2.2	Triggering events	93
5.2.3	Implementation	93
5.2.4	Growth: Defining the four growth perspectives model	96
5.3	Mentoring as it impacts on growth of women-owned businesses	97
5.4	Growth, Gender and Business Size: Does one size fit all?	98
5.5	Gender differences in the value placed on growth	99
5.6	South African Case Studies	100
5.6.1	SA Case 1: Illustrative case study on performance hampering barriers: The fatal barrier of a women entrepreneur	101
5.6.2	SA Case 2: Women entrepreneurs in construction teaming up for success: Kemarifi Consortium	103
5.6.3	SA Case 3: Joint venture: Husband and wife team: LFS Building projects	105
5.6.4	SA Case 4: Going it alone: SAWiC member Meisie Ndlovu	107
5.6.5	SA Case 5: Networking to make inroads into road-maintenance technology: Angela Broom - an entrepreneurial manufacturer and innovator	109
5.6.6	SA Case 6: Family as a role model - positive pull factors - Monica Dzwimbo	110
5.6.7	SA Case 7: Overcoming barriers in a non-traditional occupation as civil projects contractor - Stephina van Rooyen	111
5.6.8	SA Case 8: The Growth construct, networking and success as manufacturer and supplier - Phumelele Siphayi	113
5.6.9	SA Case 9: How being a medical doctor can make you a successful contractor – Dr Thandi Ndlovu	121
5.7	USA Case Studies	124
5.7.1	USA Case 1: 2004 Crystal Achievement Award Winner Alise Martiny	124
5.7.2	USA Case 2: High need for Achievement and perseverance to overcome barriers - Deborah Naybor	127

5.7.3	USA Case 3: Brick by Brick: A woman's journey – Lynn Donohue:	130
5.7.4	USA Case 4: Growth in construction as experienced by women in construction in the USA - Nobleza Magsanoc President of the NAWIC Hawaii Chapter	132
5.7.5	USA Case 5: Taking a chance on dreams – Anna Cecilia Merenda	134
5.7.6	USA Case 6: Nancy Eaton installed as National President of NAWIC	136
5.8	Findings and Conclusions	137
5.8.1	Comparison between SA and USA cases	137
	<ul style="list-style-type: none">• Childhood and family.• Educational background.• Marital status.• Reason for becoming entrepreneurs in construction• Age on becoming entrepreneurs in construction• Type of entrepreneur• Barriers• Success• Networking and mentoring• Growth	
5.8.2	Comparisons in relation to constructs	139
	Chapter 6: Empirical analysis: Instrument design and testing	146
6.1	Introduction	146
6.2	Instrument development	146
6.3	Sampling	149
6.4	Instrument implementation: Hard copies and interactive website	149
6.5	Electronic Questionnaire for website: Development Methodology	150
	<ul style="list-style-type: none">• Pair-programming:• Test Driven Development:	

• Software development technologies used	
6.6 Data editing and quality control	151
6.7 Statistical tools applied in analysing the responses	152
6.7.1 Selection of statistical techniques by measurement level and testing situation	152
6.7.2 Computer programme	152
6.7.3 Means and standard deviations	153
6.7.4 Chi-square	153
6.7.5 ANOVA (Analysis of variance)	153
6.7.6 Probability Values (p values) measuring statistical significance	154
6.7.7 Friedman ANOVA (Analysis of variance)	155
6.7.8 Anova ('Blom' Transformation)	155
6.7.9 Kendall coefficient of concordance	156
6.7.10 Cohen-d values measuring practical significance	156
6.8 Statistical tools used for the confirmation of validity and reliability	157
6.8.1 Factor analysis	157
6.8.2 Cronbach Alpha	161
6.10 Conclusions	162
Chapter 7: Empirical analysis: Comparison between SA USA and the nine SA provinces regarding the constructs formulated in Chapters 3, 4 and 6	163
7.1 Introduction	163
7.2 Positive pull factors as reason why entrepreneurs are involved in construction; Construct 1 or Factor 1 (C1 or F1)	164
7.2.1 Results of the dichotomous questions	164
7.2.2 Results of an ANOVA between SA and USA (Positive pull factors C1 or F1)	165
7.2.3 Results of an ANOVA between USA and the SA nine provinces (Positive pull)	166
7.2.4 Results of the Friedman two way ANOVA test (Positive pull factors)	168
7.3 Positive pull elements as reason for involvement: Need for Achievement; Ideas, opportunities & challenges; Need for independence & individualism	170
7.3.1 The need for Achievement as important positive pull factor	170

7.3.2	New opportunities, challenges and ideas why entrepreneurs are involved in construction; Construct 1.2	170
7.3.3	The need for independence and individualism as positive pull factor	170
7.4	Negative push factors why entrepreneurs are involved in construction (C2; F2)	171
7.4.1	Results of the dichotomous questions	171
7.4.2	Results of an ANOVA between SA and USA (Negative push factors C2 or F2)	172
7.4.3	Results of an ANOVA between USA and the SA nine provinces	173
7.4.4	Results of the Friedman two way ANOVA test (Negative push factors)	174
7.5	Negative push elements: Family; previous job; obligatory financial circumstances as negative push factors	176
7.5.1	Negative family circumstances as push factors	176
7.5.2	Previous job related circumstances as negative push factors	176
7.5.3	Obligatory financial circumstances as negative push factors	176
7.6	The experiencing of negative barriers inhibiting performance (C3 or F3) as construction entrepreneurs	177
7.6.1	Results of the dichotomous questions	177
7.6.2	Results of an ANOVA between SA and USA (Negative barriers C3 or F3)	178
7.6.3	Results of an ANOVA between USA and the SA nine provinces (C3 or F3)	179
7.6.4	Results of the Friedman two way ANOVA test (Negative barriers C3 or F3)	181
7.7	Negative barrier elements	182
7.7.1	The exploitation, discrimination and harassment <u>by society</u> as negative push factor	
7.7.2	The exploitation, discrimination and harassment <u>at work</u> as negative pushfactor	182
7.7.3	Sophisticated blaming, faming and unfair labour practices as negative push factor	
7.8	Experiencing positive motivational, planning & process success factors	183
7.8.1	Results of the dichotomous questions	183
7.8.2	Results of an ANOVA between SA and USA (Positive factors C4 or F4)	183
7.8.3	Results of an ANOVA between USA & SA nine provinces (Positive factors)	184
7.8.4	Results of the Friedman two way ANOVA test (Positive factors C4 or F4)	186
7.9	Elements motivational, planning & process success factors	187
7.9.1	Being successfully independent, in control, achieving goals and job satisfaction	187
7.9.2	Being successful by planning for growth factors	187
7.9.3	Being successful by sustaining growth in their businesses	187

7.10	Role that SAWiC (SA) and NAWIC (USA) play in entrepreneurial success (Q49)	188
7.11	Break even of SA and USA entrepreneurs (optional questions Q50-53 for business owners and managers only)	189
7.11.1:	Success rates (Q50)	189
7.11.2:	Profitability (Q51)	190
7.11.3:	Client satisfaction rates (Q52)	191
7.11.4:	Time it took the business to break even (Q53)	192
7.12	Age groups of SA and USA entrepreneurs (Q56)	193
7.13	Comparison in marital status of SA and USA respondents (Q57)	194
7.14:	SA and USA comparison in terms of years involved in construction (Q58)	194
7.15	Where involved in construction: SA and USA entrepreneurs (Q59)	195
7.16	SA and USA comparison of company sizes in terms of number of staff (Q61)	196
7.18	Conclusion	196

Chapter 8: Findings, conclusions, recommendations

and future research

197

8.1	General findings	197
8.2	Summary of empirical findings	197
8.3	Other important findings	200
8.4	Conclusions	201
8.5	Recommendations	202
8.6	Future research	202

Bibliography

203

Interviews

225

Web Pages

226

Annexures

Annexure 1: Glossary

Annexure 2: Research Questionnaire as finally used

Annexure 3: Curriculum Vitae

List of Tables:

Chapter 1:	1
Table 1.1: Proposition summary of SA versus USA on the constructs regarding Yourselfs, Men, and Women in general	
Table 1.2: Proposition summary of SA's nine provinces and USA on the constructs regarding Yourselfs, Men, and Women in general (3H ₀)	
Table 1.3: Proposition summary of SA USA combined on the constructs regarding Yourselfs, Men, and Women in general	
Chapter 2:	18
Table 2.1: US Total Construction for 2000-2004	
Table 2.2: SA Total Construction for 1999-2004 (Format adapted to match the format of US as far as possible)	
Table 2.3: Comparison between Men and Women Entrepreneurs	
Chapter 4:	53
Table 4.1 Key indicators of the five models being considered to measure success	
Chapter 5:	89
Table 5.2: Case study findings illustrating the constructs	
Chapter 6:	146
Table 6.2.1: Construct and element formulation from questions	
Table 6.8.1: Yourself: Factor correlations for rotated factors (not yet equal to constructs)	
Table 6.8.2: Men: Factor correlations for rotated factors (not yet equal to constructs)	
Table 6.8.3: Women: Factor correlations for rotated factors (not yet equal to constructs)	
Table 6.8.4: Factor analysis: Variance explained by factor	
Table 6.8.1 Cronbach Alpha results	

Chapter 7:

163

Table 7.2.1: Positive pull factor differences between SA and USA

Table 7.2.2: ANOVA P-values for USA and SA's nine provinces regarding:
Positive pull factors (C1 or F1)

Table 7.4.1: Differences between SA and USA

Table 7.4.2: ANOVA P-values for USA and SA's nine provinces regarding:
Negative push factors (C2 or F2)

Table 7.4.3: Negative push (C2 or F2): Results of Friedman ANOVA

Table 7.6.1: Differences between SA and USA

Table 7.6.2: ANOVA P-values for USA and SA's nine provinces regarding:
Negative barriers (C3 or F3)

Table 7.6.3: Negative barriers (C3 or F3): Results of Friedman ANOVA

Table 7.8.1: Positive motivational, planning and process success factors. (F4): Results of
Friedman ANOVA

Table 7.8.2: Differences between SA and USA

Table 7.8.3: ANOVA P-values for USA and SA's nine provinces regarding:
Positive success factors (C4 or F4)

Chapter 8:

197

Table 8.1: Proposition summary of SA versus USA on the constructs and elements
regarding Yourself, Men, and Women in general)

Table 8.2: Proposition summary of SA's nine provinces on the constructs
regarding Yourself, Men, and Women in general

Table 8.3: Proposition summary of SA USA combined on the constructs
regarding Yourself, Men, and Women in general

List of figures

Chapter 1:	1
Figure 1.1: Thesis design flow chart (From question to element, to construct, to hypothesis and propositions)	
Figure 1.2: Schematic layout of chapters as part of the research design	
Chapter 2:	18
Figure 2.1: U.S. Construction Market, 1995-2004 (Starts, Bil \$)	
Figure 2.2: The SA Construction Industry Development Board Status Report 2004	
Figure 2.3: SA Contractual Environment per quarter for Contract Types 2002-2004	
Chapter 3:	39
Figure 3.1: Summary of reasons for women being construction entrepreneurs in descending order based on 'strongly agreed' responses	
Figure 3.2: Reasons for start-up decision: The push and pull factors of entrepreneurship	
Chapter 4:	53
Figure 4.1: Income levels and poverty	
Figure 4.2: Model of Achievement Behaviour	
Figure 4.3: The 5 key Successneur™ Model of Business Success	
Chapter 5:	89
Figure 5.1: A model of the entrepreneurial process	
Figure 5.2: The Chain of Greatness	
Chapter 7:	163
Figure 7.2.1: The number of respondents who answered Yes on Q1-Q3	
Figure 7.3.1: The number of respondents who answered Yes on Q1	

Figure 7.3.2: The number of respondents who answered Yes on Q2

Figure 7.3.3: The number of respondents who answered Yes on Q3

Figure 7.4.1: The number of respondents who answered Yes on Q4-Q6

Figure 7.5.1: The number of respondents who answered Yes on Q4

Figure 7.5.2: The number of respondents who answered Yes on Q5

Figure 7.5.3: The number of respondents who answered Yes on Q6

Figure 7.6.1: The number of respondents who answered Yes on Q9:

In your opinion do men in general undermine successful women?

Figure 7.7.1: The number of respondents who answered Yes on Q7

Figure 7.7.2: The number of respondents who answered Yes on Q8

Figure 7.7.3: The number of respondents who answered Yes on Q9

Figure 7.8.1: The number of respondents who answered Yes on Q10-12

Figure 7.9.1: The number of respondents who answered Yes on Q10

Figure 7.9.2: The number of respondents who answered Yes on Q11

Figure 7.9.3: The number of respondents who answered Yes on Q12

Figure 7.10.1: 'Yes' answers to SAWiC and NAWiC being instrumental to the success of members.

Figure 7.11.1: Success rates (Q50)

Figure 7.11.2: Profitability (Q51)

Figure 7.11.3: Client satisfaction rates (Q52)

Figure 7.11.4: Time it took the business to break even (Q53)

Figure 7.12.1: Age groups of the respondents

Figure 7.14.1: SA and USA comparison in terms of years involved in construction

Figure 7.15.1: SA and USA comparison in terms of capacity involved in construction

Figure 7.16.1: SA and USA comparison of company sizes in terms of number of staff

Chapter 1 Introduction and research design

1.1 Research orientation

Branding women who are entrepreneurs in construction as being involved in a so-called 'non-traditional' sector is an unfair and unfortunate practice. Women should rather take back the share in construction that is rightfully theirs. As early as the Old Testament of the Bible, in the twentieth year of the rule of King Artaxerxes, we hear of women in construction (WiC). The King sent Nehemia to Jerusalem, granting him permission to rebuild the walls of Jerusalem. Shallum, ruler of a half district of Jerusalem, repaired his section "with the help of his daughters" (Nehemia 3:12). Lumsdaine & Lumsdaine (1995:409) note that women's involvement in the construction industry in a leading role dates back as far as 1315, when "a road-building project through the mountains of Fujian province was directed by a women engineer." At the South African Housing Awards Ceremony held 10 May 2002 the Keynote speaker said: "For centuries women in Africa built their huts, houses and homes, clayed floors, thatched roofs, cultivated the land, made money and raised their kids, while men were busy with more important things elsewhere" (Mthembi-Mahanyele, 2002). The factual story of South Africa is "When their men left to work as migrant labourers the women built their dwellings, supported their families, and farmed the lands ... Whole communities became matriarchal" noted Lazar (1993:12).

According to the *Global Entrepreneurship Monitor: 2004 Report on Women and Entrepreneurship* women's entrepreneurship is expanding around the world. Women-owned businesses comprise between one-quarter and one-third of business in the formal economy and are likely to play an even greater role in informal sectors. Generations of women from different backgrounds contribute to their environment and are demonstrating encouraging signs of entrepreneurial spirit (Arenius, Minniti and Langowitz 2005: 11).

"Our industry is the most important industry on the face of the earth. Why? Because everything is dependent upon the built environment..." (Young 2004:7). This thesis will explore the construction situation for women entrepreneurs in construction in South Africa (SA) as a developing country and the United States of America (USA) as a developed country.

1.2 Background, demarcation, scope, limitations & author's related experience

The Women in Construction (WiC) initiative was originally founded in 1997. WiC later developed into the South African Women in Construction (SAWiC) with some of its objectives to protect women entrepreneurs in construction against discrimination, to access construction contracts, to create and secure business opportunities, to enhance their business enterprises, to promote women in the industry, to identify problems, come up with solutions, to establish a competitive edge and to showcase their successes in order to survive in the male dominated construction industry. The linkage through affiliation with the National Association of Women in Construction in the USA, namely NAWIC, provides access to information from Canada, UK, Australia, the Netherlands and New Zealand. Moreover it provides the opportunity to share experiences and to reach out to developing countries to learn about similarities and differences.

This research was initiated by the SAWiC secretariat as part of a capacity building programme within the Knowledge Management Cluster (KMC) of the Development Bank of Southern Africa (DBSA). It presents a window of opportunity and a challenge for the author, as a specialist in the DBSA KMC and as Founder of SAWiC, to apply her skills and expertise to a worthy cause such as to obtain new knowledge during a time when 'learning institutions' and 'knowledge management' are important aspects. Constitutionally in South Africa (SA) there is a will to help previously disadvantaged individuals, especially women, but client bodies do not know how to reach out to them. This study is aimed at addressing this need.

This thesis mainly focuses on a comparative study between the associations, SAWiC in South Africa and NAWIC in America. South Africa is a developing country while the USA is a developed country and useful lessons of experience can be obtained through studying information from these two organisations that are dealing with women entrepreneurs in construction. Only members, service providers and stakeholders of these associations were targeted to ensure that respondents are knowledgeable as well as give relevant and informed inputs to this research study. Thus respondents include a limited number of men as service providers and stakeholders. This will assist SAWiC with future strategic planning, maximising development impact of women in construction interventions through enabling measures to achieve that goal. As founder of SAWiC the author initiated the research programme to streamline the activities, output, outcome and impact of SAWiC to uphold their slogan "Constructing a brighter future".

1.3 Problem statement

Although the South African Constitution (South Africa 1996), Employment Equity Act (South Africa 1998) and the Procurement procedures (RSA 1998) require that women be employed and advanced in all sectors of the economy, women entrepreneurs in construction still find it problematic to optimise the benefits. In the light of the gender discrimination against women such measures were necessary to enable, to protect and to encourage women. Women organisations are also crucial in implementing the enabling measures. This thesis in contributing to the SAWiC Research Programme is approaching the problem from another angle: Schindehutte, Morris & Kuratko (2000:10) propose research on the roles or impacts of triggering events in a start-up context and whether any relationship exists between types of triggers and success rates.

A major problem of SAWiC members is that employers and main contractors simply get away by appealing that those “suitable” women entrepreneurs could not be found for the business opportunities. There is the perception that construction is for men and that women are not entrepreneurial. The problem seems to be that the background of where women come from, the challenges women face and why they are in construction need to be understood. Their successes need to be measured and recognised to effectively and competitively grow their businesses and access business opportunities.

1.4 Research objectives: Aim, purpose, beneficiaries and benefits

The aim and purpose of this study is to deal with the problem statement. It will investigate women construction entrepreneur's existence, involvement, competitive edge, barriers and empowerment towards achieving success, especially among SAWiC and NAWIC members that were used as samples through a literature study and empirical research. Case studies will be used and models studied and developed to answer the research questions. It will enable women Small, Medium and Micro Enterprises (SMMEs) to utilize national and international resources especially earmarked to address gender inequalities, to establish networks, to change negative perceptions and to provide suitable and appropriate training towards achieving success.

The main beneficiaries of the research will be DBSA, SAWiC and NAWIC as well as their Management Offices and members of gender empowerment associations. They need to maximise their empowering role and function by capitalising on private, national and international funding. The national and international development fraternity will

benefit in the sense that it will guide their investments to promote economic development to women entrepreneurs in construction.

The results of the questionnaire and this study will be useful not only to SAWiC and NAWiC associations and their members, but also to government officials, development finance institution staff, main contractors and contract providers. Furthermore employers in the public and private sector who are responsible for decision-making regarding the appointment of contractors or sub-contractors, for awarding public or private sector projects and tenders, and for the allocation of any construction related business opportunities to women entrepreneurs, will benefit. The results of Chapter 7 will be used to align SAWiC's training activities and planning accordingly.

The research introduces ways and means how entrepreneurship could benefit from concepts and models. For this research to have a development impact on the lives of women, it is important that the outcome of the research will be accepted and utilised by gender organisations and their members: Actions speak louder than words!

1.5 Research questions

A fundamental problem that has received relatively little attention, according to Schindehutte, Morris & Kuratko (2000:1), concerns the "initiating factors that get the entrepreneurial process underway". They state: "while much is known about sources and types of opportunities, the criteria for a good concept, ways to leverage resources, and methods of harvesting, much less is understood regarding exactly what leads a person or set of persons to '*make the leap*' and pursue an entrepreneurial activity."

The above quotation inspired the title of the thesis, 'Women entrepreneurs in construction: A comparative analysis between SA and USA'. The empirical analysis is aimed at the research question "Why do women make this leap?" The analysis determines if there is a significant difference between the countries' responses and if there is a link between the reasons and the success rates. Part one is a theoretical literature study to review the relevance of the following questions:

- **How** can the entrepreneurial process be used as framework for research?
- **What** are non-traditional occupations (NTOs)?
- **When** did women get involved in construction?
- **Which** aspects make women unique as entrepreneurs?

- **How many** women are in the construction industry?
- **Where** do women find market niches as construction entrepreneurs?
- **How** are women entrepreneurs discriminated against?
- **When** did discrimination against women start?
- **Why** is it 'cost-effective' to discriminate against women?
- **What** barriers do women entrepreneurs experience?
- **How** severe is gender discrimination in hampering entrepreneurial performance?
- **How** are women entrepreneurs in construction influenced by the poverty trap?
- **Who** can help women overcome poverty and discrimination?
- **How** can women entrepreneurs in construction be assisted?
- **What** can women pro-actively do against poverty and discrimination?

The above literature study is the foundation for the following empirical question:

Why do women choose to be construction entrepreneurs?

Or in the words of Schindehutte, Morris & Kuratko (2000:1):

Why do women make this leap? How successful are they?

How can their success be measured?

1.6 Research design, methodology, information management & deliverables

Each chapter, from 2 to 5 is handling one of the main research dilemmas of SAWiC. These dilemmas were translated into the research questions stipulated in item 1.5 above. Each chapter is introduced by a literature study of the question, followed by Chapter 6, the empirical research and analysis based on sections of the questionnaire and then compared to NAWIC in the USA. The literature contains models that are helpful in analysing the case studies and informing the empirical research.

Secondly, a comprehensive questionnaire was designed as part of the SAWiC Research Programme developed by the author with the SAWiC Management. The data for the interrogative study were collected in South Africa by means of workshops with participant members and stakeholders of SAWiC completing the questionnaire supported by interviews. The workshops had on average 30 to 40 participants, but in the Gauteng province in SA there were more respondents because of the urban setting and population density. A total of 330 questionnaires were completed in SA and 87 in the USA, representing most of the states of the USA.

The questionnaire was designed as an instrument to answer the research questions. It was submitted in a workshop to delegates in the SAWiC (developing country) and NAWiC (developed country) databases. This method is called a **convenience sample** where workshop delegates complete the questionnaire in a workshop situation. After the questionnaire was filled out, a short individual interview with each respondent was done in order to limit rejected questionnaires.

The SAWiC and NAWiC databases of ± 600 and 6000 members respectively were used to identify the entrepreneurial members. Some 417 members including stakeholders completed questionnaires in workshops dedicated for this purpose. The results of each section of this research programme questionnaire are reflected in Chapter 7. The SAWiC Research Programme is also investigating the opinions of service providers, (including contract sources and originators) on their needs regarding success, qualities and quantities of women entrepreneurs in construction.

A major management dilemma is that women entrepreneurs in the construction sector find it difficult to access business opportunities, despite enabling measures and implementing women organisations. An important research question is therefore whether they are adequately equipped to compete for business opportunities and are they successful? The empirical part of the research takes a snapshot of the supply related shortfalls of women entrepreneurs in the construction industry.

In the USA the same questionnaire was handled in a workshop with interviews and an internet interactive website, to be accessed using a password to prevent tampering or skewing of results by unauthorised persons. Four and five point scales were used where possible. A pilot test was run to test the questionnaires.

The databases of SAWiC and NAWiC were mainly used to select appropriate case studies to further enhance the study through real life examples described and analysed in Chapter 5. The specific methodology and statistical tests used are further discussed in Chapter 6 and 7. The literature study part of each chapter will set the scene for the case studies and survey instrument enhancing hypothesis testing.

The data was edited to ensure that it is accurate, consistent, uniformly entered, completed and arranged to simplify the coding and tabulation. Data entries will be done through SAS and Excel spreadsheets. Descriptive statistics are used to point out central tendency, spread and shape. Visual displays of the data use Excel graphics. Chi-square

tests are used to determine where significance needs are tested in nonparametric test results. Cronbach Alpha and Factor Analysis are used to test the constructs.

The Analysis of Variance (ANOVA) is used to test the hypothesis. The Pearson correlation coefficient will be used where linearity or bivariate normal distributions occur. A distinction will be drawn between the SA and USA samples members, between the intentions of employers and the experience of employees regarding empowerment needs. The findings will be discussed with stakeholders.

It is foreseen that a publication in a construction, development or entrepreneurial periodical will materialise from this thesis. Chapters 2 to 7 are designed in such a way that each of them can serve as a separate publication. The main cost item will be the time used by the student for the research and structured interviews. The author will handle all interviews, questionnaires and analysis. The author sponsors the SAWiC Research Programme with no charge to SAWiC.

1.7 Descriptors and classification of research design

This research has been preceded by a Master's degree on the same topic that served as an exploratory study. The research question has been crystallized in the MPhil in Entrepreneurship exploratory study in order to proceed with this doctoral thesis that is a formal study. The master's degree study served as the foundation and preparation to this formal study, having comprised of 14 subjects on entrepreneurship and research.

The method of data collection is interrogation and communication of respondents that were invited to SAWiC and NAWiC workshops, therefore it can be described as a convenience sample. Regarding the communication a short interview was conducted with each respondent to ensure that the questionnaire was fully completed thus minimising missing data. Questionnaires as in Annexure 2 were distributed in hardcopy and internet formats (See Chapter 6 for further technical detail).

This was an *Ex post facto* study that tested the opinions of the respondents. No experiments were conducted on the respondents. That is the reason for using propositions rather than hypotheses. Although the study was mainly descriptive some causal relationships were investigated such as the initiating factors relating to success.

Regarding the time dimension no longitudinal research over time was used except in Chapter 2 of the literature study providing a perspective of the performance of the

building sector over time and of female entrepreneurial involvement over time. This research was mainly cross-sectional of women in construction in SA and USA in 2004.

Case studies in Chapter 5 provide the depth of specific topics and specific individuals while Chapter 7 is a statistical study spanning over a width of more than 400 respondents in the two countries being researched.

1.8 Hypotheses and proposition formulation

1.8.1 The thesis hypothesis design

Pull and push:

1H₀: There **is not** a significant difference between the responses to the *why involved* research questions to mainly women entrepreneurs in construction: (1) between USA and SA; (2) between the USA and the SA nine provinces; and (3) between "Yourself, Men and Women", because of mainly **positive pull factors** (C1); and various **negative push factors** (C2).

1H_a: There **is** a significant difference between the responses to the *why involved* research questions to mainly women entrepreneurs in construction: (1) between USA and SA; (2) between the USA and the SA nine provinces; and (3) between "Yourself, Men and Women", because of mainly **positive pull factors** (C1); and various **negative push factors** (C2).

Barriers and success factors:

2H₀: There **is not** a significant difference between the responses to the *why successful or unsuccessful* research questions to mainly women entrepreneurs in construction: (1) between USA and SA; (2) between the USA and the SA nine provinces; and (3) between "Yourself, Men and Women", because of a variety of reasons that can be constructed as **barriers** (C3) and **success factors** (C4).

2H_a: There **is** a significant difference between the responses to the *why successful or unsuccessful* research questions to mainly women entrepreneurs in construction: (1) between USA and SA; (2) between the USA and the SA nine provinces; and (3) between "Yourself, Men and Women", because of a variety of reasons that can be constructed as **barriers** (C3) and **success factors** (C4).

Other comparisons:

3H₀: There **is not** a significant difference between the responses of the mainly women entrepreneurs in construction in SA and USA regarding:

- a. SAWiC and NAWiC success;
- b. Business success rates;
- c. Business profitability;
- d. Client satisfaction rates;
- e. Time it took the business to break even;
- f. Age groups of the respondents;
- g. Marital status (single women entrepreneurs);
- h. Years involved in construction;
- i. Capacity involved in construction (where?); and
- j. Company sizes in terms of number of staff;

3H_a: There **is** a significant difference between the responses of the mainly women entrepreneurs in construction in SA and USA regarding: a to j (See above).

The hypotheses and propositions were formulated according to the following constructs:

- Construct 1 (C1): Positive pull factors;
- Construct 2 (C2): Negative push factors;
- Construct 3 (C3): Negative barriers; and
- Construct 4 (C4): Positive success factors

Chapters 2-5 are giving evidence from the literature informing these main constructs as tested by the Factor Analysis in Chapters 6 and analysed in Chapter 7. (These constructs, C1, C2, C3 and C4 are sometimes referred to as factors F1; F2; F3 and F4).

The respondents in the SA and the USA samples had to answer each question in the survey instrument (questionnaire) about their own experiences 'Yourself' and then to give their opinions on each of the questions for 'Men' in general and 'Women' in general.

Figure 1.1 presents a perspective of the questions, elements, propositions and hypothesis that stemmed from the above four constructs comparing SA & USA.

1.8.2 The thesis design flow chart

Figure 1.1: Thesis design flow chart (From question to element, to construct, to hypothesis and propositions)

Thesis hypothesis		Propositions per construct & elements		Questions 1 - 12 = Yes-No	Questions 13-48 = Five point Likert Scale statements
Involvement of women entrepreneurs in construction	Why involved?	C1	Positive pull factors	C1.1 Need for Achievement as positive pull factor	Q1 Need for Achievement Q13 Achievement as pull factor Q14 Constructiveness as pull factor Q15 Satisfaction as pull factor
				C1.2 Ideas, opportunities & challenges	Q2 Love for construction Q16 Enjoying new opportunities Q17 New challenges and horizons Q18 New ideas to be tested
				C1.3 Need for independence & individualism	Q3 Need for independence Q19 Need to do your own thing Q20 Desire to have an own business Q21 Not being willing to work for a boss.
		C2	Negative push factors	C2.1 Negative family circumstances	Q4 Negative family circumstances Q22 Negative family circumstances Q23 Being left single (e.g. widowed) Q24 A divorce that act as a push factor
				C2.2 Previous job related as negative push factors	Q5 Dissatisfied with previous job Q25 Resigning from a previous job Q26 Rejoining after other failures Q27 Dissatisfaction in a formal job
				C2.3 Obligatory financial circumstances	Q6 Economic and financial pressure Q28 The necessity to have a job Q29 Job loss or retrenchment Q30 The obligation to earn an income
	C3	Barriers and constraints	C3.1 Harassment & discrimination by society	Q7 Women envied by men in society Q31 Exploitation in society Q32 Abuse and discrimination in society Q33 Sexual harassment in society	
			C3.2 Harassment & discrimination at work	Q8 Women envied by men at workplace Q34 Exploitation in the workplace Q35 Abuse and discrimination at work Q36 Sexual harassment at work	
			C3.3 Blaming, framing and unfair practices	Q9 Undermine successful women Q37 Sophisticated blaming and framing Q38 Unfair disciplinary practices Q39 Planned mismatch of tasks and skills	
	C4	Success factors	C4.1 Successfully independent & in control	Q10 Motivation as success factor Q40 Being independent and in control Q41 Achievement of goals Q42 Job satisfaction	
			C4.2 Successful by planning for growth	Q11 Plan for growth in business Q43 Increases in turnover annually Q44 Competitive advantage Q45 Changes in the environment	
			C4.3 Successful by sustaining growth	Q12 Sustaining growth in business Q46 Adapting internal systems Q47 Good communication links Q48 An organisation's culture	
	Why successful or not?				

KEY: C=Construct; C1=Construct 1;
C1.1=element 1 of Construct 1; C1.2=element 2 of construct 1; C1.3=element 3 of construct 1; etc.

1.8.3 The propositions of SA versus USA on the constructs regarding Yourself, Men and Women in general are as follows:

The propositions (hypotheses) for Construct 1 (C1)

There **is not** a significant difference between the opinions of SA & USA entrepreneurs in construction on their respective sectors regarding the **positive pull factors** (C1) why entrepreneurs are involved in construction about:

- Yourself (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

The propositions (hypotheses) for Construct 2 (C2)

There **is not** a significant difference between the opinions of SA & USA entrepreneurs in construction on their respective sectors regarding the **negative push factors** (C2) why entrepreneurs are involved in construction about:

- Yourself (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

The propositions (hypotheses) for Construct 3 (C3)

There is not a significant difference between the opinions of SA & USA entrepreneurs in construction on their respective sectors regarding **experiencing barriers inhibiting performance** (C3) as construction entrepreneurs about:

- Yourself (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

The propositions (hypotheses) for Construct 4 (C4)

There is not a significant difference between the opinions of SA & USA entrepreneurs in construction on their respective sectors regarding experiencing **positive motivational, planning and process success factors** (C4) about:

- Yourselfs (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

The above construct propositions can be summarised and will be reported on in Chapter 8 in a user-friendly table format as follows:

Table 1.1: Proposition summary of SA versus USA on the constructs regarding Yourselfs, Men, and Women in general

	There is not a significant difference between the opinions of SA & USA construction entrepreneurs on their respective sectors regarding ...	↑.Y ...about Yourselfs (respondents themselves)	↑M ...about Men in general	↑W ...about Women in genera
1C1	...the positive pull factors why entrepreneurs are involved in construction...			
1C2	...the negative push factors why entrepreneurs are involved in construction...			
1C3	...experiencing negative barriers Inhibiting performance as construction entrepreneurs...			
1C4	...experiencing positive motivational, planning and process success factors...			

Example: The propositions for Construct 1 regarding Men: **C1.M** should read: There is not a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors, regarding the positive pull factors why entrepreneurs are involved in construction, about Men in general.

1.8.4 The propositions of SA's nine provinces versus USA on the constructs regarding Yourself, Men and Women in general are as follows:

The propositions (hypotheses) for Construct 1 (C1)

There **is not** a significant difference in the opinions of the construction entrepreneurs in the nine provinces of SA and USA regarding the **positive pull factors** (C1) why entrepreneurs are involved in construction about:

- Yourself (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

The propositions (hypotheses) for Construct 2 (C2)

There is not a significant difference in the opinions of the construction entrepreneurs in the nine provinces of SA and USA regarding the **negative push factors** (C2) why entrepreneurs are involved in construction about:

- Yourself (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

The propositions (hypotheses) for Construct 3 (C3)

There is not a significant difference in the opinions of the construction entrepreneurs in the nine provinces of SA and USA regarding:

- Yourself (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

The propositions (hypotheses) for Construct 4 (C4)

There is not a significant difference in the opinions of the construction entrepreneurs in the nine provinces of SA and USA regarding **experiencing positive motivational, planning and process success factors (C4)** about:

- Yourselves (Y) (respondents themselves);
- Men in general (M); and
- Women in general (W).

Similar to the SA-USA comparison, the USA–Nine provinces comparison presented in the above construct propositions, can be summarised and will be reported on in Chapter 8 in a user-friendly table format as follows:

Table 1.2: Proposition summary of SA’s nine provinces and USA on the constructs regarding Yourselfs, Men, and Women in general (3H₀)

	There is not a significant difference in the opinions of the construction entrepreneurs in the nine provinces of SA and USA regardingY ...about Yourselfs (respondents themselves)	M ...about Men in general	.W ...about Women in general
2C1	...the positive pull factors why entrepreneurs are involved in construction...			
2C2	...the negative push factors why entrepreneurs are involved in construction...			
2C3	...experiencing negative barriers inhibiting performance...			
2C4	...experiencing positive motivational, planning and process success factors...			

1.8.5 Proposition summary of SA - USA combined on the constructs regarding Yourself, Men, and Women in general

The propositions (hypotheses) for Yourself, Men and Women for all four constructs can be formulated as follows:

There **is not** a significant difference in the opinions of the construction entrepreneurs in both SA and USA between Yourself (Y) (respondents themselves); Men in general (M); and Women in general (W) regarding:

- C1 the positive pull factors why entrepreneurs are involved in construction;
- C2 the negative push factors why entrepreneurs are involved in construction;
- C3 experiencing negative barriers inhibiting performance; and
- C4 experiencing positive motivational, planning and process success factors.

Similar to the other two comparisons, the above propositions can be summarised and will be reported on in Chapter 8 in a user-friendly table format as follows:

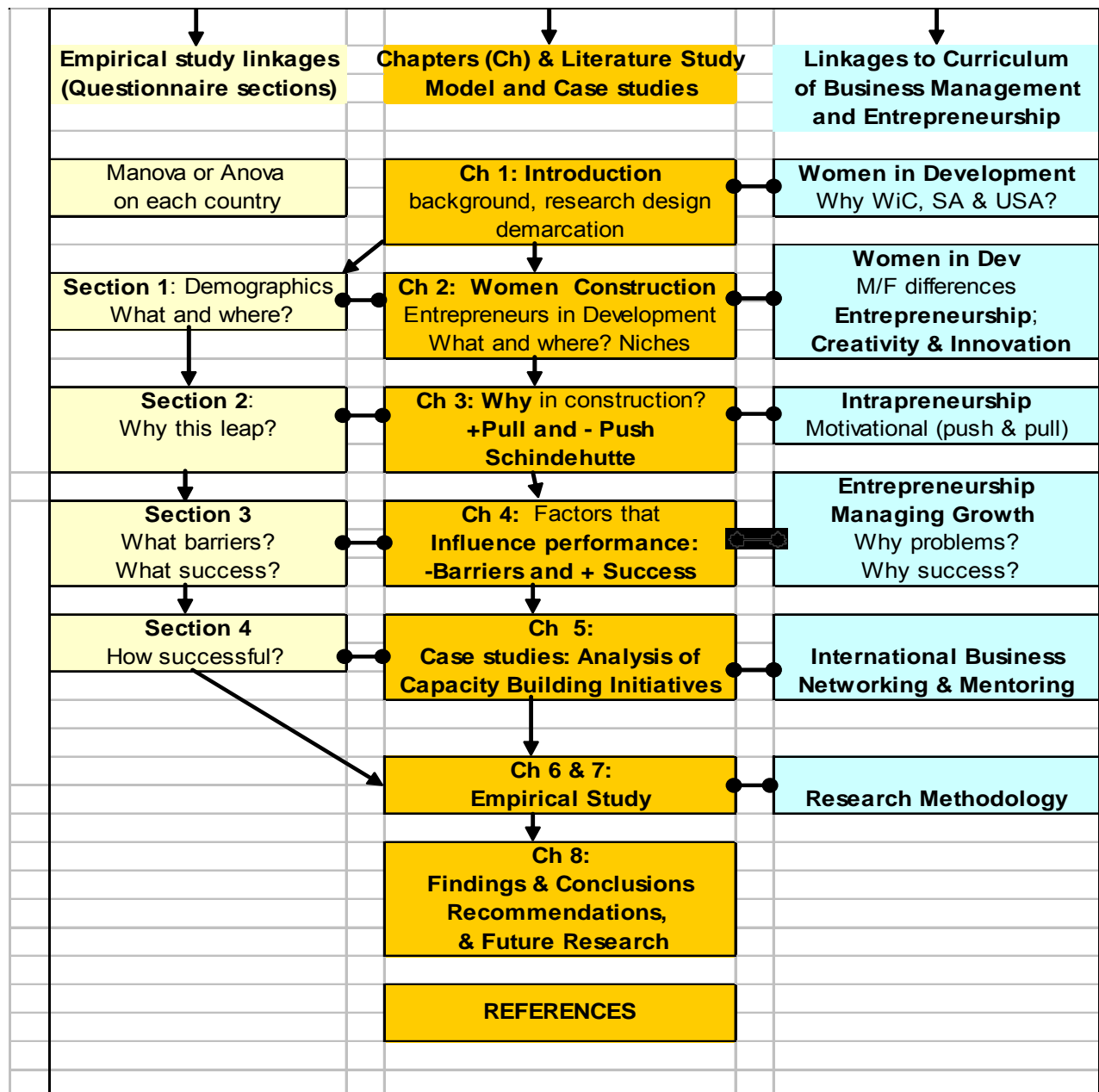
Table 1.3: Proposition summary of SA USA combined on the constructs regarding Yourself, Men, and Women in general

Pro-Position	There is not a significant difference in the opinions of SA & USA construction entrepreneurs combined on their respective sectors regardingYourself, Men & Women.
3C1	...the positive pull factors why entrepreneurs are involved in construction...	
3C2	...the negative push factors why entrepreneurs are involved in construction...	
3C3	...experiencing negative barriers Inhibiting performance as construction entrepreneurs...	
3C4	...experiencing positive motivational, planning and process success factors...	

1.9 Schematic layout of the research design

The following schematic layout indicates how the analysis answers the research questions:

Figure 1.2: Schematic layout of chapters as part of the research design



1.10 Definitions setting the scene

The research questions are closely related to the "Model of Achievement behaviour" further discussed in Chapter 4 and contained in Figure 4.1.

In conjunction with the above the Model for Entrepreneurial Performance and definition of an entrepreneur (Van Vuuren 1999) will be used as well:

$$E/P = f aM (bE/S \times cB/S)$$

Where:

E/p =Entrepreneurial performance

M = Motivation

E/S = Entrepreneurial skills

B/S = Business skills

a, b and c = constants or existing skills

An **Entrepreneur** is a person who sees an opportunity in the market, gathers resources and creates and grows a business venture to satisfy these needs. He/she takes the risk of the venture and is rewarded with profit if it succeeds.

Furthermore the 5 Key SuccessneurTM Model of Business Success components (Pretorius 1999) will help to measure success:

- Positioning
- Attitude and motivation
- Cash flow
- Sales Forecast
- Economic model

This model is further discussed in Chapter 4 and depicted in Figure 4.2.

Apart from the above models Chapter 2 will capture the major differences between male and female entrepreneurs in the United States of America (USA) by Hisrich & Peters (1998:79) and the GEM 2004 report on Women and Entrepreneurship that also serve as good models for the purpose of comparison between SA and USA. Chapter 3 dwells on why women are in construction, whilst Chapter 4 contains a literature review of barriers and success factors influencing the entrepreneurial performance of women in construction. Chapter 5 depicts case studies reflecting those factors, while Chapter 6 and 7 will develop constructs mentioned in Chapter 1 around the research questions captured in a questionnaire (refer to Annexure 2).

Chapter 2

Women entrepreneurs in construction in a development context

What and where? (market niches)

2.1 Introduction

In the previous chapter the background, research design, demarcations, constructs, propositions and hypotheses were described. This chapter focuses on women entrepreneurs in construction in South Africa and the United States of America, briefly describing the wider international scene in context and referring to women entrepreneurs in general as not much has been published on women entrepreneurs in construction as such. This can be viewed as a limitation of the study. Indeed, other scholars have coined the phrase "the invisible entrepreneurs" to describe the lack of media coverage of women business founders and their companies (Langowitz 2004:1).

When it comes to the policy implications of women's entrepreneurship, 'one size does not fit all'. Therefore to be effective in enabling strategies the context of SA and of USA has to be considered respectively because one of the main findings of the GEM 2004 report on Women and Entrepreneurship is that women's entrepreneurship tend to be more sensitive than men to conditions in their local environment (Arenius, Langowitz and Minniti 2005: 13).

Even so a good start has been made by beginning to analyse the SA home situation in comparison to the United States of America and hopefully this thesis will 'trigger' similar studies in other countries so that more meaningful comparisons and analysis can be made in future studies. The empirical section of the study mainly deals with 'why' women entrepreneurs in construction entered this field endeavouring to establish if the success rate is linked to those reasons.

2.2 Entrepreneurship: America's secret weapon

South African women in construction can learn a lot from the USA. Small businesses, especially those owned by women are changing the face of America's economy. Timmons (1999:4) describes entrepreneurship as "America's Secret Economic weapon" and states that over 95% of the economic wealth in America today has been created by the 'Entrepreneurial Generation' of revolutionaries since 1980 and one of every three

households includes someone who has had a primary role in a new emerging business. Hisrich & Peters (1998:9) agree that "Entrepreneurship is the dynamic process of creating incremental wealth".

Compared with South Africa, American women entrepreneurs took the gap sooner in the market. According to Wickham (2001:71) women now lead half of all new businesses in the USA. Hisrich & Peters (1998:78) finds that "Women entrepreneurs tend to be more motivated by the need for achievement." Wickham (2001:9) describes an opportunity as a gap in a market where the potential exists to do something better, enhance effectiveness and create value. The most important gap that women entrepreneurs in construction in the USA took was the development funds earmarked for gender equity. The World Bank spends approximately \$40 billion on development projects per annum. A large percentage of these funds find their way to the construction sector, and is earmarked for qualifying women entrepreneurs. The World Bank's President, (Wolfersohn 2002) justified this approach and stated that family assets can be better used when they are made available to women especially where women can take the lead in terms of education of their children. Wolfersohn (2002) continues to state "I've seen that in the poorest countries, women have the worst deal, and so it's hardest to advance their cause." In 1970 women-owned USA businesses employed less than one million persons, and increased in 1991 to 12 million (Timmons 1999:5).

2.3 Uniqueness of women entrepreneurs

Women are unique. They have a "different touch", a "different point of departure" and a different "view of affairs", according to the Commission on Gender Equality report (CGE Mpumalanga 1998:53). "Because we are different yet striving for the same ideals ... we must play a decisive role on constitutional, political and community levels" (CGE Mpumalanga 1998:53). Women do not want to become like men as "...we need to liberate ourselves but without losing our gentle touch and femininity" (CGE Northern Province 1997:26,27). "We already have everything by just being women" (CGE Mpumalanga 1998:54).

A successful woman professor of Business Ethics at Auckland's Unitec said: "Passion is what gets you up in the morning" (Smith 2000:97). Entrepreneurial ventures stem more from prior jobs with men, as compared with women where their ventures stem more

from hobby or interest (Kuratko 2001:152), "... patience and attention to detail, says the U.S. Small Business Administration, also contribute to the high success rate of women-owned businesses" (Davis & Long 1999:26).

According to The Women's Watch, "women are people too." "Every woman is a citizen of some country, an individual whose human rights and potential are as important as those of her brother, her father or her husband" (Women's Watch 1993:1).

Doman (1997:5) links this to empowerment: "Women all over the world have a lot to offer, ... it is time that better use of their talents and special leadership be made. Women's Empowerment will also lead to men's empowerment. When men realise this, there will be less resistance."

Baroness Jay highlighted that "... access to capital is one of the main stumbling blocks preventing women from starting their own businesses in greater numbers" (Wickham 2001:71). According to this source, Hillary Clinton mentioned that women lead half of all new businesses in the US, whilst in Britain this is only 30%.

A serious handicap preventing women from realising their entrepreneurial potential, is reliable, affordable and conveniently situated day care facilities for children operating on flexi hours to suit the entrepreneurial work situation of the mother. According to Berger & Buvinic (1989:1), "Women entrepreneurs seem to be invisible in Latin America". Their specific characteristics and needs are often overlooked and only "passing reference" is given to the importance of women's contribution.

"Women may be in the labour force but they are certainly not achieving their full potential" (Wickham 2001:71). High numbers of educated women are found in part-time jobs. A United Kingdom (UK) survey revealed that 18% of British mothers with a tertiary education work less than 20 hours a week. "There is a widespread general mismatch between women's skills and what they are actually doing, which means that, for the government, there is a serious issue about skilled, highly educated women dropping out of the labour force completely or working in jobs where their talents cannot be used to the full" (Wickham 2001:71).

This is contrary to the fact that "...female executives tend to lead in non-traditional ways, by sharing information and power" (Lumsdaine & Lumsdaine 1995:104).

Women inspire good work by "interacting with others, by encouraging employee participation, and by showing how employees' personal goals can be reached as they

meet organizational goals” (Lumsdaine & Lumsdaine 1995:104). This social leadership style is particularly relevant for sectors like the building industry where teamwork is important.

Women have difficulties getting financing “partly because of discrimination” (Dollinger 1999:217). “Clawing your way to the top without nails” is the phrase as mentioned in Chapter 1 that Sharon McCollick used to describe the scratching at the doors of banks to secure financing for her now successful business (Dollinger 1999:205). “Women usually rely solely on personal assets or savings” (Hisrich & Peters 1998:78).

Women are vulnerable because their support groups are spouse, family, women’s professional groups and trade associations, as opposed to men who lean on friends, professional acquaintances and business associates (Hisrich & Peters 1998:78).

Socially, women are more “whole-brain oriented, more intuitive, more open to ideas and more people-oriented than thing-oriented” (Lumsdaine & Lumsdaine 1995:79). That leads to asking the question that if women are unique, what tendencies are there for women entrepreneurs in construction?

2.4 Women in non-traditional work (What?)

To answer the 'what?' the international scene is viewed firstly and then the African and local South African pictures and that of the United States of America are painted in context. According to the non-governmental organisation ‘Family Economic Self-Sufficiency’ (FESS 2003:1) Non-traditional Occupations (NTOs) are jobs often thought of as “men’s jobs.” For the United States (US) Department of Labour NTOs include “any occupation in which less than 25% of the workforce is female.”

2.4.1 International scene

Luxton’s paper on the politics of love and care (IICW 2002) highlighted ways in which women carry increasing burdens “reconfiguring the meaning of women’s work in a context of formal gender equality.” The organisation ‘Internet System for Education and Employment Knowledge’ (ISEEK 2003:2) agrees with this view by stating that it is a myth that women cannot do hard or messy jobs, because many traditional female jobs like mothering and nursing babies are sometimes very “dirty and messy!”

Creating business opportunities for women in so-called NTOs "speeds economic development by raising productivity and promoting the more efficient use of resources; it produces significant social returns, improving child survival and reducing fertility; and it has considerable intergenerational payoffs" (UNDAF 2000). There is a worldwide shortage of project managers to take up development projects in construction, and according to ISEEK (2003:1) it is a myth that women are in NTOs as women only work "because of economic need."

This is a career development process and many researchers suggest that as more women enter the NTO labour force, "they will behave more like men in their career development. Others suggest that women's careers are different and likely to remain so in the near future" (Anna et al 1999:282).

The Development Bank of Southern Africa (DBSA) agrees with this as the economic need might be true for women in some construction jobs, but on a higher level, project management provides a window of opportunity for women (DBSA 2003).

For Reinhold (2003a: 2) "this is not the age of Cinderella." Women can no more wait passively until their skills are discovered by a so-called NTO. They should open the window of opportunity and demonstrate what they could do. Droste (2003:1) notes, "Traditionally male-dominated fields are now drawing more women." Her-Own-Words™ (2003:1) presented a range of videos where women are involved in building construction, engineering, architecture, welding, highway construction and many other NTOs, with great success.

It can therefore be safely stated that women get involved in non-traditional occupations worldwide. The 8th International Interdisciplinary Congress on Women (IICW 2002) focussed on the links between "global shifts in production and the reorganization of women's work in the local context."

2.4.2 USA scene

The USA NAWIC Image November/December 2004 lists current non-traditional jobs as follows: detectives, architects, chefs, barbers, clergy, computer and office machine repairers, construction and building inspectors, machinists, truck drivers, fire-fighters, aircraft pilots, various construction occupations and small engine mechanics. As more women enter jobs previously dominated by men, many jobs once considered non-

traditional for women in the 1980's were no longer non-traditional for women in 2002. Some of these non-traditional occupations are insurance sales, purchasing managers, photographers, physicians, chemists, postal service mail carriers, lawyers, athletes and protective service administrators (Overman 2004:15).

According to ISEEK (2003:1) during World War 2 "over 6 million women entered the labour force to build ships, airplanes and factory goods" and "many non-traditional jobs are less physical demanding than housework."

Weiler (2001:85) argues that the US National Association of Women Business Owners (NFWBO) reported 7.7 million women owned businesses employing 15.5 million people and generating \$1.4 trillion in sales.

2.4.3 African scene

The Economic Commission for Africa (UNDAF 2000) reports that women are no more regarded as "dependent, vulnerable and disadvantaged, but as a category of people who are capable of taking control of their own lives by defining their needs and the strategies to fulfil them." UNDAF (2000) studies have shown that investing in women's education, health, family planning, access to land, inputs, extension and business opportunities, are "an important part of development strategy as well as a matter of social justice." Women's economic participation is essential not only for achieving social justice but also for reducing poverty (UNDAF 2000).

The term 'non-traditional sector' is also used in the literature to describe wider entrepreneurial opportunities. The term 'wider' business opportunities involves occupations other than teaching, nursing, secretarial, etc previously regarded as suitable occupations for females (ISEEK 2003:1).

2.4.4 South African scene

In the southern African sense this might be a contradiction as women in Africa have for centuries built their own homes. Many women in South Africa regard their involvement in construction as a natural return to what they did for centuries. This was said at the Housing Awards Ceremony held on 10 May 2002 by the Minister of Housing. "Women must take back the share in construction that is rightfully theirs. For centuries women in

Africa built their huts, houses and homes, clayed floors, thatched roofs, cultivated the land, made money and raised their kids, while men were busy with more important things elsewhere" (Mthembe-Mahanyele 2002). Those who call construction a non-traditional career for women in Africa, have short-term memories about African traditions.

The Global Entrepreneurship Monitor (GEM) South African Executive Report (Fox et al 2003:27) states that cultural and social norms have a significant role to play in reinforcing stereotypical perceptions of women and their role in entrepreneurship and should be challenged in order to stimulate female participation in entrepreneurial activity.

Moreover, "In the overwhelming majority of GEM countries the rate of entrepreneurial activity among men is far higher than among women. South Africa is no exception, with men being twice as likely as women to be new firm entrepreneurs and one and a half times more likely to be owner-managers of an established firm... On average, male owner-managers employ 3.5 people in comparison with female owner-managers who employ 1.7 people" (Fox et al, 2003:27).

Unfortunately the Global Entrepreneurial Monitor (GEM) report does not interpret this positively. Positively viewed, taking into account those women entrepreneurs came from a more disadvantaged and discriminatory background than men, their employment of 1.7 people on average is a significant achievement and in reality indicates entrepreneurial flair to have narrowed the gap to this extent.

2.5 International and USA tendencies of women in the construction industry

Firstly it should be stated that the building industry in both the United States of America and South Africa is cyclical (Choo 2004:19) and vulnerable to economic up- and down-swings and environmental factors. A ten year review in the US (EPA 2004) reports a 40% growth in employment figures as against dropping employment figures for the building industry in South Africa the past five years (van Wyk 2003:1).

2.5.1 International tendencies

Several studies agree that when women take up 'men's work' they do it with proper planning and with the aim to increase profitability. Anna, Chandler, Jansen & Neal

(1999) used a MANCOVA (Multivariate analysis of co-variance) to assess the differences between women business owners in traditional businesses versus women in non-traditional businesses. They found that women owners of non-traditional businesses had a higher venture efficacy for planning and higher expectations for profit than women owners of traditional businesses, while women in traditional businesses had a higher career expectation and expectation for security than the non-traditionals (Anna et al 1999:293). In contrast with Anna et al (1999) Cliff (1998: 523) as well as Allen and Truman (1992) found that female entrepreneurs are more concerned about risk than male entrepreneurs. Women entrepreneurs also tend to set thresholds to where their businesses should grow. These thresholds represent the size that they are comfortable managing, and to "balance work and personal life."

Against that background women's participation in this industry can be viewed through the literature to detect possible tendencies. The UN Trends and Statistics of the World's Women (United Nations 2000:109) indicated that women comprise an increasing share of the world's labour force, the informal sector is a larger source of employment for women than for men, and self-employment for women increased. Women pursue entrepreneurial careers in the informal sectors because they need to balance their labour-market work with their household responsibilities, as explained by the United Nations (2000:115).

According to ISEEK (2003:1) the vast majority of new "job requirements are unrelated to sex." The tendency is that women also make an increasing contribution to construction the same way they already do in agriculture. Women produce as much as 80% of the food in some African countries (UNDAF 2000).

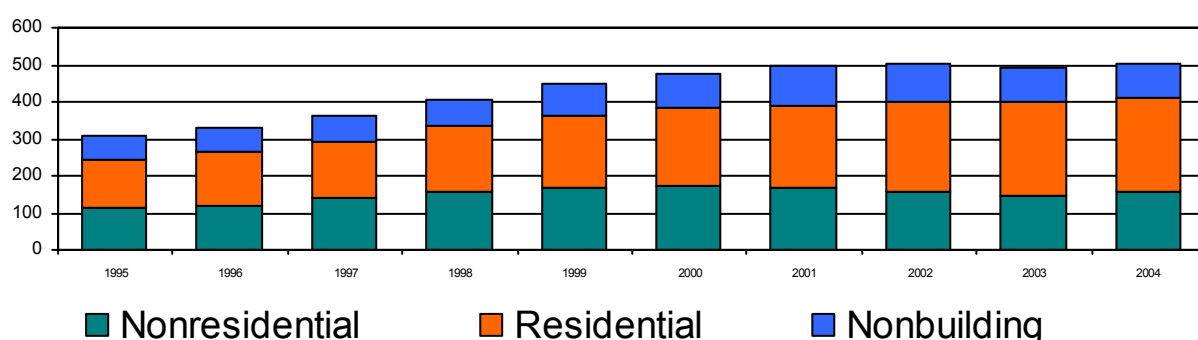
2.5.2 USA tendencies

Weeks 2004:4 relates that for the USA, construction is the fastest growing non-traditional industry in terms of women entrepreneurship, quoting a 35,5% increase in number of women-owned firms from 1997 and 2002, a 69,9% increase in employment of women and 94,3% increase in revenue. It is fair to say that the economic clout of women-owned construction firms is increasing in the USA. The same tendency is implied in SA from the growth in membership of South African Women in Construction from 80 in 1998 to 508 in 2003 (Verwey 2003). FESS (2003:2) notes that for the US

District of Columbia "Construction is one of the employment sectors that have been identified as a growth sector for the region." In order to benefit from this tendency they proactively developed a comprehensive training program for women entrepreneurs in construction. In California non-traditional training programmes were developed for women entrepreneurs to benefit from business opportunities in the booming construction industry (FESS 2003:2).

The following figures and tables will give an indication of the industry in total for US:

Figure 2.1 U.S. Construction Market, 1995-2004 (Starts, Bil \$)



(Young 2004:10)

Table 2.1: US Total Construction for 2000-2004

	2000	2001	2002	2003	2004
Total Construction	473.1 +6%	495.9 +5%	501.7 +1%	505.6 +1%	508.9 +1%
Single Family Housing	177.0 +8%	186.9 +6%	214.2 +15%	230.5 +8%	226.0 -2%
Public Works	77.8 +5%	83.5 +7%	87.6 +5%	78.9 -10%	80.5 +2%
Electric Utilities	13.5 +43%	23.6 +75%	12.0 -49%	9.3 -23%	7.5 -19%
Income Properties	112.3 +4%	103.1 8%	92.9 -10%	92.9 0%	100.9 +9%
Institutional Buildings	83.6 +4%	90.7 +9%	89.7 -1%	88.6 -1%	88.1 -1%
Manufacturing Buildings	8.9 -22%	8.1 -8%	5.3 -35%	5.5 +5%	6.0 +9%

(Young 2004:10)

The trades magazine the NAWIC Image (NAWIC 2004:29) relates for the USA that according to Zweigwhite's 2004 Principals, Partners & Owners survey of Environmental Architectural Engineering and Property Consulting Firms the percentage of leaders predicting improvement in the business environment over the next year is on the rise. Survey data shows that the majority of architectural and engineering consulting firm leaders (68%) believe that the business environment will improve over the next year. Zweig goes on to say that multiple signs show things are improving in many sectors and that the demand for what the construction industry is doing is going to be there finally after having suffered a few tough years. This is confirmed by NAWIC (2004:10) quoting the McGraw-Hill Construction source that states that for the first three months of 2004 total construction contract values were up seven percent compared to a year ago.

2.6 SA tendencies of women in the construction industry

In contrast to the USA the SA building industry battles with a mismatch in available and required skills and a high rate of enterprise failure related to overregulation, poorly drafted regulations or poor implementation of good regulations according to John Orford of the Centre for Innovation and Entrepreneurship at the University of Cape Town (Ueckermann 2004: 7). The 'cidb' (2004: 17) concurs with this view predicting that medium- to long term investment growth is indicated for the SA Construction industry. In addition to market criteria that determine investment decisions, constraints according to the construction industry development board (cidb) include capacity and the perception of construction as a high-risk, low-reward sector. The industry is being expected to grow in a low-profit, over-competitive environment characterised by business failure. Lawless (2005:1) summarises the industry as paradoxical with dilemmas faced being too many of some skills, too few of others, some are too young and inexperienced and others too old, retired or immigrated and the chicken and egg situation of 'no job-no experience, no experience-no job!' She concludes to say that projections show an increase of work, but not in skilled people. The industry is challenged to grow and deliver, to improve its performance and capacity, and to achieve empowerment objectives.

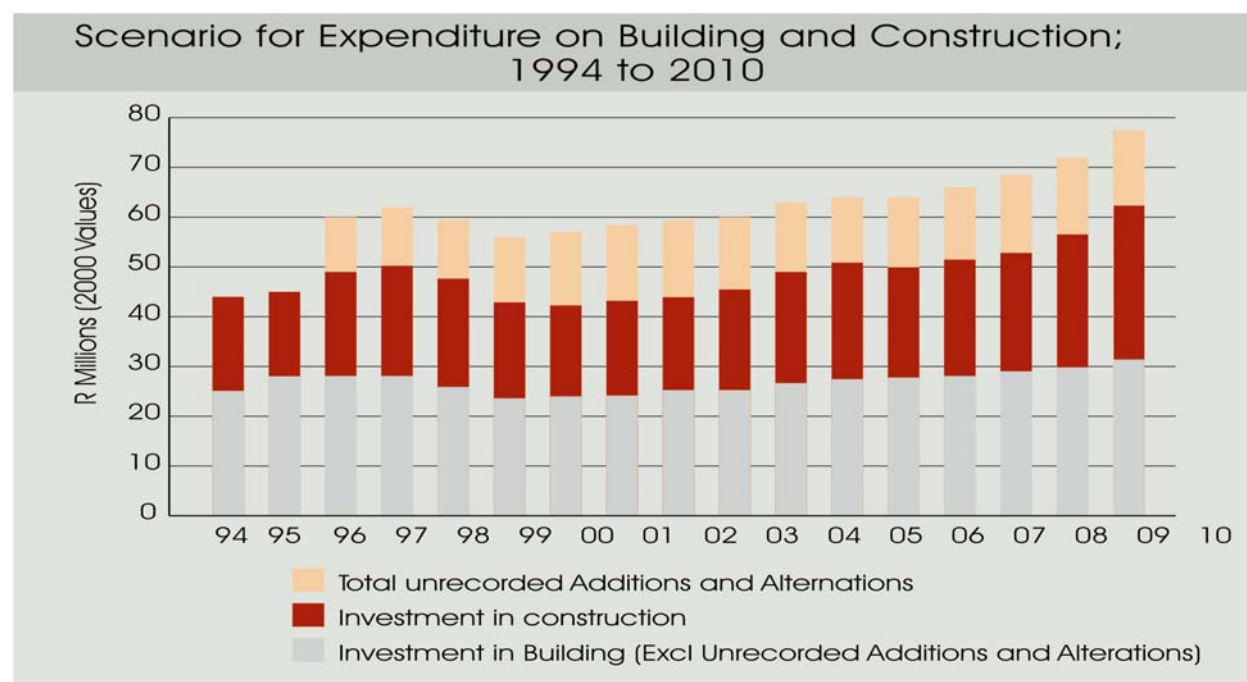
Even so government and private sector are working jointly to create an enabling environment for the industry and the progress made by putting a construction transformation charter in place united the industry in a pledge to jointly take up the challenge in SA.

Table 2.2: SA Total Construction for 1999-2004
(Format adapted to match the format of US as far as possible)

INVESTMENT IN	YEAR	1999	2000	2001	2002	2003	2004
*includes civil, mechanical, structural and electrical engineering							
Residential							
R million		10734	11035	11841	12066	12090	12453
% change		-1,2%	2,8%	7,3%	1,9%	0,2%	3,0%
Non-Residential							
R million		13752	14183	13843	14327	15187	16554
% change		-5,6%	3,4%	-2,4%	3,5%	6,0%	9,0%
Total in Buildings							
R million		24486	25219	25684	26393	27277	29007
% change		-3,7%	3,2%	1,8%	2,8%	3,3%	6,3%
Construction works*							
R million		17532	17885	18937	20338	21660	22310
% change		-5,6%	2,0%	5,9%	7,4%	6,5%	3,0%
Total construction							
R million		42018	43104	44621	46731	48937	51317
% change		-4,5%	2,6%	3,5%	4,7%	4,7%	4,9%

(Brooke 2001:9)

Figure 2.2 The SA Construction Industry Development Board Status Report 2004

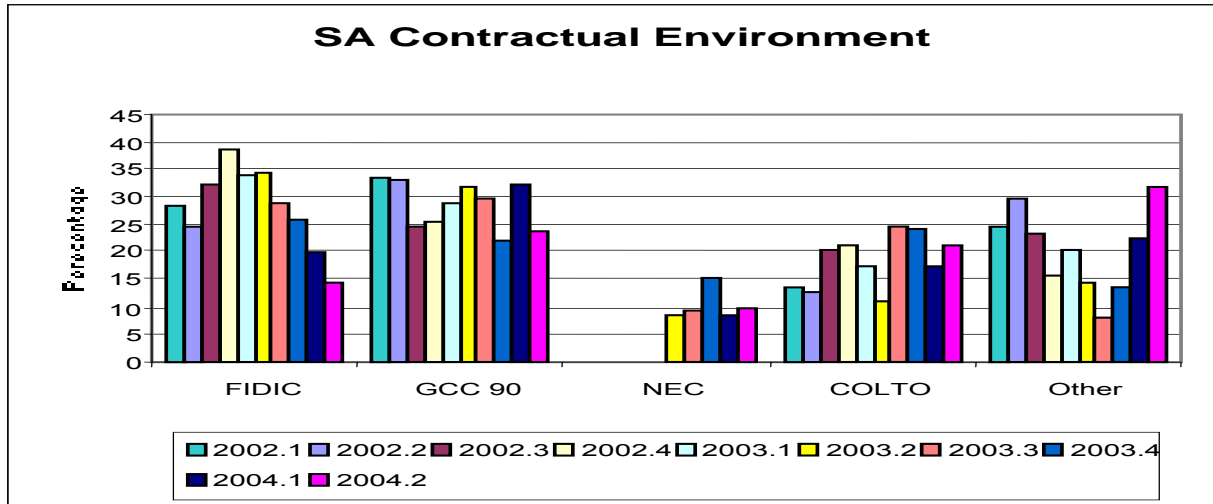


'cidb' (2004:15)

From the tables and figures 2.1, 2.2 and figure 2.3 it is clear that the different types of construction in SA and USA significantly differ in value, scope and tendencies. The USA performed better overall, but percentages shows larger negative movements in 2002

compared to SA, probably as a result of the Sept 11 shock, in income properties and manufacturing buildings.

Figure 2.3 SA Contractual Environment per quarter for Contract Types 2002-2004



(SAFCEC 2004:13)

When it comes to women entrepreneurs in construction, research done by the SA Department of Public Works cited by Minister Stella Sigcau in her 2004 message published in the 2004 Annual Report of South African Women in Construction (SAWiC), ‘women constitute just over 10% of emerging contractors registered on our database. By comparison in North America of the 9,5 million participants in the construction industry, about 934000 (10%) are women. This says we are in line with the pace of the developed world...’ (Sigcau 2004:5). Looking at management profiles in the construction sector, women amount to only 8% (‘cidb’ 2004:36).

Unfortunately the SA Construction Education Training Authority (CETA) (2002:8) reported that the tendency in the SA construction sector is that skills in technical expertise and traditional craftsmanship are still declining at an alarming rate, and where people are still active in these trades, the high average age causes concern. Opportunely WCEs should view this as a window of opportunity to fill the gap.

According to Ntsika (1999:27) there were nearly 4000 women self-employed in construction. This represents only 5% of the construction sub-sector. In 1996 women were predominant in Education and Related activities (69%); followed by Textile and clothing (50%); Health and social work (46%) and Catering (45%).

The number of women involved in construction is also related to the size of the firms. Ntsika (1998a: 7) found that "women's businesses tend to be smaller; with fewer assets and smaller profit margins... women tend to concentrate on the micro and survivalist categories of enterprises... This allows women to combine productive activities and family responsibilities." These findings might be outdated as women entrepreneurs in construction enter the industry also because of 'positive pull factors'.

Contrary to Ntsika's 1998 findings, Stats SA (2003:vii) found that the percentage employed in Construction grew from 5.0% in February 2000 to 5.2% in September 2002. Interesting to note that of the people involved in "Formal Construction" 8% were women against the 12% women in "Informal Construction" (Stats SA 2003:2.4.2, 2.4.3). The above-mentioned Ntsika studies of 1999 and 1998 came to the conclusion that women entrepreneurs find their niche in the informal sector, but failed to mention the tendency that the employment in the informal sector more than doubled in any case for males and females due to the decline in job opportunities in the formal economy since 1994.

According to the Development Bank of Southern Africa (DBSA 2003) the total formal labour force declined from 7.55million people in 1996 to 7.16million in 2001. The construction sector declined from 382 869 people in 1996 to 348 398 in 2001. To balance this, the people involved in the informal sector increased from 816 806 in 1996 to 1 740 480 in 2001. In construction the employment in the informal sector increased from 148 906 in 1996 to 258 368 in 2001 (DBSA 2003).

Also diverging from the Ntsika findings, women entrepreneurs do enter the world of big business. At the signing of the Memorandum of Understanding MoU between the South African Women's Entrepreneurial Network- Department of Trade and Industry (SAWEN-DTI) with the Johannesburg Stock Exchange (JSE) on 29 April 2003 Newton-King (2003:2) noted SAWEN has great potential to create a new body of entrepreneurs. Deputy Minister Lindiwe Hendricks (2003:3) stated that co-operation with the JSE will fill the gaps in women's knowledge of how stock markets work.

Busi Mabuza (2003:1) of the Women's Private Equity Fund concurrently demonstrated how the DTI JSE MoU could lead to increase the participation of women in the economy. Having been informed of the magnitude of women involvement in the industry leads to the next question: Where are the niche markets for women in construction?

2.7 Women's market niches as construction entrepreneurs

Regarding niches in business Ntsika (1998:79) reported that "even though women tend to dominate certain sub-sectors and industries (for example, clothing manufacturing, arts and crafts, and trading) their position in the survivalist category means they cannot access niche upper end markets." Ntsika (1998:80) states that women are not free to take up any business niche because "the reality is that there are many societal practices based on cultural beliefs, customs and religion, which still discriminate against women ... to be minors in the eyes of the law ... wife's capacity to contract, inherit or own property and to litigate are not fully recognised ... Instead their male counterparts remain guardians and heads of the household."

Due to the lack of skills and experience women and youths in Africa do not have a variety of choices where to work. The Federation of African Women Educationists (FAWE 1995) estimated that youth unemployment rates in Africa are about three to four times higher than for older workers. Among women it is two to three times higher than among men, partly through gender biases, but also because about 60 per cent of African women over 15 are illiterate. In such poverty situations women thus do not have any preferences regarding niches in construction, but take what they get.

The National Women's Business Council (NWBC) 2002 brochure reports for the USA that an estimated 10,1 million privately-held businesses in which women own 50% or more of the company. The 10,1 million women- and equally-owned firms employ 18,2 million people and generate \$2,32 trillion in sales. Majority women-owned firms employ 9,2 million workers and generate \$1,2 trillion in sales. An estimated one in five women-owned businesses is owned by a woman or women of colour. The number of majority-owned, privately-held women-owned business grew by 14% between 1997 and 2002, compared to 7% of all US businesses. Employment increased by 30% compared to 18% nationally and revenues rose by 40%, the same as the increase among all US business.

The NWBC brochure 2002 relates about the US that the fastest growth rates among women-owned firms are in 'non-traditional industries', including construction (36% increase in the number of women-owned firms between 1997 and 2002). The USA National Association for Women in Construction (NAWIC) memberships increased since 1998. The South African sister association SAWiC's female membership also showed a growth tendency from 80 in 1998 to 508 in 2003 (Verwey 2003).

It is of significance to note that according to the NAWIC database, of the 2227 NAWIC members that listed an occupational code on their database, 50% of their members are working in big companies and corporations, 32% falls within the service provider category and 1% are in the trades. Only 15% of their members are owners of a construction enterprise (Naybor 2004).

This is in contrast to the SAWiC database of 508 women entrepreneurs in construction that indicated where they found niches (Verwey 2003). The SAWiC membership makes provision for four categories of members. Of the 508 women on the database 392 or 77% indicate that they are contractors (business owners and entrepreneurs); 82 or 16% service providers; 25 or 5% trades persons and only 9 or 1.8% employees or from the corporate environment. Contractors and service providers are regarded as entrepreneurs, while the 25 trades persons can either be entrepreneurs or employees (Verwey 2003). The 508 women entrepreneurs in construction found their niches mainly as building contractors 392 or 65.4%; project managers and developers 15.1%; Contracting service providers 10.7%; Trades 5.0%; Civil contractors 4.0%; Financiers and capacity builders 1.5%; Architects and drafting services 1.5%.

According to the Annual Report of the Construction Education and Training Authority (CETA 2002:7) "the nature of the business within the construction sector, such as physical demands, long hours, remote sites, and 'nomadic' life style, very few women find the employment prospects attractive." On the other hand women are getting involved in all construction entrepreneurial activities at an increased rate according to the SAWiC and NAWIC databases and for them gender equality is not only "a matter of social justice; it is also good economics" (UNDAF 2000).

2.8 Comparison of women and men entrepreneurs

GEM 2004 Report on Women and Entrepreneurship found that in every country of their study, men are more active in entrepreneurship than women. The gap is 33% in high-income countries (USA) and 41% in low-income countries (SA).

Overall, opportunity is the dominant motivation for women's entrepreneurship, similar to men. Nonetheless, many more women than men are involved in entrepreneurship because of the lack of alternative job opportunities.

Necessity entrepreneurship is much more widespread among women in low-income countries such as South Africa where the opportunity to necessity ratio is 1.7, as opposed to high-income countries such as the USA where the ratio is 6.

- As mentioned in the introduction to this chapter, women's entrepreneurship tends to be more sensitive than men to conditions in their local environment (Arenius, Langowitz and Minniti 2005: 13).

- In low income countries such as SA, the peak years to become involved in entrepreneurial activities for women are ages 25-34. In high income countries, on the other hand, the peak years for women are ages 35-44.

- In low income countries such as SA, the majority of entrepreneurially active women (54%) have not completed a secondary degree. In high income countries such as the USA, on the other end, women with post secondary education are the most likely (34%) to start a new business.

- As in the case of men, and regardless of per capita income, the largest majority of women involved in starting a new business hold other jobs.

- Regardless of per capita income, a strong positive and significant correlation exists between knowing other entrepreneurs and a woman's involvement with starting a new business. These results indicate that employed women who know other entrepreneurs are the most likely to start a new business. These women tend to be older and better educated in high-income countries (USA) than in low-income countries (SA).

The majority of businesses started by women employed less start-up capital as compared to men, used known technology, and targeted existing markets. This suggests that women entrepreneurs may take a more conservative approach to business formation, perhaps because of their higher involvement in necessity driven entrepreneurship.

- On average, businesses started by men used more capital than those started by women (US\$65,010 vs. US\$33,201 respectively). One reason for this discrepancy may be because women are more likely than men to start consumer-oriented businesses rather than service-oriented enterprises, where startup costs tend to be higher. Consistent with overall GEM results for both genders, the majority of women entrepreneurs provide all the required start-up capital themselves.

- Women tend to have slower early growth trajectories. The vast majority of women involved in starting a new business expect to create 5 or fewer additional jobs within a 5

year period. In low and middle income countries, only 1% of women's new businesses qualify as having high employment potential. The percentage increases to only 1.6 in high income countries.

- Further, women entrepreneurs tend to start businesses with known technology and in established markets. On average, at least 70% of the female respondents involved in starting a new business reported that the technology they adopted was available at least one year prior to the survey. Most also reported a known set of existing competitors. Overall, at inception, women's businesses tend to be smaller and less expensive to operate than those of men. Women entrepreneurs also face immediate competition and tend to bear the full cost of starting their businesses (Arenius, Langowitz and Minniti 2005: 13).

Looking at the historic situation from another source, there has been a significant growth in female self-employment, with women then starting new ventures at three times the rate of men, according to Hisrich & Peters (1998:78). Although there are some similarities in characteristics of both male and female entrepreneurs, female entrepreneurs differ in terms of motivation, business skills, and occupational backgrounds.

Hisrich and Peters continues to say that factors in the start-up process of a business for male and female entrepreneurs also differ, in such areas as support systems, sources of funds and problems. Men are often motivated by the drive to control their own destinies, to make things happen, stemming from disputes with their bosses or a feeling that they can run things better themselves. In contrast, women are motivated more by the need for achievement (nAch), by previous performance and growth (Hisrich & Peters (1998:78). With start-up financing men often list investors, bank loans or personal loans in addition to personal funds as sources of start-up capital, while women usually rely solely on personal assets or savings.

Personality-wise, men are more confident and less flexible and tolerant than women, which can result in very different management styles. Hisrich and Peters concur with the GEM 2004 Report on Women and Entrepreneurship that women in the US embark on their ventures at an older age, 35 to 40 versus 25 to 35 for men.

In terms of educational backgrounds, men have often studied in technical or business-related areas, while women more often have a liberal arts education. Men usually list outside advisors as their most important supporters, with the spouse being second. Women list spouses first, close friends second and business associates third and rely heavily on a variety of sources for support and information, such as trade and women's associations. Occupationally, men seem to have more experience in manufacturing, finance or technical areas. In contrast, women usually have administrative experience, limited to middle-management level and often in service-related areas.

The nature of men's and women's ventures differs. Women are more likely to start a business in a service-related area such as retail public relations or educational services, men are most likely to enter manufacturing, construction or high-technology fields. The result is often smaller women-owned businesses with lower net earnings.

2.9 Comparative summary table between women and men entrepreneurs

In comparing male and female entrepreneurs in SA, Van der Merwe (2003:13) found that in starting a business, male entrepreneurs laid the foundations in the business environment for women to follow and women are the latecomers to the entrepreneurial game. Male entrepreneurs are mainly in manufacturing while women tend to be more in service related businesses. In terms of relationship building, men are more short-term oriented as against women who build strong relationships before closing a deal. Access to finance is only a barrier to male entrepreneurs if they do not have collateral, but it is a most severe barrier for women. In considering support groups male entrepreneurs make use of friends, professional acquaintances, business partners and spouse as opposed to women entrepreneurs in SA using spouses, network groups and associations.

Opportunities for women are, however, greater than before, with women starting businesses at a faster rate than men in the fastest growing area of the economy - the service area (Hisrich & Peters 1998:78). The major differences between male and female entrepreneurs in the United States of America (US) are summarised in Hisrich & Peters (1998:79) as follows:

Table 2.3: Comparison between Men and Women Entrepreneurs

Character-istic	Male entrepreneurs	Female entrepreneurs
Motivation	Achievement - strive to make things happen. Personal independence - self-image as it relates to status through their role in the corporation is unimportant. Job satisfaction arising from the desire to be in control.	Achievement - accomplishment of a goal. Independence - to do it alone.
Departure point	Dissatisfied with present job. Sideline in college & in job, or outgrowth of present job. Discharge layoff. Opportunity for acquisition.	Job frustration. Interest in and recognition of opportunity in the area. Change in personal circumstances.
Sources of funds	Personal assets and savings. Bank financing. Investors. Loans from friends and family.	Personal assets and savings. Personal loans.
Occupational background	Experience in line of work. Recognised specialist or one who has gained a high level of achievement in the field. Competent in a variety of business functions.	Experience in area of business. Middle management or administrative-level experience in the field. Service-related occupational background.
Personality characteristics	Opinionated and persuasive. Goal oriented. Innovative and idealistic. High level of self-confidence. Enthusiastic and energetic. Must be own boss.	Flexible and tolerant. Goal oriented. Creative and realistic. Medium level of self-confidence. Enthusiastic and energetic. Ability to deal with the social and economic environment.
Background	Age when starting venture: 25-35. Father self-employed. College-educated - degree in business or technical area (e.g. engineering). First-born child.	Age when starting venture: 35-45. Father self-employed. College-educated - degree in liberal arts. First-born child.
Support groups	Friends, spouse, professional acquaintances (lawyers, accountants). Business associates.	Close friends, spouse, family, women professional groups, trade associations.
Types of business started	Manufacturing or construction	Service related - educational services, consulting, or public relations.

(Hisrich & Peters 1998:79)

2.10 Conclusions

Regarding the question what women are doing, where and on which level to find women entrepreneurs, Reinhold (2003:2) states that organisations need to be "women-friendly organisations." Where women are in top positions in organisations the spread of women through the organisation will be more equal and will be promoted easier. This is the only way to resolve the "yes she can/no she cannot" dilemma.

Historically the more "lucrative sectors seem to have been reserved for the entrepreneurial male especially in Manufacturing and Construction" (Ntsika 1999:27). Ntsika (1999:51) states that the women entrepreneurs in South Africa are mainly involved in the informal sector and "made her mark in the self-employment sector... Successful women have identified a niche through their own sustainability."

The SA Dept of Public Works concludes through their research that women constitute just over 10% of emerging contractors registered on our database. By comparison in North America of the 9,5 million participants in the construction industry, about 934000 (10%) are women. This says we are in line with the pace of the developed world... (Sigcau 2004:5).

Hisrich & Peters 1998:78 found that women are motivated more by the need for achievement (nAch), by previous performance and growth.

The GEM 2004 Report on Women and Entrepreneurship concludes that support policies by themselves are not sufficient to increase women's involvement in entrepreneurship. Mentoring and network support, especially at the local level, are at least as crucial in boosting women's attitudes with respect to business leadership and new venture creation. Regardless of per capita income, some of the most successful policies and programmes world wide are those able to increase women's awareness about entrepreneurship and provide them with role models and networking possibilities.

Although much female entrepreneurship in low-income countries such as SA is motivated by necessity, starting a new business represents an effective and flexible way for women from all groups to emancipate themselves and provide for their families. Areas of importance for policy makers should include literacy, financial assistance, management assistance, and training. High-income countries such as the USA need to sustain innovation rates and encourage the involvement of women in entrepreneurship,

especially when faced with an aging labor force. Areas of importance for policy makers should include promoting entrepreneurial education at the college and post-graduate level and encouraging more women to pursue technical degrees and to commercialize their ideas. Coordinating policy to encourage equal benefits for women in the workforce, whether in traditional or entrepreneurial business roles, is vital (Arenius, Langowitz and Minniti 2005: 13-14).

After having discussed where the WCEs find their niches, logically the next question is why did they enter into the complex and harsh construction industry?

Chapter 3

Initiating factors: Why are women involved in construction?

3.1 Introduction

A fundamental question that has received relatively little attention according to Schindehutte, Morris & Kuratko (2000:1) concerns the "initiating factors that get the entrepreneurial process underway." They state: "while much is known about sources and types of opportunities, the criteria for a good concept, ways to leverage resources, and methods of harvesting, much less is understood regarding exactly what leads a person ... to '*make the leap*' and pursue an entrepreneurial activity."

Morris Altman and Zahra (1999:1) argued that linking triggers to entrepreneurial behaviour will enhance the ability of researchers to conceptualize the entrepreneurial process and to understand the motivators behind the process. Linking the triggers to performance measures provides insights regarding the factors contributing to successful entrepreneurship. Managers can gain a better appreciation for kinds of triggers that exist, and can develop keener insights regarding triggers they should seek to facilitate when setting goals, structuring operations, and designing incentives, evaluations, controls, and related systems.

As mentioned in Chapter 2, the GEM 2004 report on Women and Entrepreneurship found that overall opportunity is the dominant motivation for women's entrepreneurship similar to men but even so more women are involved in entrepreneurship because of lack of alternative job opportunities than men (Arenius, Langowitz and Minniti 2005:12).

According to Ntsika (1999:60) 49% of all women in SA indicated that they started their businesses because of their own ideas, with 60% for African women. Overwhelming differences can be seen in the ideas and motivation to start a business. Among Africans, Whites and Coloureds, business start-up is usually self-inspired. The tendency is that Indians are more influenced by family. According to Schindehutte, Morris & Kuratko (2000) analyzing the triggering process is vital for sustaining entrepreneurship. Wickham (2001:63) and Dollinger (1999:43) present a method to analyse the WHY question by means of 'push and pull factors'.

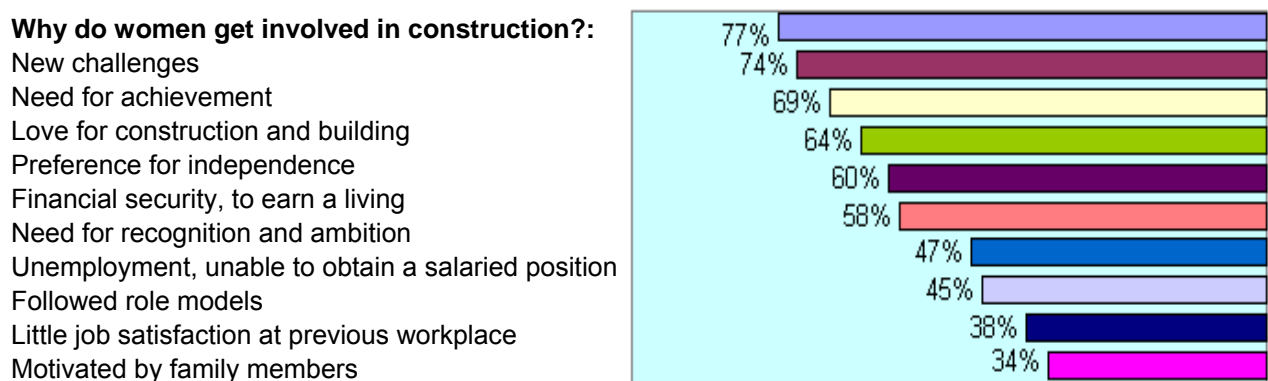
3.2 Procurement in South Africa: A window of opportunity

In entrepreneurial theory these gaps are referred to as 'windows of opportunity'. Wickham (2001:211) identifies the "five stages of the strategic window: spotting, locating, measuring, opening and closing." A window of opportunity is defined by Hisrich & Peters (1998:41) as the time period available for creating the new venture. To recognise these opportunities is one of the key elements that "defines entrepreneurship and makes it unique" (Kuratko 2001:157). DFIs do not bring in their own people from their own countries to do the construction, but make use of local construction entrepreneurs that understand development and operate within the legislation and enabling measures of that specific country. Currently legislation and procurement procedures in South Africa benefit women entrepreneurs in construction - in itself an important window of opportunity!

3.3 Exploratory research on the question 'why involved in construction?'

Verwey (2003:62) concurs with McClelland, Dollinger, Hisrich & Peters and Wickham indicating that women are in construction mainly because of positive pull factors that includes new challenges, need for achievement as well as love for construction as is indicated in Figure 3.1 below.

Figure 3.1: Summary of reasons for women being construction entrepreneurs in descending order based on 'strongly agreed' responses



Those who Strongly agreed, on 4 point Likert scale, N=339

(Verwey 2003:62)

It is interesting to note that the negative and neutral entrepreneurial statements such as: *motivated by family members (34%), little job satisfaction at previous workplace (38%), followed role models (45%) and unemployment, unable to obtain a salaried position (47%)* are low on the list. These observations strengthen the findings of this particular study that presented extremely high means of 3.46 and 3.62 for the positive pull factors and lower means of 3.14 and 3.19 for the negative or push factors.

Men in the sample element do not acknowledge that women are in construction because of entrepreneurial decisions such as positive triggering events and pull factors. This finding confirms the discriminatory behaviour, negative perceptions and attitudes towards women entrepreneurs in construction described in Chapter 4.

3.4 Triggering events

Schindehutte, Morris & Kuratko (2000:6-8) gave a third and slightly different interpretation of 'pull and push' factors and link it to triggering events. "Push versus pull factors or positive versus negative circumstances give rise to entrepreneurial action." Thus one is "pushed" into entrepreneurship by job dissatisfaction, and "pulled" into entrepreneurship by perception of market opportunities. A "positive" trigger might be an invitation from a potential customer, while a "negative" trigger might be divorce. Schindehutte, Morris & Kuratko (2000:6-8) came up with 5 key classification methods that can be applied to corporate triggering events, namely internal/external source, opportunity-driven/threat-driven, technology-push, market-pull, top-down, bottom-up and systematic or deliberate search, chance or opportunism. Morris & Kuratko (2002:338) concurs with this classification, further stating that although there are other ways to classify triggering events, each of the ones identified has potential strategic relevance.

Triggering events in start-ups and in a corporate context have been largely ignored according to Schindehutte, Morris & Kuratko (2000:1). "Start-ups are generally thought to be triggered by individual factors such as survival, job dissatisfaction or lay-off, divorce, death of a family member, desire to improve one's lot, a windfall, deliberate search, and invitation. Corporate triggers are more strategic or operational."

The principal triggers for corporate entrepreneurship are aggressive competitor moves, changes in industry or market structure, regulatory threats as well as external factors according to Morris & Kuratko (2002:336).

Volery, Doss & Mazzaroli (1997:11) quote level of creativity, need for autonomy, achievement of social status, response to market opportunities, the drive for money and redundancy and consequent need for 'turnaround' as reasons. Similarly Mackay (2004:2) list five top factors concurring with Volery et al, but adding networks related to opportunities that were not raised by other sources.

Richards (2000:4,6) adds an enabling environment, entrepreneurial spirit and culture as precipitating elements. Elena Fawkner (2003:2) relates continuous change and opportunities as triggers, while Watkins (2002:1) cites crises as a trigger. All these triggers can be categorised as push and pull factors.

In South Africa the research of Ntsika (1999:60) revealed that nearly 50% of businesses were started by "own idea." Interesting to note the significant difference Ntsika found in the WHY reasons per population group. While 60% of Blacks, 50% of Coloureds and 42% of Whites started their businesses because of "own ideas", 0% of Indians did it because of own ideas. Their reasons were mainly "Advice from family and friends."

3.5 Distinguishing between pull and push factors

According to Dollinger (1999:43): 'Positive Pull' is described as positive influences that lead to the decision to investigate entrepreneurship. These factors can come from "a potential partner, a mentor, a parent, an investor or a customer." The 'Positive Pull' factors include such things as "career path that offers entrepreneurial opportunities or an education that gives the individual the appropriate knowledge and opportunity." A person with a deep knowledge of the industry is in an excellent position to develop a business that fills a niche or gap in the industry.

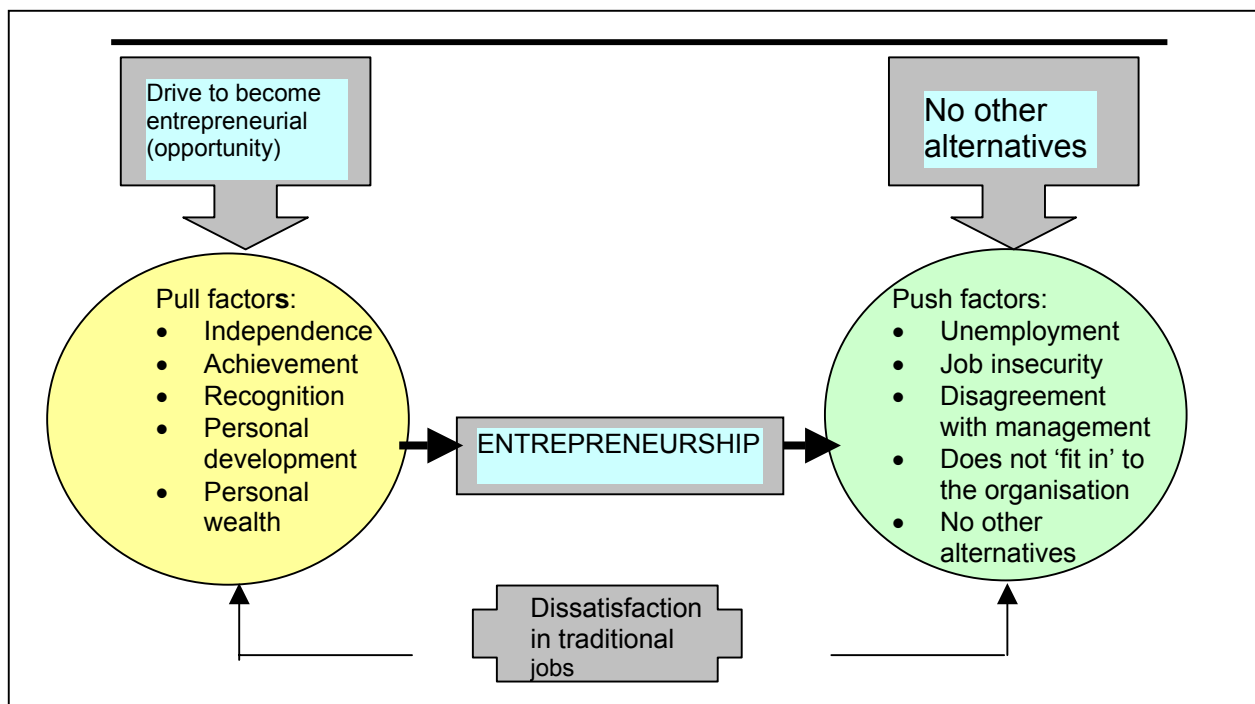
The 'push and pull factors' described by Wickham (2001:63) are slightly different: 'Pull factors' are those, which encourage potential entrepreneurs by "virtue of the *attractiveness* of the option" and include financial rewards, preference for independence, need for achievement, innovation, ambition and new challenges, and to gain social standing and recognition.

In terms of positive pull factors women are motivated more by the need for achievement (nAch), by previous performance and growth (Hisrich & Peters 1998:78).

Van der Merwe 2003 defines a successful woman entrepreneur as one who has been in business for longer than two years, operated an enterprise with more than five employees and made a profit and expanded in terms of infrastructure and growth. It is one who has moved beyond her traditional role of wife, caretaker and mother to enhance her business enterprise, fitting the definition above. Van der Merwe distinguishes between types of women entrepreneurs on a model with four quadrants (Goffee and Scase 1985) referred to in Lynch (1998:324). The quadrants are labelled traditional, domestic, radical and innovative with a sliding scale from high to low on the x- and y axis, attachment to traditional gender role features on the x-axis and attachment to entrepreneurial ideas on the y- axis. She continues to analyse women entrepreneurs through their start-up decisions in figure 3.2.

Women entrepreneurs in construction can be typified according to the above model of Goffee and Scase (1985) as having a high attachment to entrepreneurial ideals and a low attachment to conventional gender roles. The words 'innovative' and 'radical' certainly come to mind.

**Figure 3.2: Reasons for start-up decision:
The push and pull factors of entrepreneurship**



(Van der Merwe 2003)

In order to learn more about the drivers depicted in figure 3.2 different sources were studied and the findings are recorded in item 3.6 to 3.9 that follows:

3.6 Positive pull factors (+)

The GEM 2004 Report on Women and Entrepreneurship reports that 97% of the respondents in their study are involved in entrepreneurial activities for two primary reasons: opportunity and necessity. Opportunity entrepreneurship estimates the number of people who choose to start their business as one of several desirable career options, pointing to reasons that are positive in nature or positive pull factors (Arenius, Langowitz and Minniti 2005:18).

Pull factors include independence, being one's own boss, creative expression, doing enjoyable work and profit motives according to Watson *et al* (1994) as also reflected in Robertson *et al* (2003: 310). Bird (2001:310) pursued process-driven school studying of attitude and external environment that in turn influences thoughts, which shape attitudes and form intention (motivation). If those intentions are strong enough it leads to action.

Hofstede's (1980) conception of socio-cultural dimensions influencing worker's attitudes towards work (motivation) is helpful to explore their implications for entrepreneurship development in developing nations such as in Africa (Themba, Chamme *et al* (1996:2) in an extract from Kinunda-Rutashobya & Olomi (1996:103). Hofstede (Morrison 2000; Robertson 2003:310) defines culture as an interactive aggregate of common characteristics that influence a human group's response to its environment, while Dyer (1994) note that these influences affect the entrepreneurial decision. Volery Doss and Mazzarol (1997:11) in their analysis of why entrepreneurs start business ventures discovered that several triggers - possibly a combination of triggers - appeared to be at the root of start-ups. These triggers were the level of creativity, the need for autonomy, the achievement of social status, the response to a market opportunity, and the drive for money. In addition to these "usual" triggers, the research also highlighted one intriguing trigger: the will to invest savings in a business venture which will provide the investor with a job and the satisfaction of being rewarded on merits. It was suggested that this trigger matched the profile of mid-career professionals - some of whom were made redundant - who wanted to become self-employed. This constitutes an emerging trend in entrepreneurship. Business advisers along with training institutions should better

target these professionals who want to redirect their career toward running their own business and provide them with an ad hoc turnaround strategy.

Wang *et al* (2001) studied student populations and found that the possession of lack of an idea and their socio-economic status influence their entrepreneurial intentions.

All of the above can be true for women as well as men. Langowitz (2004:1) found in her study that in looking beyond the amount of coverage, several themes were apparent in business press stories on women entrepreneurs. First, the media tends to favor what she calls "Cinderella hard-luck stories." Those refer to stories in which a woman faced with some horrible adversity summons the strength and motivation to start a business. These feminized Horatio Alger stories invoke a Cinderella theme in which the woman overcomes hardship, with the benefit of neither fairy godmother nor handsome prince. The circumstance might vary from welfare mother to divorcee, but the frequent underlying message is that something unusual has caused the woman to start her own business. Why else would she do it?

Langowitz further argues that women entrepreneurs are primarily portrayed by the business media as reacting to negative circumstances (necessity entrepreneurship), rather than seizing opportunities. This inherent message is a far cry from the glamorization of Bill Gates in his college dormitory or Steve Jobs in his garage. Moreover, the media likes to focus on women starting businesses in fields that "women would be expected to know about," such as retail, fashion, or food, and the businesses featured tend to be small. Airport manicure shops get attention, industrial technology equipment manufacturers do not.

The problem is that much of business media coverage of women entrepreneurs doesn't fully reflect the facts. An on-going research project Langowitz conducted on more than 200 women business leaders, points to the reality for women entrepreneurs. On the question 'Why do women entrepreneurs start their businesses?' the Langowitz study found that women entrepreneurs are driven to found their firms by a desire for personal autonomy and personal achievement.

3.7 Need for achievement (nAch) and motivation as positive pull factors

McClelland (1976:65) identified 'need for achievement' as the fundamental driving trait in the personality of successful entrepreneurs and stated that need for achievement (nAch) is high in individuals who start their own businesses (also in Wickham 2001:16).

McClelland's hypothesis (in Jennings 1994:148) states that a society with a generally high level of need for Achievement will produce more energetic entrepreneurs who, in turn, produce more economic development.

3.7.1 Economic growth, nAch and entrepreneurial behaviour as positive pull factors

Dyer (1994) in Robertson *et al* (2003:310) notes that although historically entrepreneurship research has attempted to articulate the individual factors that influence the choice to become an entrepreneur, more recent research (Secret 1975; Aldrich *et al* 1986; Kirchoff 1991) has identified the social and economic factors that affect entrepreneurship. Population ecologists believe that environmental forces, the availability of economic resources and quality of life in terms of economics, education and health issues are important influences on entrepreneurial intentions (Pennings 1982).

They all share the view of McClelland (The Achieving Society, 1976) who formulated the hypothesis that need for Achievement (nAch) is associated with economic growth. Although his hypothesis was derived from a particular historical sequence of events in Western Europe – the Protestant Reformation and the rise of capitalism, in its most general form it might be applied to any society at any time or place. There is an empirical method of testing the generality of the hypothesis. Anthropologists have collected enough information on a number of preliterate cultures to see that need for Achievement level is a sufficiently powerful variable to predict economic development in the societies under scrutiny despite major variations in other factors such as type of social organisation, a particular stage in historical sequence, level of technology or type of economy. The method of determining the need for Achievement level of a preliterate culture relies on analysis of the content of folk tales widespread in the culture. The way the tales are told will come to reflect a kind of “averaging level” of motivation among the people of the tribe. The presumed mechanism by which need for Achievement level translates itself into economic growth is the entrepreneurial class. Therefore as stated at the beginning of item 3.5, if the need for Achievement level is high, there will presumably be more people who behave like entrepreneurs, acting to produce more than they consume.

Despite many flaws in the collection of cross-cultural data, McClelland found that they confirm the hypothesis that the need for Achievement level of a society is a variable significantly related to entrepreneurial economic activity in a culture, despite wide variations in social structure, in climate, means of subsistence and level of technological development. The data also hint that tribes with high need for Achievement are readier to adopt more efficient, but also complex and difficult means of earning a living whilst those tribes with lower need for Achievement appear to be more tradition-bound, particularly in the religious sphere. McClelland concluded in this study that it seemed possible that Weber's observation of the connection between Protestantism and the rise of the capitalism may be a special instance of a much more general phenomenon. To date there is no evidence as to which came first, the change in the type of economic activity or in the level of need for Achievement (nAch); nor is there any certainty that the relationship found at such primitive levels will persist among modern complex nations.

In the preliterate cultural study McClelland stated that few individuals of families would be found that got *all* of their income from entrepreneurial activities since raising at least some food for subsistence is very widespread. Therefore a full-time entrepreneur was defined as someone who received 75 percent or more of his income from entrepreneurial activities.

3.7.2 The notion of entrepreneurship, nAch and role models as positive pull

Robertson, Collins, Medeira and Slater (2003:309) are firm believers in the social engineering school of thought where individualism itself is a social phenomenon (Bendix 1956) and that you can understand individuals by studying the situations with which the individual is faced and the social groups to which the individual relates (Gibb and Ritchie 1985). Thus the social engineering view captures all other streams of thought relating to external variables in the study of influences on entrepreneurial intentions, such as family influences, culture, work experiences, ethnic influences and role models. (Bridge *et al* 2003, Boyd and Vozikis 1994, Henderson and Robertson 1999 as well as Gibb and Ritchie 1985).

Along with the authors quoted in Robertson, Collins, Medeira and Slater (2003) David McClelland belonged to the behavioural school of thought regarding the notion of entrepreneurship. Sponsored by the Centre of Entrepreneurial Studies at Harvard

University, linked Protestantism, the need for achievement (nAch), and economic development by hypothesizing that a psychology motive derived from a family socialization intervened between Weber's Protestant work ethic and entrepreneurial behaviour (Jennings, 1993). McClelland argued that family socialization consisting mainly of child-rearing practices that stressed standards of excellence, maternal warmth, self-reliance and low father dominance contributes to the development of nAch. McClelland further concluded that nAch is the key to entrepreneurial success.

3.7.3 Thematic Apperception Test (TAT) assessing nAch as a positive drive

In developing a measure for nAch, McClelland believed that fantasy is the best way to assess motives and used the Thematic Apperception Test (TAT). The TAT requires subjects to write imaginative stories in response to a set of pictures. The stories are then content-analysed for achievement imagery to obtain a nAch score. By performing correlation studies in the laboratory, McClelland concluded that individuals with a high nAch, as determined by the TAT, tend to exhibit the following behavioural traits:

- Personal responsibility is taken for finding solutions to problems.
- Moderate achievement goals are set and calculated risks are taken.
- Concrete feedback regarding performance is desired.

While McClelland's research influenced a large number of subsequent researchers to use nAch as a distinguishing entrepreneurial behavioural characteristic, a definite link between achievement motivation and entrepreneurial success has not been established. Furthermore, McClelland's research has been criticised by psychologists for his measurement of nAch, by economists for his analysis of economic development and by researchers in Entrepreneurship for his definition of entrepreneur.

Barry (1998) and Robertson, Collins, Madeira and Slater (2003:309) agree with McClelland on the trait school of thought initiated by Baudeau (1730-1792). They all focused on certain personality traits such as need for Achievement (nAch) as a key driving factor in an individual's decision to become an entrepreneur.

The case studies that follow in Chapter 5 will attempt to seek clarity from the role models studied to see if any link can be drawn in this research study.

3.7.4 Entrepreneurial behaviour and nAch as positive pull factors

McClelland pointed out that a study of the "behaviour of entrepreneurs" is conceptually

different from a study of “entrepreneurial behaviour.” According to him, entrepreneurs or those occupying entrepreneurial status, need not show entrepreneurial behaviour, just as garbage collectors may not always collect garbage. He argues that it is quite possible for individuals occupying other statuses to behave in an entrepreneurial way, just as a parent may occasionally collect garbage when the regular garbage collector is not available. Thus a politician, a physician, a university professor or a ditch digger may show all of the components of the entrepreneurial behaviour, even though his status is not primarily that of an entrepreneur. Linked to the nAch, optimism and other value attitudes are the following entrepreneurial characteristics:

According to McClelland entrepreneurial role behaviour includes:

- Moderate risk –taking as a function of skill not chance, decisiveness
- Energetic and /or novel instrumental activity
- Individual responsibility
- Knowledge of results of decisions
- Money as a measure of results
- Anticipation of future possibilities
- Organisational skills

Steffen (2004) agrees with McClelland arguing that successful change relies on new ideas, good timing, adequate resources, but absolutely demands effective leadership, "good people doing good things." If you want to change the world, the theory of social entrepreneurship goes, get the right people involved and set them free. They will use less resources.

3.7.5 The need to do things better as a positive motivating drive

McClelland's concept of achievement motivation is also related to Herzberg's motivation-hygiene theory. People with high achievement motivation tend to be interested in the motivators – the job itself. Achievement-motivated people want feedback on how well they are doing the job. The time spent on figuring out how to do things better. That could lead entrepreneurs into new areas of innovation and enterprise, hence the positive pull theory. Companies with such people grow faster and are more profitable. McClelland has extended his analysis to countries where he related the

presence of large percentages of achievement-motivated individuals to the national economic growth.

He further states that while there is an undeniable core of inborn characteristics such as energy and raw intelligence that an entrepreneur does have or not have, it is becoming apparent that possession of these characteristics does not necessarily make an entrepreneur. Timmons (1999:219) to the contrary stated that there is a good deal of evidence that entrepreneurs are born and made better, as certain attitudes and behaviours can be acquired, developed, practised and refined through a combination of experience and study.

Richards (1999:3) elaborated further on McClelland and Timmons's views of positive pull factors by defining an entrepreneur as one possessed of a high capacity for imagination, flexibility, creativity and innovation; as one willing to think conceptually and to see change as opportunity: Pulled by vision so to speak. The entrepreneur has a high tolerance for risk, and a dogged optimism about the world and the eventual right to succeed in it. These are all positive drivers or pull factors that lead entrepreneurs to the decision of entering into entrepreneurial ventures.

3.8 Other sources of positive pull factors

The model of Wickham (2001:65, 377) regarding "the move to entrepreneurship" presents an analysis of personal development, social and economic needs satisfaction and elaborates on the "choice of the entrepreneurial path."

Closely related to nAch is motivation. Langowitz (2004:1) found that "More than 80 percent of women business owners are the founders of their firms. Women entrepreneurs are driven to found their firms by a desire for personal autonomy and personal achievement. They're not down on their luck, as the human interest lens of the media would lead us to believe. Less than a third cited economic hardship as a motivating factor. Instead, the vast majority of women start businesses because they're driven to achieve, and they want control over their achievement. Guess what? This is the same motivation we find for male entrepreneurs!"

As already mentioned in Chapter 1, item 1.10, Van Vuuren (1999) developed an equation to illustrate entrepreneurial performance:

$$E/P = M f[E/S \times B/S];$$

where E/P = Entrepreneurial performance; M = Motivation; E/S = Entrepreneurial skills; B/S = Business skills, based on the work of White (1961) where it has been concluded that:

$$P = f(M \times A)$$

This equation concurs that motivation plays a key role in entrepreneurial performance and can be regarded as a positive driver or pull factor why entrepreneurs take on the challenge of engaging in entrepreneurial enterprises.

Fox (2004:1) defines entrepreneurship as the process of creating value by bringing together a unique package of resources to exploit an opportunity. Moreover it is the pursuit of an opportunity without regard to resources currently controlled. He infers from these definitions that entrepreneurs are opportunity driven and positively pulled into entrepreneurship.

3.9 Negative push factors (-)

'Push factors' on the other hand are those which make the existing option *less attractive*, such as financial limitations from existing job, unemployment and unable to obtain a salaried position, job insecurity or insufficiency to earn a living, and career limitations and little job satisfaction at previous workplace according to Wickham (2001:63).

Robertson et al (2003:310) records push factors to include redundancy, blocked promotion, recession, unemployment, frustration with previous employment, the need for a reasonable living and they quote Watson et al (1994); Davies and Gibb (1991) as well as Brockhaus and Horwitz (1986) in support of this view.

Lynch (1998: 333-334) quotes Hakim 1989 and Storey *et al* 1989 defining push factors as referring to events or the threat of events prompting a move to entrepreneurship. In this sense, life cycle events such as bereavement, retirement, employment circumstances are all identified as push factors. Other drivers include social isolation, labour market conditions and reduced income levels.

The GEM 2004 Report on Women and Entrepreneurship talks about 'necessity entrepreneurship' that estimates the number of people who start their business because other employment options are either absent or unsatisfactory. They found that the

number of women who choose entrepreneurship because of necessity is concentrated in low-income countries like South Africa. In recent years self-employment and home-based work has expanded opportunities for women's participation in the labour force, but it is characterised by lack of security, lack of benefits and low-income. Aurenus, Minnity and Langowitz (2005:18) conclude that for women, entrepreneurship may represent an important means to circumvent unemployment and in some countries a way out of poverty, but that the number of women that pursue an entrepreneurial opportunity when other income producing activities are available is still very low compared to that of men.

3.10 Conclusion

If the need for Achievement level is high, there will presumably be more people who behave like entrepreneurs, acting to produce more than they consume (McClelland, 1976:65).

This is the case with women entrepreneurs in construction who build and develop the environment and economy, starting at low profit margins that is common for survival at times in the construction industry, but with the drive to meet challenges, overcome barriers and to grow their businesses as a result of positive pull factors. It can therefore from the literature covering previous studies be concluded that women are in construction mainly because of positive pull factors that includes new challenges, need for achievement as well as love for construction as indicated in Figure 3.1 (Verwey 2003:62,63).

According to ISEEK (2003:2) women take great pride in knowing that they have achieved in building or creating something. "As a result, researchers have found that most tradeswomen have a high degree of job satisfaction."

The GEM 2004 report on Women and Entrepreneurship found that in both the USA and SA more women are involved in opportunity entrepreneurship (positive pull) than in necessity entrepreneurship (negative push) although the opportunity prevalence ratio is much higher in the USA at 6.0 than in SA at 1.1

'Motivation' including all the other parameters above are also useful in researching the question: '**How** do we measure success?' and that is what the next chapter will be dealing with.

Chapter 4

Factors that influence performance

Barriers(-) and success (+)

4.1 Introduction

Robertson, Collins, Medeira and Slater 2003:308 state that the identification of barriers to entry is important together with strategies to minimise their impact. While this is true for all entrepreneurs in start up and in reaching success, it is even more crucial for women who are more sensitive to what happens in the environment around them according to the GEM 2004 Report on Women and entrepreneurship (Arenius, Langowitz and Minniti 2005:13). Themba, Chamme *et al* (1996:2) as well as Kinunda-Rutashobya & Olomi (1996:103) agree that political, legal, economic and technological factors have a big influence on the success of any business operation. The political environment of a country, for instance, acts like a cushion of air within which business organisations and other institutions float and breath. Whereas a stable political environment provides “a coat of protection to businesses allowing them to swim, breath and grow”, an unstable political environment batters businesses, shaking the life out of them and suffocating most of them to death. Women entrepreneurs in South Africa historically come from an unstable situation that left some barriers behind, while the USA does not go free from clock-stoppers such as September 11th 2001.

The identification and removal of such barriers is key to furthering entrepreneurship and to stimulate the economy. SA lags behind the USA in its levels of entrepreneurship and this chapter can give some indications of how to rectify the situation.

4.2 Barriers (-) and discrimination against women defined

The SA Constitution, Act 108 Chapter 1, stipulates that "non-sexism" as one of the "founding provisions" (South Africa, 1996:3). The Oxford dictionary defines discrimination as 'distinguish unfavourably' with synonyms: oppression, domination, and tyranny. According to the First South African Convention for the Elimination of All Forms of Discrimination Against Women (Convention report, 1997), the term discrimination against women means "any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women" (Convention report, 1997: 2-1). For the purpose of this paper

blatant discrimination is defined as obvious discrimination, easily detected and proven, while subtle and sophisticated discrimination is not easily identified or proven.

The Concise Oxford Dictionary defines barriers as barring advance or preventing access. The barriers that women entrepreneurs experience are defined as follows:

Entrepreneurial access barriers

Entrepreneurial survival barriers

The poverty trap as a barrier

Van der Merwe (2003:7) identifies barriers to women entrepreneurs as traditionally male-dominated environments, lack of access to financial resources, lack of support, negative prevailing socio-cultural attitudes, gender discrimination, personal difficulties, lack of basic life skills such as self-confidence, self-motivation and communication skills. In her study 32,2% of women in the random sample suffered gender discrimination with finance, opportunities and skills as the major limitations. Access to capital markets have been regarded as among the most important resources denied to women, whereas 44,1% of the respondents reported no gender discrimination. Reasons why women are disadvantaged in capital markets were cited as less experience and equity in business, out-moded gender role beliefs and women themselves believe that they will receive differential treatment when applying for finance. Furthermore financial institutions require middle management experience, start-up experience and technical backgrounds, whilst ironically women have had limited access to higher levels of education and training in general as well as to mentors.

In addition to those barriers, the Department of Trade and Industry (the dti) 2003:29 highlighted the importance of environmental factors in accounting for enterprise success or failure. In the case of the three most important of these factors – the macro-economy, the institutional and the regulatory environment, much needs to be done to create an enabling environment for entrepreneurs, especially for women entrepreneurs who are more sensitive to the impact of these factors. They stress the importance and success of incubators to overcome some if not most of these barriers that are within the domain of local government and can reach to remote rural areas.

Not everybody thinks that women can fulfil entrepreneurial roles. The SA Isu Group, in sharing its entrepreneurial story, reported that “their husbands could not understand

why their wives wanted to become involved in business problems instead of attending to home chores while their men brought in a living" (Bagshaw 1995:275).

The effects of customary law on the social status of women ensure that they are further marginalised. It is common practice for women to have to produce marriage certificates when signing contracts regarding ownership of property (CGE Mpumalanga 1998:6).

The media often "portray women in domestic roles or as sex objects" (CGE Annual Report 1999:9). "It is therefore essential that women begin to insist on defining themselves, instead of being defined by men" (CGE Northwest 1998:24). Women's sexual stereotypes are reflected in the media and advertising, which "deny them their democratic rights" (CGE Annual Report 1999:9).

Because of the "gender gap" in tertiary enrolments in sub-Saharan Africa, women are worse off educationally (Subbarao 1994: ix). In the course of motivating for women's economic empowerment "we also have to deal with men's perceptions that a woman's economic independence means that she is growing away from him" (CGE Northern Province 1997:29).

Entrepreneurial survival barriers are common in South Africa although not so in the USA where women are more affluent and generally better educated. In African tradition it is expected that successful women help others. It is therefore difficult for them to grow their own businesses by ploughing profits back into their businesses. The primary problem is that women suffer oppression and discriminatory burdens in all walks of life. These burdens must be identified before they can be rooted out. Phosa (CGE Mpumalanga 1998:29) said: "The majority of women continue to be denied their economic citizenship...They find themselves against a multitude of barriers when they want to enter mainstream economic activity." Mandela (CGE Northern Province 1997:23), the former President, said: "It is vitally important that ... freedom cannot be achieved unless women have been emancipated from all forms of oppressions".

In the 20th Century, industrialisation and urbanisation were two major factors in changing the position of women in society. Women's empowerment is not solely dependent upon their involvement in production. The discrimination is of a more subtle nature, imbedded in psychological and ideological barriers. This can be observed from sex-typing particular industries such as textiles and food processing as women's work, which is lower paid, less skilled and lower in status (Walker 1991:4).

Unfortunately HIV/AIDS statistics worldwide suggests that women are bearing an increasingly large burden of the disease (United Nations 2000:67). This poses a severe *entrepreneurial survival barrier* that has to be addressed by stakeholders in the industry. The definitions above form the point of departure for a more in-depth discussion that follows elaborating on the impact of individual barriers on women entrepreneurs.

4.2.1 The ‘glass ceiling’ as an entrepreneurial barrier for women

In the year 2004, the 10th anniversary of democracy in South Africa, the Business Women’s Association (BWA) as the largest association in SA representing women, examined the degree that women have made strides in all of South Africa’s major corporate companies and state-owned enterprises. BWA entered into a partnership with Catalyst, the leading business women’s organization in the United States to conduct a South African Census that will be updated annually. The first results for South Africa were released on 29 April 2004. The key census findings were that women:

- whilst making up 52% of the adult population in South Africa, they make up only 41% of the working South African population
- constitute only 14,7% of all executive managers
- make up only 7,1% of all directors
- hold only 221 of the 3125 directorship positions
- hold only 11 chairs out of a total 364
- in CEO positions make up only 7 compared to 357 male CEOs

In the USA, women make up 46,1% of the workforce, 13,6% of directors and 15,7% of executive managers (BWA 2004:1,2). Even for USA, similar to SA it is clear that there still is a ‘glass ceiling’ for women in the corporate companies and state-owned enterprises.

According to the GEM 2004 Report on Women and entrepreneurship, women’s employment choices are more sensitive to the local environment than those for men. They report that recent studies have shown that the choice to start a new business is far more complex for women than for men and women tend to be more sensitive than men to a variety of non-monetary incentives. Women’s choice is often linked to necessity or to time and location flexibility to accommodate the independence that can accommodate family needs and child rearing. There can be construed as constraints and even as

barriers for women. To overcome these specific constraints and barriers universal best practices are key to address the need of reforming the social entrepreneurial environment. Eliminating barriers to competition, reducing regulatory burdens, and providing more efficient services for new and developing firms will benefit all individuals interested in starting a business. Support policies by themselves are not sufficient to increase women's involvement in entrepreneurship. Mentoring and network support, especially at the local level, are at least as crucial in boosting women's attitudes with respect to business leadership and new venture creation. Regardless of per capita income, some of the most successful policies and programs world wide are those able to increase women's awareness about entrepreneurship and provide them with role models and networking possibilities (Arenius, Langowitz and Minniti 2005:13).

4.2.2 Discrimination, gender neutrality and democracy

'Gender blind' or to be 'gender neutral' is a smokescreen and against the sense of the law (Evers 1993:2). The Employment Equity (EE) Gender legislation prescribes proactive sensitivity for women's needs in the workplace. Discriminatory practices need to be identified, and barriers removed (Beijing Conference 1995:25). Women have to be proactively empowered in order to gain gender equality in future and to develop their entrepreneurial potential.

For Phumele Nzimande "Many women who participate in the struggle for democracies in these countries found that in the end democracy really did not mean much for women..." She stated that the new South Africa would not be complete "without a firm commitment and a firm framework to bring about effective gender equality" (CGE Eastern Cape 1998:15). According to African tradition, women were inferior in status and this was "entrenched by tribal law" (Lazar 1993:12). Women need to take up their democratic rights and her story as opposed to his story still has to be told (CGE Northwest 1998:24). Most issues concerning women "cannot be well presented by men" (ILO 1995:9). Women's sexual stereotypes are reflected in the media and advertising, which "deny them their democratic rights" (CGE Annual Report 1999:9).

4.2.3 Women, gender, sex, breadwinners and human rights

The term 'gender' was originally developed by 'feminists' (Moser 1987:6) who were concerned about the "biological overtones" of terms such as 'sex'. 'Gender' is not a

biological but a social concept (Brydon and Chant 1989:2). It refers to the way gender differences and needs are shaped and "socially constructed" through ideological, historical, religious, cultural, economic and business determinants (Moser 1987:6). The media often "portray women in domestic roles or as sex objects" (CGE Annual Report 1999:9). "It is therefore essential that women begin to insist on defining themselves, instead of being defined by men" (CGE Northwest, 1998:24).

The father as the "bread winner" concept should be done away with (ILO, 1995:8). In the rural areas today women are ploughing the lands and place food on the table (Lazar 1993:6). Whether literate or illiterate, urban or rural, women are always deeply hurt by discrimination (Walker, 1991:3). In Japan men became workaholics after World War 2. To their dismay their wives who controlled the family budget "are growing more independent with their own separate bank accounts." (Jennings 1994:126).

According to The Women's Watch "Women are people too". "Every woman is a citizen of some country, an individual whose human rights and potential are as important as those of her brother, her father or her husband" (Women's Watch, 1993: 1). Discrimination against women is thus a violation of their basic human rights.

4.2.4 Uniqueness of women vs. business barriers

Women are unique. They have a "different touch", a "different point of departure" and a different "view of affairs" (CGE Mpumalanga 1998:53). "Because we are different yet striving for the same ideals ... we must play a decisive role on constitutional, political and community levels" (CGE Mpumalanga 1998:53). Women do not want to become like men as "...we need to liberate ourselves but without losing our gentle touch and femininity" (CGE Northern Province 1997:26,27). "We already have everything by just being women" (CGE Mpumalanga 1998:54). A successful women professor of Business Ethics at Auckland's Unitec said: "Passion is what gets you up in the morning" (Smith 2000: 97). Entrepreneurial ventures stem more from prior job with men, as compared to women where her's stems more from hobby or interest (Kuratko 2001:152). "... patience and attention to detail, says the U.S. Small Business Administration, also contribute to the high success rate of women-owned businesses" (Davis & Long 1999:26).

Baroness Jay highlighted that "... access to capital is one of the main stumbling blocks preventing women from starting their own businesses in greater numbers" (Wickham

2001:71). According to this source Hillary Clinton mentioned that women lead half of all new businesses in the US, whilst in Britain it is only 30%. A serious handicap for women to realise their entrepreneurial potential, is reliable, affordable and conveniently situated daycare facilities operating on flexi hours to suit their entrepreneurial work situation. According to Marguerite Berger (Berger and Buvinic 1989:1), "Women entrepreneurs seem to be invisible in Latin America". Their specific characteristics and needs are often overlooked and only "passing reference" is given to the importance of women's contribution.

Women's involvement in the construction industry in a leading role dates back as far as 1315, when "a road-building project through the mountains of Fujian province was directed by a women engineer" (Lumsdaine & Lumsdaine 1995:409). "Women entrepreneurs tend to be more motivated by the need for achievement" (Hisrich & Peters,1998:78). Aida Geffen of Aida Holdings reported that she had thought of making Law her career. However, when realizing that women in those days were not regarded as capable professionals, she decided against it (Bagshaw 1995: 143). In 1970 women-owned US businesses employed less than one million persons, and increased in 1991 to 12 million (Timmons 1999:5). The proportion of women board directors to male board directors is, however, very low: Only 4,6% of all directors are women. Not a single company in the SA Top 50 listings has more than 3 women directorships (Corporate women directors report 2000:11). Unfortunately the women entrepreneur must "already be rich or have the ability to borrow capital based on connections" (Jennings 1994:45).

"Women may be in the labour force but they are certainly not achieving their full potential" (Wickham 2001:71). High numbers of educated women are found in part-time jobs. A UK survey revealed that 18% of British mothers with a tertiary education work less than 20 hours a week. "There is a widespread general mismatch between women's skills and what they are actually doing, which means that, for the government, there is a serious issue about skilled, highly educated women dropping out of the labour force completely or working in jobs where their talents cannot be used to the full" (Wickham 2001:71).

The author infers from this section that women have entrepreneurial development potential that should be encouraged. This is contrary to the misconception that women

have to become like men to act in an entrepreneurial way and to be able to play their legitimate role in the economically active society.

4.2.5 Historical discrimination, trends and challenges over millennia

Gender discrimination has been present for millennia. In the Bible (Genesis 21:14) Abraham disregarded human rights by sending his wife and son, Hagar and Ishmael, from home into the desert. The Queen of Sheba astonished Solomon, with his harem of hundreds of wives. That a woman could be a king, be so clever, and rich as well as entrepreneurial to travel so far! On her business trip she gave him gifts, four metric tons of gold, spoke to him on an equal footing and she tested him "with hard questions" (1 Kings 10:1).

The first discrimination against South African women documented was in 1843 when a group of Afrikaner women demanded a political voice from the British Commissioner Cloete. He reported that "I endeavoured (but in vain) to impress upon them that such a liberty as they seemed to dream of had never been recognised in any civil society and that however much I sympathised in their feelings, I considered it a disgrace on their husbands to allow such a state of freedom" (Walker 1991:10). A few decades later in 1883 Olive Schreiner, one of South Africa's most famous feminists coined the phrase "to be born branded" (Walker 1991:1) for the subordinate position of women in South Africa.

During the Anglo-Boer War of 1899/1902 the fiercest oppression occurred against women entrepreneurs on South African farms when they were removed to concentration camps while their houses and crops were burnt down and their cattle were confiscated by British troops. Up to 1930 no woman in South Africa was allowed to vote and from 1954 it was compulsory for all Blacks, including black women to carry passes (Walker 1991:25). South African women are until 1991 "distributed throughout the class spectrum" (Walker 1991:1), determining standing in society and hampering entrepreneurial confidence.

4.2.6 Violence against women limiting their entrepreneurial performance

Women who were conscripted by the Japanese during World War II to provide sexual services to soldiers were called "comfort women". This was cruel, ruthless violent rape

of women, "forced prostitution" and "sexual slavery" (Women's Watch 1993: 9). Even today "The majority of Afghan men do not believe women should have rights. Taliban or Northern Alliance, there are fanatics everywhere" (Beach 2001:52). South Africa has a high incidence of all forms of violent crime, including gender violence, which affects women of all races, classes, and ages, in rural and urban areas (Convention report 1997:17-1). In his opening Address to the Commission for Gender Equality's meeting in North West, the Premier Popo Molefe said: "The exclusion of the contribution of women ... in itself constitutes an act of violence against women." (CGE Northwest 1998:24). Violence and psychological torture against women is rampant. (United Nations 1991:19). The recent launching of the multi million rand Maputo Corridor project linking South Africa's industrial heartland with the port of Maputo has been accompanied by a sharp rise in rape, prostitution and AIDS (CGE Mpumalanga 1998:6).

In a strong attack on patriarchy the Convention Report (1997:5-1) states: "Men are exhorted to express their manhood as powerfully as possible, which some do by joining the police or the army or vigilante groups and seeing how many youths they can shoot, whip, teargas, club or knife, or how many houses they can burn down or bulldoze, or how many people they can torture into helplessness. Patriarchy brutalises men and neutralises women...". Many women said that lobola should be abolished as it sometimes results in violent treatment. "Women are constantly harassed at home because men feel they have bought them to be their slaves." (WNC 1994 case 059).

Research undertaken on gender and the media has revealed that reporting on issues concerning women "remains limited to issues around crime, violence against women and gender equality" (CGE Directory 1999:V). A number of violent practices, such as witch hunting, female circumcision and virginity testing, are proof of the inferior status of women in Africa (CGE Annual Report 1999:9). Since women became aware of their rights during the development of the Constitution in 1992/93, the rape reported cases in South Africa increased from 4 349 in 1992 to 28 318 in 1993 (Beijing Conference 1995:44). In Gauteng alone the rapes reported for 2000 was 12 380 (SAPD 2002).

Violence is a severe form of oppression and discrimination "We have to address the iceberg ... we are addressing the tip. We have to understand that gender inequalities represent a bigger world of injustice and violation of human rights" (Motsei 1997:35).

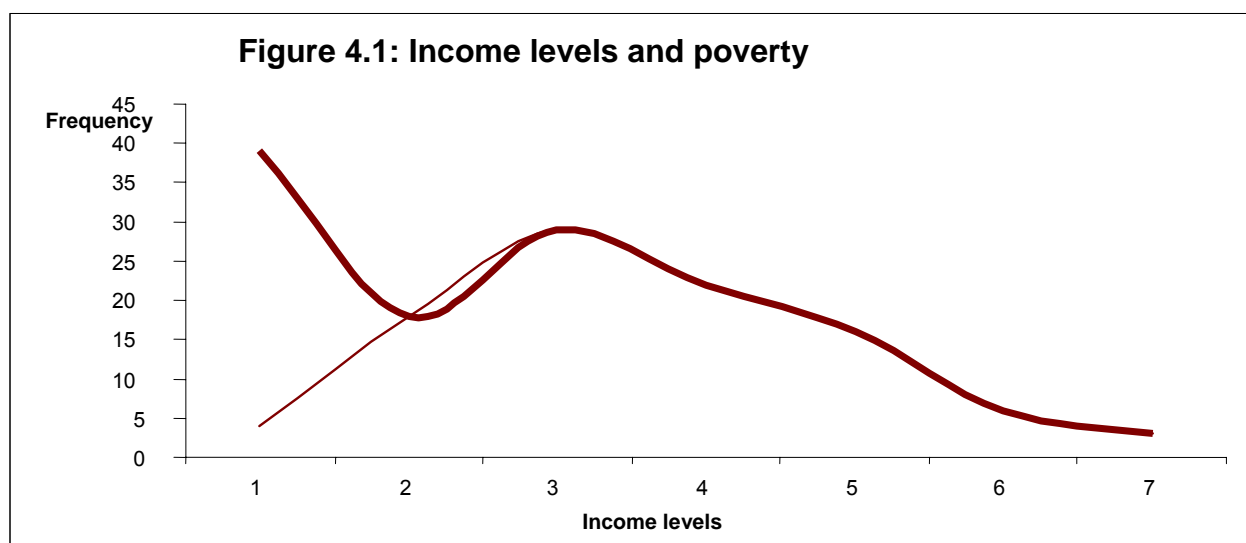
4.2.7 Women entrepreneurs and the poverty trap

In terms of the poverty trap as a barrier in South Africa the Commission for Gender Equality (CGE Western Cape, 1998:58,59) found that:

- female headed household are poorer than where there is a resident male;
- a 70% poverty rate exist amongst female headed households, whilst
- only 43,6% poverty exists amongst families where there is a resident male
- women suffer a 36% unemployment rate compared to only 26% among men;
- unemployment in rural areas is nearly twice as high as in metropolitan areas;
- Old age pensions are the main sources of income for over 40% of the poor.

In rural areas women have to carry water and wood over long distances. In a submission to the Commission for Gender Equality made by women from North KwaZulu Natal, they reported that crocodiles in the Nyalazi River are killing many women and children when fetching water (CGE Annual Report 1999:38). {Male Crocodiles?} “The image of my mother weeping as she gave me a sixpence as her fare to set me on the road to school.... She knew it was not enough, but, for all her love, that was all she could offer. I think that should not happen to any mother.” (Kibirity 2001:36).

Nearly 50% of the respondents in a study of Verwey (2003) are single parents or single, and 63% had four or more people depending on their income. Some 30% of the sample of 133 falls within the interval R0 to R500 per month, below the poverty income line of R600 for households. Figure 4.1 presents the results of a SAWiC survey on poverty amongst women entrepreneurs in construction (Verwey & van Vuuren 2002:11).



Unfortunately social injustices flourish in a state of poverty because women and children experience the harshest deprivation. According to Todaro (2000:172) women make up “a substantial majority of the worlds poor.” Social justice is absent in many cases as “everywhere, women and children experience the harshest deprivation. They are most likely to be poor and malnourished and less likely to receive medical services clean water, sanitation, and other benefits.” The World Bank (2002d) asks the question “Who are the Poor?” and answers as follows: The poor include people in remote and impoverished areas. Women and children make up a large proportion of the very poor, which also includes people marginalized by virtue of their race and ethnicity as well as those disadvantaged by circumstances beyond their control, such as disabilities and natural or man-made disasters.

Regarding negative factors influencing women’s empowerment, in a wider comparative literature review this thesis will point out that women’s empowerment is not appreciated everywhere. Cultures exist in which there are very strong limits to this issue. There may be prohibitions against interactions between genders and even between population groups. For example, in some parts of the world there are caste or religious systems which place limits on dialogue between men and women and on some topics of discussion even between members of the same sex (Patel & Russon 2000:125).

Regrettably this thesis will also have to deal with the gender mismatches in the two countries under scrutiny. “There is a widespread general mismatch between women's skills and what they are actually doing, which means that, for the government, there is a serious issue about skilled, highly educated women dropping out of the labour force completely or working in jobs where their talents cannot be used to the full” cautions Wickham (2001:71).

Greater equality in education between women and men means healthier families. If African women and men had more equal schooling, child mortality would have been 25% lower than it was in 1990 (World Bank 2001b). “Women may be in the labour force but they are certainly not achieving their full potential,” warns Wickham (2001:71). “It is cheaper to hire or fire a woman.” In Japan's recession, women employees were “the first to go.” According to Women's Watch (1993:4) “Women have the lowest paid and least skilled jobs. Women are more likely to be “employed in temporary, casual or part-time positions which are less well-paid, less secure and enjoy fewer benefits” according to the Beijing Conference (1995:24).

Women are vulnerable as their support groups are a spouse, family, women's professional groups and trade associations, as opposed to men who lean on friends, professional acquaintances and business associates, note Hisrich & Peters (1998:78).

For Dollinger (1999:217) women have difficulties getting financing "partly because of discrimination"... Hisrich & Peters (1998:78) states that "Women usually rely solely on personal assets or savings". Formal financiers are in any case not always good for new ideas, and "Banks are sometimes passion killers" warns Crijns (2002). According to Wickham (2001:71) "...access to capital is one of the main stumbling blocks preventing women from starting their own businesses in greater numbers." For finances women entrepreneurs also make use of four Fs: "Family, fools, friends and formal financiers" (Crijns, 2002). "Clawing your way to the top without nails" is the phrase Sharon McCollick used to describe the scratching at the doors of banks to secure financing for her now successful business (Dollinger, 1999: 205).

As far as positive factors influencing women's empowerment are concerned, fortunately women are nowadays regarded as the hidden resource of construction entrepreneurial potential and development. Research on gender is one of the "enduring entrepreneurship research topics" for Crijns (2002). Women should be active participants in economic development. Makhubela (2001:1) agrees with this and warns against traditional accounting and organisational models that only regard revenue and physical assets as 'valuable', and that regard women as liabilities rather than important resources and investments. This is now recognised as essential to ensure that the needs and interest of women are identified and met, and that women are "active participants rather than passive beneficiaries" notes Moser (1993:130). In this development environment, the empowerment of women has become a central element in the World Bank's strategy for poverty reduction (Valdivieso 2002). Todaro (2000:301) agrees that the provision of affordable health, child-care and family planning services would lighten the burden of women's reproductive roles and permit them a greater degree of economic participation. Entire societies can only develop if they bring the fruits of economic progress to the broadest segments of their populations. By engaging women early on, everyone will have a better understanding. Nowadays women also have a productive role, as well as their "reproductive role."

4.2.8 The misuse of religion in discriminating against women

Although some would argue that religious discrimination are misinterpretations of religious texts "women traditionally occupy an inferior status in all South Africa's religions" (CGE Annual Report 1999:9). Gender stereotypes are common in Christianity, Judaism, Islam and Hinduism. Where women's presence is acknowledged it is often hidden behind "abstractions such as reproduction" (Walker 1991:2) so that the full significance of their lives become obscured.

In China, the education level of women entrepreneurs is lower than their counterparts in other countries (Hisrich & Peters 1998:109). In Muslim countries two classes of citizens were created under Islamic Law. The female is formally recognised as second-class citizen with no place in the public arena and no security in the domestic sphere. Men are first class citizens and absolute rulers in their homes with the "power to decide over life and death" (Brydon and Chant 1989:32). Akhter Hameed Khan, a scholar, poet and organizer of development projects for poor women are accused of blasphemy as he helped women in Pakistan. He faced the death sentence under Pakistan's Penal Code, Section 195-C (Women's Watch 1993: 3). Israel has no civil law governing marriage and divorce; religious law governs. Divorce under Jewish law results when a man gives his wife a "get" and she accepts it. If she refuses the divorce, he can obtain permission to take another wife (Women's Watch 1993: 5). Towers had to fall before Time Magazine reported, "Women suffer severe discrimination" in Afghanistan (Beach 2001:52).

Women are also drawing distinctions between religious ideals and anachronisms, which have been used to subordinate women. Churches question the patriarchal foundations of the Christian religion (Convention report 1997:5-4). The gender desk of the Islamic Youth Movement reported on how it has launched an information and education campaign to emphasise the egalitarian aspects of the religion, which override its patriarchal practices (Convention report 1997:5-4). "Worldwide, women are held at varying levels of recognition. This can fluctuate from being accepted as a professional equal, to being considered slightly less than equal, to no recognition at all!" (Davis & Long 1999:26). The slogan of the South African Indian Congress since 1913 was that "No nation can be free when one half of it is enslaved in the kitchen" (Walker, 1991:105). This attitude is one of the reasons why Indian women are such successful entrepreneurs today.

4.2.9 Marital practices inhibiting women's entrepreneurial performance

"How many wives is enough to a man?" asks Dr Manto Tshabalala-Msimang, Minister of Health (CGE Eastern Cape, 1998:46). "The continued application of customary law in Lobola, Polygamy, Traditional and Civil Marriage, Co-habitation, Ukuthwala is yet raising a very heated debate in the country, therefore while we appreciate traditional values we should also move and recognise new developments".

According to Cheryl Walker, (1991:2) the male rights over women and their unborn children was that of "bridewealth, which most characteristically took the form of cattle" in Africa. Although females in Africa have great pride in their ability to produce and to reproduce especially in rural agriculture, this pride diminished with urbanisation.

The SA Isu Group, in sharing their entrepreneurial story, reported that "Their husbands could not understand why their wives wanted to become involved in business problems instead of attending to home chores while their men brought in a living" (Bagshaw, 1995:275).

According to the Women National Coalition (WNC, 1994) women from the Northern Cape said that men "use the fact that they have paid lobola for their wives as justification for treating them as slaves" (Case 058). Furthermore, the practice of lobola is applied to deny women and girls equal access to educational opportunity. In Kwa-Sokhulu, rural women reported that parents in that area remove "girl children" from school as early as Standard 1 to be married to "bring cows for parents" (WNC, 1994; Case 150). Only 13% of black groups believe that the practice of lobola has value and should be retained as "lobola was initially used to unite the two families" mainly in rural areas (WNC, 1994).

The effects of customary law in the social status of women ensure that they are further marginalized. It is common practice for women to have to produce marriage certificates when signing contracts regarding ownership of property (CGE Mpumalanga, 1998:6). Also in other societies, according to Brydon and Chant (1989:182) "male control of women's activities" after marriage often has its origin in male pride. Despite the need for extra income men often prevent their wives and daughters from taking jobs.

The unpaid work that married women perform in households are often not seen as entrepreneurial or as a matter of "boosting household welfare" but rather as the "margin allowing for survival" (Goldschmidt-Clermont 1987:v). Margaret Logan confessed that "marriage and motherhood shelved her ambitions temporarily, but not for long." (Bagshaw 1995:275). Women tend to start their entrepreneurial careers later than men (Hisrich & Peters 1998: 78). This is probably because of marriage and raising children.

4.2.10 Traditional and ethnical related discriminatory practices inhibiting women's entrepreneurial performance

"Even chaos is a gift!" This exclamation resulted in an article called: "Hello, sunshine" remarking on a young woman in Kabul, Afghanistan, taking advantage of the sudden opportunity presented by the US falling tower disaster, and military action, to move about unveiled. (Gibbs 2001:36). Cheryl Walker (1991:1) refers to "Various forms of patriarchy" and of Indigenous gender systems of Blacks versus the European "settler sex-gender systems". Apart from the roles of wife and mother millions of females in Africa and the Middle East also have to account to their mothers-in-law (Brydon and Chant 1989:32). This is contrary to the fact that "...female executives tend to lead in non-traditional ways, by sharing information and power (Lumsdaine & Lumsdaine 1995:104).

Across all of South Africa's eleven ethnic groups, men are regarded as heads of the household with women expected to be subordinate (CGE Annual Report 1999:9). Men working in the cities start new families. "How can we prevent population growth whilst we allow polygamy ...with this question answered we can be able to prevent the escalating number of street children ... to be in line with population" (CGE Eastern Cape 1998:46). Many black women feel that the extended family, particularly "mother-in-laws puts a burden on the marriage". Women feel angry that they "do not have control of the household's money - even the money they have earned" (WNC 1994).

Forced to become the heads of their families when their men left to work as migrant labourers in the cities for months on end, women assumed the responsibilities of their absent men. They built their dwellings, supported their families, and farmed the lands.

"Whole communities became matriarchal, with the exception of the brief periods when the men folk temporarily returned" (Lazar 1993:12).

Fortunately, the traditional attitude towards entrepreneurship is changing as described by Inkosi Khumalo (CGE Mpumalanga, 1998:4) "We must accept the change which is taking place, but it must not make us lose our roots. The manner in which we are brought up in our families contributed much to the discrimination of women. Boys are assigned to perform certain duties and girls are assigned to perform certain duties. That is why I find it very strange when I learned that our duties at home should be fifty-fifty. I cannot make a bed, cook, and do the washing and ironing, not because I do not wish to. Circumstances and the condition under which I grew led to this. However, I now admire women who are bricklayers, truck drivers and doing all the tough jobs which were strictly for men."

4.2.11 Social and societal discrimination against women and women entrepreneurs

More than a century ago, in 1883, sub-ordination of women was regarded by Olive Schreiner as complex, and attributed to a sex-based division as a dominant determinant of a woman's place in society (Walker 1990:4). For too long women's route to social status and economic security was "through childbearing" (Women's Watch 1993: 7). "Her story as opposed to his story still has to be told" (CGE Northwest 1998:24).

For Marguerite Berger (Berger and Buvinic 1989:1) the activities undertaken by women in society are not always "considered to be entrepreneurial despite the fact that they risk their own capital, create jobs and an income". However their male counterparts are "considered to be micro-entrepreneurs" by society. Walker (1991:1) states that "...everywhere women were subordinate to men but there were important contrasts in the operation of gender between different social systems". In many countries the unpaid work of women is not taken up in the national income accounts, and therefore give a misrepresentation of the value of married women in the socio-economic cycle (Goldschmidt-Clermont 1987:v). Women inspire good work by "interacting with others, by encouraging employee participation, and by showing how employees' personal goals can be reached as they meet organizational goals" (Lumsdaine & Lumsdaine 1995:104).

This social leadership style is particularly relevant for sectors like the building industry where teamwork is important.

The direct participation of women in the wider non-domestic economy is thus an important precondition to "destroy the inferior position of women in society" (Walker 1991:4). Women are vulnerable as their support groups are a spouse, family, women's professional groups and trade associations, as opposed to men who lean on friends, professional acquaintances and business associates (Hisrich & Peters 1998:78). Because of the "gender gap" in tertiary enrolments in Sub-Saharan Africa women are worse off educationally (Subbarao 1994:ix). Socially women are more "whole-brain oriented, more intuitive, more open to ideas and more people-oriented than thing-oriented." (Lumsdaine & Lumsdaine 1995:79).

In the course of motivating for women's economic empowerment "we also have to deal with men's perceptions that a woman's economic independence means that she is growing away from him" (CGE Northern Province 1997:29).

4.2.12 The economics of gender discrimination and oppression

Men sometimes benefit economically from gender discrimination. "On development, men design customary and traditional rules especially in rural areas even when they affect women; in other words they are based on what men perceive to be the best for women" (CGE Eastern Cape 1998:46). Some men are very entrepreneurial when dealing with and dealing for women: "when a man marries you, he pays lobola, and because of that he considers you his toy-thing" (WNC 1994 case 036).

It is cheaper to hire a woman. "Women have the lowest paid and least skilled jobs. Women are more likely to be employed in temporary, casual or part-time positions which are less well-paid, less secure and enjoy fewer benefits" (Beijing conference, 1995:24). Indeed, 84% of the WNC sample acknowledged "women's double load at work and at home" (WNC, 1994). Women in the rural areas are easy targets for economic oppression as they are prepared to work for low wages as compared to men because women are "concerned with the provision of food for their children" (CGE Mpumalanga, 1998:65,66).

In Japan's recession, women employees were "the first to go", according to a Tokyo newspaper. The seven-year-old equal opportunities in employment law "doesn't mean anything in an economic recession" (Women's Watch 1993:4). Women are drawn out of their homes into wage employment in times of economic expansion. In times of recession they are phased out of employment, without fear of industrial action that would have taken place if it happened to men. Women are also regarded as "objects of consumption ... as sex objects ... by which commodities ... are promoted for sale" (Walker 1991:2).

Women have difficulties getting financing "partly because of discrimination" (Dollinger 1999: 217). "Clawing your way to the top without nails" is the phrase Sharon McCollick used to describe the scratching at the doors of banks to secure financing for her now successful business (Dollinger 1999: 205). "Women usually rely solely on personal assets or savings" (Hisrich & Peters, 1998:78).

In the 20th century industrialisation and urbanisation were two major factors in changing the position of women in society. Women's empowerment is not solely dependent upon their involvement in production. The discrimination is of a more subtle nature imbedded in psychological and ideological barriers. This can be observed from sex-typing particular industries such as textiles and food processing as women's work, which is lower paid, less skilled and lower in status (Walker 1991:4).

Despite all the above barriers, women entrepreneurs in construction strive to be successful. Construction is a harsh industry and yet many women choose it as a career. There are even associations like SAWiC and NAWiC initiated because of the numbers of women in construction and to look into their empowerment needs, helping them to survive and thrive in this previously male-dominated field.

4.3 Success (+) of women entrepreneurs in construction

The research questions are: Why do women choose to be construction entrepreneurs? How do they view success and how successful are they? Is there a link between the 'why' and the 'how' questions? In an attempt to address these questions success was viewed and measured through the use of a number of models that will be discussed below.

4.3.1 Defining and measuring success

The Concise Oxford Dictionary defines success as accomplishment or end aimed at or the attainment of wealth, fame or position. According to Hupalo (2003:1) the most common method people use to measure business success is financial worth, mostly through listing on the Stock Exchange. The more the entrepreneur in person and the business are worth, the more successful the entrepreneur is considered to be. This measure of worth is given great weight by society. But Hupalo argues that a more reliable measure is steady business growth and profit over the years and customer satisfaction. Many of these listed companies are 'fly by nights' and after some time fold, never to be heard of again. Improving your product or service, customer satisfaction, employee relations, and internal operating improvements are often things the entrepreneur can directly focus upon. Further, they are often the key to business success, measured in financial terms.

"Any way you look at it, financial worth alone is by no means an adequate measure of entrepreneurial success... One of the best measures of success is the quality of the products (or service) you provide. Being proud of your products (or service), sincerely feeling their usefulness, and making meaningful improvements in your company's products or services are big factors making many entrepreneurs feel truly successful... success is measured by what you do within your company" (Hupalo 2003:1). Hupalo (2003a:1) in his "Seven Things You Need to Have a Successful Business" article quotes the following:

- Maintain reasonable profit margins
- Good Revenue per sale (scale of economies)
- Proprietary product and demand
- Love for what you are doing
- Good cash flow
- Good growth prospects
- The business must be something you are psychologically suited to do

Probst & Raisch (2005:91) remark that it has scarcely been possible to read a book on management without encountering four key factors of success: a high growth rate, the ability of change continuously; a highly visionary company leadership and a success-

oriented company culture. They caution companies that in order to sustain success they need to keep a balance as there is a fine line between success and failure. The great majority of companies that failed possessed these factors in abundance. In fact that is exactly where they failed.

Companies that classify as 'burnouts', owe their failure to excessive growth, uncontrolled change, autocratic leadership and an excessive success culture. Remedies they suggest to stabilise growth, the organisation and leadership are opening up the system to 'new blood', to invest in growth and change and to promote an innovative and achievement-oriented culture (Probst & Raisch 2005:101).

Cornwall and Naughton (2003:62) define the measure of success as the actions and behaviours of the entrepreneur as it relates to financial growth, growth in total employment and profits, the terms of survival of the business enterprise as well as customer and employee satisfaction. They go further to say that the moral purpose of the enterprise and the spiritual meaning of the work are equally important to define success in entrepreneurship. They conclude by saying that the proper ordering of three distinct kinds of goods are necessary for the entrepreneur to define her activity as the basis of authentic success: the good of being technically competent, the good of the individual subjective dimension of the work and the good of community or social order of the work (Cornwall and Naughton 2003:71)

The SA Micro-MBA course developed by Cedric Buffler of the Trident Institute, a course accredited by SAQA and SETA cites the key success factors for entrepreneurs as personal motivation and need for Achievement, spotting the gap (opportunity) in the market for your product or service, knowing who will use your product or service, the best location for your business and to know how best to sell your product or service that includes market research, money management and stock control (Buffler 2005).

Bridges (2002:3) stresses the importance of case studies in measuring success, to find out what works and what does not. Also the extent to which an enterprise or set concrete goals and achieve it, evaluate efforts and give feedback to clients and supporters, creating new business, building skills and impart it locally, best impact for least cost and efficient use of technology.

David McClelland looked at entrepreneurial success from a different angle honing in on the entrepreneur in person. He found that it is not a person's position in life, or initial advantage they have that contributes to their success in business, but rather certain personality characteristics or competencies, namely need for Achievement, initiative, assertiveness, efficiency orientation, systematic planning and commitment to work.

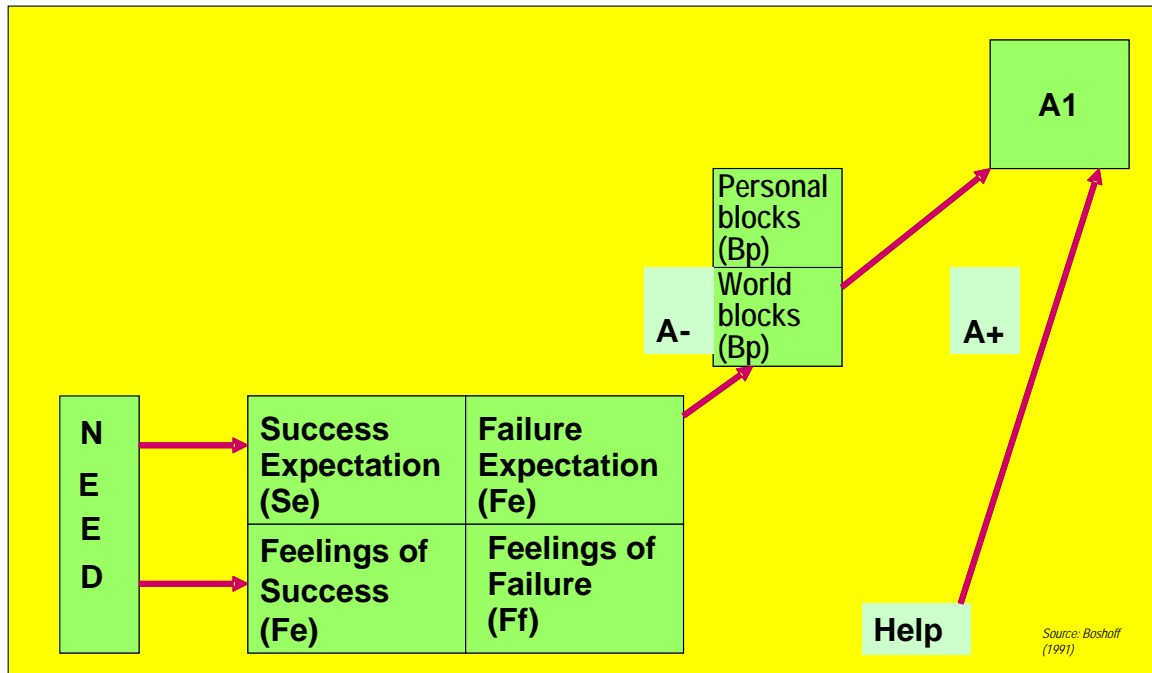
Moreover he concluded that for promoting economic development and promoting success one should start with people rather than resources, making sure there is a critical mass of competent, highly motivated entrepreneurs who will on own initiative develop an area or business. They will find the resources needed and will need fewer resources than those without the personality characteristics which are crucial for entrepreneurial success (McClelland 1986:229).

Robertson, Collins, Medeira and Slater (2003:313) agree with McClelland that an enterprise will neither start up nor succeed without motivation. They also quote the Global Entrepreneurship Monitor (2000-2002) that found on national and international levels, social and cultural attitudes in the United Kingdom cause business failure and pose the strongest barrier to the growth of entrepreneurship due to negative attitudes towards wealth creation and self-employment.

4.3.2 Model of achievement behaviour

According to Boshoff (1991) the model of achievement behaviour centers on the way a person thinks and that the thoughts can be analysed in order to determine the individual's predominant motive. This in turn relates to the person's behaviour patterns. People who think a certain way tend to behave accordingly. Like Boshoff, Hofstede's (1980) conception of socio-cultural dimensions influencing worker's attitudes towards work (motivation) is helpful to explore their implications for entrepreneurship development.

Figure 4.2: Model of Achievement Behaviour



Boshoff (1991)

Moreover, persons with a strong need for achievement react to failure and success. The feeling of failure is a negative reaction associated with failure to reach an achievement goal. There may, however, be a positive aspect to this feeling, because it is usually associated with disgust and despondency. If the entrepreneurial performance of a person needs to be improved, they must be taught to handle this feeling of failure. They must be taught to be angry with themselves and the failure must be seen as a reason for trying again. It must be noted that the feeling of failure, just as the feeling of success, differs from the expectation of failure or success in that these feelings are experienced after an action has been completed, whereas expectations are experienced before the result of an action is known.

Fox (2004:1) quotes Winston Churchill in this regard saying: “Success is the ability to go from failure to failure with no loss of enthusiasm”. Churchill continues to say that the entrepreneur should see failure as a temporary set-back, an investment in education and most importantly an opportunity to learn and do better next time.

4.3.3 Five Key Successneur™ Model of Business Success

According to Pretorius (1999) success can be defined as the achievement of goals. So once one has set a goal or series of goals and you achieve them, a person can be regarded to be successful. Failure being the opposite of success, one can deduce that non-achievement of realistic goals can be regarded as failure. What complicates the picture is that some goals may be achieved and others not which could be perceived as partial failure or marginal success.

Business ventures are complex and have various goals whereby success or failure can be determined. Many authors report different factors that determine the success of a business. A lack of attention and focus on these factors in a venture will contribute to its failure. The more they are lacking the further the venture will slide down the failure scale. The following five key factors are interrelated and once the entrepreneur masters the concepts behind them, it will halt the failure slide and help the entrepreneur to measure success:

•Attitude and motivation

The starting point is a positive outlook and feeling about being successful in business. It is your choice to have a positive outlook – it goes hand in hand with ‘locus of control’. An attitude of success refers to the frame of mind in approaching challenges and tasks. Perseverance is another element that makes entrepreneurs succeed as they never give up. Low levels of achievement motivation leads to higher chances of failure.

•Positioning

Positioning largely takes place in the minds of consumers confirming how they view their products. For example KFC food-franchises are positioned as a ‘convenience’ product that is also fun and its marketing promotions are aimed at toys for children. Nando’s on the other hand concentrates on giving people a “memorable experience” and Chicken Licken is positioned to provide a fair-sized meal at a cheap price.

•Economic model

The economic model describes the relationship between selling price, cost, volume and fixed expenses. If the economic model is not sound, there is no basis for the business venture to exist. There are three questions that should be asked:

- Is the business model economically sound?
- How many concept offerings (products or services) can be sold in the market?
- How much fixed expenses are required to produce the required number of products or services?

Combining all the above gives the **profit** formula

$$P = \Sigma N [S - C] - F$$

P = Profit

N = Number of products

S = Sales

C = Cost

F = Fixed expenses

From the above Pretorius (1999) concludes that economic viability indicates that the venture can be profitable and can be meaningfully pursued.

•Sales forecast and market share

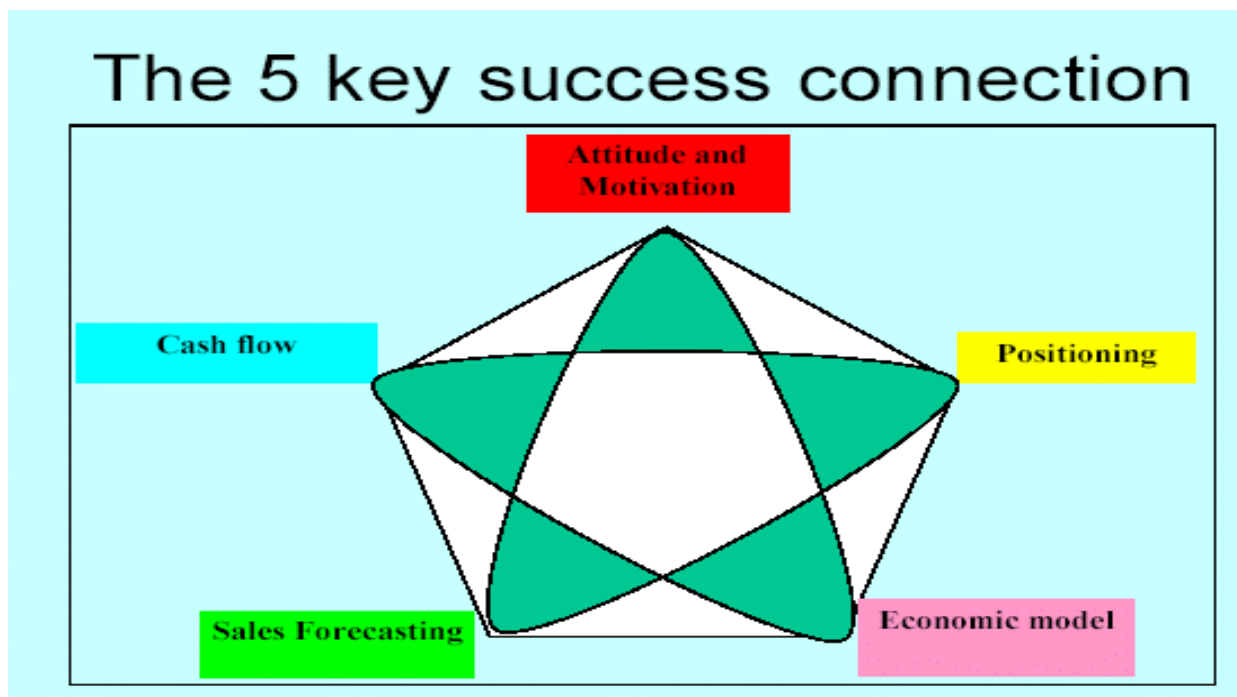
Incorrect sales forecasting is reported as the second most important reason for business failure according to Pretorius. It is best to be on the conservative side when estimating the sales forecast. To do that one could do market research by way of a simple questionnaire, observe and count customers or do a desk research by phoning the local chamber of business office to give you the specialists in your type of business or consult the yellow pages. Other than that the role of mentors should not be underestimated and women entrepreneurs in construction can turn to SAWiC and NAWiC for this information.

•Cash flow

“Cash is the lifeblood of the small business” (Nieman & Bennett 2002:65) and Pretorius (1999) agrees with them that to understand the venture’s cash flow situation is the final key to success. The two important issues about cash flow are ‘flow’ and ‘timing’. There are two kinds of flow, inflow and outflow. Inflow comes into the enterprise primarily from payments received from customers but also capital from other sources at start-up.

Outflows are moneys paid for stock and fixed expenses. Typically an enterprise must buy the inventory before it can sell. It means that the money must be paid before selling can start. In construction materials must be bought, built in and only then can it be claimed back. The inflow of money follows long after the outflow, particularly in construction. If this time cap is too wide, a cash flow problem may arise unless provision is made for obtaining bridging finance. If the timing is not right a situation may arise where there is no cash to pay for goods and expenses. Negative cash flows make financiers edgy and the entrepreneur must show a proper plan for a smooth cash level and flow. So cash flow projections must be in place to enable the venture to operate and make a profit.

Figure 4.3: The 5 key Successneur™ Model of Business Success



(Pretorius 1999:15)

4.3.4 Networking for success: The dynamic model of relationship building

The relationship between networks and entrepreneurship has received increasing attention in recent years. Not only are networks important for entrepreneurship, but the entrepreneur has to engage in networking to ensure survival of her/his venture (Jack & Robson 2002:1). Research by these authors indicates that formal and informal networks

provide a resource base that is crucial to starting and developing a business because by supplementing the entrepreneurs' own business resources, the network improves the likelihood of success.

According to Jack & Robson (2002:1) informal sources of advice include friends, family members, business associates, social groups and associations. The formal sources of advice range across the private sector from professional and technical specialists to more generalised consultants, supply chain, client and customer links. In addition there is a wide range of sector-based trade and professional associations as well as chambers of commerce. Most entrepreneurs belong to at least one of the aforementioned.

Antoncic (2002:1) agrees with Jack & Robson that the entrepreneur's network is important for acquisition of resources and business venture performance. He argues that ties forming an entrepreneur's network may consist not only of separate exchanges of goods, services, information, ideas, influence and effect, but also some combination of different ways of connection referred to as multiplexity. He proved in his study that the formation of multiplex social network structure can be beneficial for the entrepreneur's venture growth.

Zhao and Aram (1995:349) while they agree with the authors above, add another dimension to networking in their research. They propose that networking can be understood in terms of range, the number of external relationships to obtain resources and of intensity, the frequency of contact and amount of resources obtained from these relationships. They concluded that where networking range and intensity are deemed important in the growth process, new venture success may call for entrepreneurs to reach out deliberately to external organisations to capture needed resources. To a certain extent such networking activities run counter to important entrepreneurial motivations of independency and autonomy. The results of their study imply that entrepreneurs need to combine the spirit of independence with the reality of resource dependence and balance personal autonomy with strategic business relationships. Zhao and Aram further established that high-growth firms reported a greater range and intensity of entrepreneurial networking than did low-growth firms. In terms of global networking the study found that many foreign businesses seek license agreements, joint venture partners, equity participation or channel relationships with young developing

ventures. This is of particular interest to SAWiC where not only globally but within SA established firms are interested in such relationships to comply with procurement policy and procedures. Zhao and Aram (1995:350) concluded that although networking activities may have different cultural roots, firm success appeared influenced by the same principles of networking.

Nhlengethwa (2003:1) defines a network as a specific type of relation linking a defined set of persons, objects or events or a set within which certain types of relationships exist and finally social relationships among individuals and organisations. She distinguishes between network and entrepreneurial networks, defining the latter as the active process of setting up and maintaining mutually rewarding and co-operative relationships with other persons or businesses that can offer critical support to or for the growth and development of a business. Personal networks indicate a direct relationship and business activities, face to face interaction, focusing on the individual, friends and family members of the entrepreneurs. When the entrepreneur makes contacts through direct interaction it is called direct ties, as opposed to indirect ties where contacts are made through a relationship gained through personal networking. Role set includes networking contact such as with partners, customers, suppliers, bankers, distributors, professional associations, friends, family members, colleagues and people from business organisations. Social networks are formed by social bonds, based on community ties and conformity to collective culturally induced values, attitudes and behaviours, while extended networks comprises of a formal network where relationships are formed that are patterned and beneficial to the entrepreneur and her business enterprise. It requires a pledge to formal membership like with SAWiC and NAWIC. Constituents tend to be colleagues and/or people from business organisations with similar goals and interests. SAWiC and NAWIC are good examples of combined extended and social networks. They are termed dense ties where there are high levels of association between the network ties and where members know one another well and interact frequently. Reciprocity within networks are linked to equity, stability and maintenance of the networks as well as the tangible or intangible outcomes yielding positive results to networking parties.

Entrepreneurship has embraced networking theory as a mechanism for exploring the creation and development of new ventures. Drakopoulou Dodd and Patra (2002:1)

define entrepreneurial networks as the sum total of relationships in which an entrepreneur participates and which provide an important resource for their activities. These relationships may be articulated through the mechanism of membership in formal organisations (such as SAWiC and NAWIC) through the links an entrepreneur develops with suppliers, distributors and customers, or through the utilization of social contacts, including acquaintances, friends, family and kin. Kodithuwakku and Rosa (2002: 431) concur with Drakopoulou Dodd and Patra that successful entrepreneurs have the ability to extract value from their social networks and contacts, thus being creative in finding ways to mobilise scarce resources and market access. Networks are also useful in ensuring that goals and visions are realistic, as it increases the entrepreneurs' level of aspirations, expertise, identifies opportunities, provides practical assistance and information, emotional support and act as a sound board for ideas.

The competencies that entrepreneurs pool in bringing together appropriate individuals and organisations around a project or a goal through networking can lead to competitive advantage (Miller & Shamsie 1996, as quoted by Senjem & Reed 2002:1) Networks allow the entrepreneur to take advantage of the diversity of information and to develop opportunities for future projects and to reduce the risk in new ventures through networking and tapping into expertise and experience (Senjem & Reed 2002:1, quoting Coleman 1988 & 1990).

Harris and Wheeler (2005:204) conclude that for some entrepreneurs relationships formed through networking do not just fulfil a marketing function, give information or yield access to more networks, but they direct strategy and can transform an entrepreneurial enterprise. They found that the relationships rarely originate from clients or suppliers; they come from any where in work or social settings. These relationships need to mature and develop into trusted inter-personal relationships developed through social interaction, an issue previously neglected in research. South African Women in Construction like their American sisters in NAWIC, acknowledge this important aspect of networking, providing a range and combination of opportunities to network formally in workshops, task teams, joint venture projects, trade shows and socially oriented fundraising events like golf, gala evenings and fun runs. Their annual general meetings are rotated between provinces and even conventions of their affiliates abroad where

organising and travelling to these events result in social interaction, team and relationship building.

Linking to the global networking agenda of Zhao and Aram, Kovalainen, Arenius and Galloway (2002:1) argue that while the changes in the economy and restructuring of the labour markets in terms of employee qualifications, the nature of work contents and contracts are changing, these changes have also raised the profile and importance of entrepreneurship within the global network economy. As women researchers they discovered that the gap between the genders in entrepreneurship has remained almost unchanged over time. It is true that women's position in entrepreneurship has become of interest as female unemployment is growing in many countries and the changes that are taking place in the ways large corporations develop some key functions (outsourcing and subcontracting).

Despite the rapid growth of women in professional and managerial jobs in the global and local economies, the breakthrough of the glass-ceiling for women in large corporations, the changes in women's entrepreneurship seem to take place at a somewhat slower pace. Kovalainen, Arenius and Galloway (2002) conclude that the promotion of women's participation in entrepreneurial activities and networking is related to long-term economic prosperity across the globe.

South African Women in Construction has affiliated with the South African women's entrepreneurial networks (SAWEN) and actively follows the dynamic model of relationship building embraced by them. Bennett (2004:1) developed this dynamic model of relationship building (networking) for developing women's enterprise and cites the ingredients for a successful business as an idea with a market, motivation and determination, abilities, skills and experience, planning and management and finally resources, both financial and non-financial in relation to the individual entrepreneur.

Bennett further elaborates that successful entrepreneurship is about managing relationships with a range of stakeholders. Women entrepreneurs should make it a point of knowing who are critical stakeholders in their network and why, also what type of relationship they are entering into and how to maintain it. She stresses that building on trust is central, balancing place and pace.

Bennett (2004) summarises successful networking principles as follows:

- First impressions count - it takes only 90 seconds to make up one's mind about a person
- Preparation is key. Who are you seeing and why? Maximise your networking opportunity
- Establish an effective system for organising and retrieving your network
- A positive, polite attitude is the lubricant to a successful process
- Be a good listener and when you talk, talk about your client's situation not your own. Make notes and summarise to show you understand your client's needs
- Treat your client as you would your dearest friend
- Focus on people as they are introduced so you remember their names
- Reintroduce yourself to people rather than waiting for them to remember you
- Present yourself the way your client wishes to see you
- Have sufficient business cards that are attractive and representative of who you are and what you are doing
- Make notes on business cards that serve as a memory jog and follow-up reminders
- Become committed to the success of the people in your network
- Operate with integrity and professionalism
- Approach each contact with an open mind
- Nurture your networks with calls, notes and gifts in a timely and appropriate manner

In addition to these principles Bennett offers some practical networking tips:

Planning

Choose carefully the events you go to. If possible obtain a guest list in advance. Determine why you are attending the event. Is it for information purposes and networking or specifically for networking? Prepare a 'what do you do' answer that's short, snappy and memorable.

Arriving

Arrive on time for the event – it always seems a lot easier to introduce yourself to someone when you are one of the first arrivals. Wear your name badge on the right. It's

where your eye goes to when you shake hands. Use 'hosts' & organisers to introduce you to people, they are generally well connected and it's in their interest to do so.

Connecting and respecting

Treat everyone the same and never make assumptions about the people you meet. Mix not Magnet! If you are not very confident try not to attach yourself (like glue) to the first person you get speaking to. Remember the person you are talking to, whilst they might be enjoying your company, probably wants to chat to one or two other people as well.

Listen up

Listen to what other people do first and (everyone is interested if you're interested in them) and listen for link words that connect with who you are and what you do.

Talking

Keep conversation to neutral topics, avoid monopolising the conversation. Ask questions that require more than yes/no answers. You will create a better first impression if you copy the pace and volume of the person you are speaking to.

Abundance

Don't ask, offer! Offer information and contacts to match the links. It provides a reason for follow-up and staying in contact. To drink or not to drink? Generally you need a clear head so moderation is the key. Yes it can help confidence but can give others a negative impression. Get out of your comfort zone. For every person you meet and every hour you spend with them, they will be an ambassador for you and make another 10 recommendations on your behalf. Often the crucial moment is when to offer the business card. If people are interested in what you do generally they will ask for a card – don't offer your card right at the outset.

Taking notes

As a memory aid it can often be useful to make notes about a person on the back of their business card.

Follow up

Try to follow up with people you have met (recap on your notes on business cards and add useful contacts to your database).

Finally:

If you have tried all the tips and you still don't feel comfortable "try" again! Practice makes perfect.

Bennett further quotes various writers in defining networks, such as giving without hooks; it is not 'selling'. It is about promoting the company through goodwill; developing and maintaining relationships with people who can affect and impact directly on your business. Networking is the process of gathering, collecting and distributing information for the mutual benefit to you and the people in your network. It is people connecting people, linking ideas and resources and finally networking to establish connections that are mutually satisfying, helpful and uplifting. It is give and take, being clear about your expertise and the resource you can be for others. Quit being a 'Lone-ranger' and have a network diagram that represents the magnitude and diversity of your network.

Another source confirming success through network support is Brüderl and Preisendörfer (1998:213) who empirically proved that the network approach to entrepreneurship' is a prominent theoretical perspective within the literature on entrepreneurship. This literature states that network resources, networking activities and network support are heavily used to establish new firms (network founding hypothesis). Furthermore those entrepreneurs who can refer to a broad and diverse social network and who receive much support from their network are more successful (network success hypothesis) and they concluded that network support increases the probability of survival and growth of newly found businesses. They also found that support from strong ties seems to be more important than support from weak ties.

Similar to Brüderl and Preisendörfer, Steffen (2004) believes that "changing the world today is all about the network". It's about playing well with others. Certainly one needs boldness and inspired leadership to undertake any world-changing mission. Over and above that there is a need for new models, new visions, willing allies and ready resources. Steffen is convinced that these things far more often emerge from collaboration and networks "...than they spring from the foreheads of Fountainhead-

style visionaries”. When doing social change work, the strength and quality of the connections matter at least as much as the leadership zeal of any particular node.

That being the case, business as it functioned in the 20th century, is in fact exactly the wrong model for leadership development according to Steffen. The aim is not to train a whole mess of egotists who excel at making funding pitches to boards. Contrary to that the goal is to “...train people to collaborate effectively, to build networks of innovation and communication, to spread tools, address problems and maximize the impact of available resources. Nourish the network! “ (Steffen 2004).

4.3.5 Mentoring as a success factor

The NAWIC ‘Mentor a member’ programme was initiated as a strategy to increase membership and membership benefits as well as to ensure the success of members running business enterprises.

According to NAWIC 2004 mentoring is an age-old tradition that frequently involves someone more senior who provides support, encouragement and guidance to the learner. Mentors are often experienced individuals who go out of their way to help a mentee reach important goals, understand the structure and membership requirements of an association and become comfortable in participation. An informal mentor provides coaching, listening, advice, sound-board reactions or other help in an unstructured, casual manner.

Effective mentoring does not require large amounts of time. It does require the dedication of both parties. The nature of mentoring relationships varies with the level and activities of both the mentor and mentee and develops over an extended period. The NAWIC mentoring motto is “We make a living by what we get; but we make a life by what we give.”

A mentor is defined by NAWIC as someone who has the desire to share knowledge and experiences with others. A mentee is a person who openly seeks guidance and advice from peers. Both mentor and mentee have the obligation to ensure their relationship is successful and beneficial. The mentoring process is started with a voluntary pledge from a member to share her knowledge and experiences with others.

The mentee is engaged in networking before association meetings. The mentor finds out as much as possible about the mentee and sits with her at meetings. They

exchange contact details. The mentor briefs the mentee about the basic principles and core values of NAWIC as an association that enhances the success of women in the construction industry.

A follow-up is made after the meeting to encourage attendance. Encourage the mentee to participate on a committee. Ask if she has any questions about the association. Discuss her personal goals, educational opportunities and career options and provide assistance to help her meet her goals. Keep all information between the mentor and the mentee confidential. Maintain mentor duties until the new member is comfortable with the association and her branch or chapter.

SAWiC is affiliated to NAWIC and has adopted this programme of mentoring to enhance the success of women entrepreneurs in construction.

4.4 Conclusion

The Department of Trade and Industry (the dti) 2003:29 concludes that SMME development in SA is not the panacea for the underdevelopment and poverty characteristic of the Second Economy; however, it is an important part of the SA government's directed and active strategy to ensure mobility between the First and Second economies, create conditions for sustainable livelihoods and eliminate conditions of extreme poverty. The USA does not face this problem, but closing the gap may be the result of targeted programmes, cultural changes and more stress on entrepreneurial education to more equal opportunities for women.

The models reviewed in this chapter were useful in coming up with appropriate indicators to measure success and test opinions around the success of women entrepreneurs in construction.

Lynch (1998:320) after studying motivators to women entrepreneurs concluded that one way of studying entrepreneurship is to explore the motivations of the entrepreneur on the premise that motivations towards business will determine business performance. The indicators were reflected in the questions of the research questionnaire included as Annexure 2 at the back of this dissertation.

To summarize the models contain the following elements:

Table 4.1 Key indicators of the five models being considered to measure success

Model 1	Model 2	Model 3	Model 4	Model 5
Achievement Behaviour	The 5 key Successneur™ Model	Hupalo	Micro MBA Model	GEM 2004 Report on Women Entrepreneurship
nAch		Psychologically suited, need for Achievement		nAch
Goal or vision Motivation	Attitude and motivation	Love for what you are doing; Proprietary product and demand	Motivation; Opportunity: Taking the gap	Opportunity
Dealing with Feeling of Failure			Dealing with Feeling of Failure	Dealing with Feeling of Failure
Innovation				Innovation
Risk taking	Economic model	Scale of economies	Scale of economies	
Role models Networking & mentoring			Role Models Networking & mentoring	Role models Networking & mentoring
Business plan	Positioning Sales Forecast		Business plan	
Money Management (cash flow)	Cash flow	Maintaining Profit Margins	Money management (cash flow)	
Growth Prospects		Growth Prospects	Growth Prospects	Growth Prospects

Organisations like SAWiC and NAWIC are acutely aware of barriers faced by women entrepreneurs in construction. Raising awareness of women entrepreneurs in construction about the indicators above and actively promoting perpetual learning will go a long way to enhance success in their construction enterprises. In fact, the model of need for achievement stresses the importance of empowering SMMEs to deal with the feeling of failure and to overcome barriers by:

- Motivating yourself by out performing internal standards
- Use your fear for failure to improve performance
- Use your experience of failure to improve your performance
- Create new achievement imagery
- Overcome personal and environmental stumbling blocks

In conclusion it is evident from the GEM 2004 Report on Women and entrepreneurship that mentoring and network support, such as is done by SAWiC and NAWIC, especially at the local level, is at least as crucial in boosting women's attitudes with respect to business leadership and new venture creation. Regardless of per capita income, some of the most successful policies and programmes world wide are those able to increase women's awareness about entrepreneurship and provide them with role models and networking possibilities (Arenius, Langowitz and Minniti 2005:13).

McCLelland (1986:229) concurs with Robertson, Collins, Medeira and Slater 2003:313 that an enterprise will neither start up nor succeed without motivation. If motivation is not a barrier, other factors such as finance, education and idea generation come to the fore. A highly motivated entrepreneur is likely to overcome such barriers, especially where the Government programmes are directed at an enabling environment and entrepreneurial networks and mentoring are available from associations like SAWiC and NAWIC.

Having reviewed the literature on the research questions 'Why do women choose to be construction entrepreneurs? How do they view success and how successful are they? Is there a link between the 'why' and the 'how' questions in Chapters 1 to 4? Chapter 5 now follows with another useful and reliable tool in the format of case studies as suggested by Bridges in item 4.3.1.

Chapter 5

Case studies and the entrepreneurial process

5.1 Introduction

This chapter links the entrepreneurial process with women entrepreneurs in construction in an analysis of capacity building initiatives using illustrative case studies to make it more meaningful. The Courtney Price Entrepreneurial Education Foundation's evaluation of Committee of 200's Growing Entrepreneurs Mentoring Programme that found the major benefits to be business growth through exposure to mentors, role models and the work of other protégés (Lloyd & Herko 2001:1). Another way to increase knowledge and expertise of women entrepreneurs in construction is through case studies.

Honing in on case studies, what is the purpose of a case study? The business or purpose of a case study is particularization and not generalisation. It is to take a particular case, getting to know it well, emphasising uniqueness, placing an observer in the field to observe the workings of the case. It is the objective recording of what happened, examining its meaning and redirecting observation to refine or substantiate those meanings.

What is a case study and where does it fit within research? The case study method is one research design method from several methods available to the researcher. Cooper and Schindler (2001: 135) describe research design as the strategy for a study and the plan by which the strategy is to be carried out. It specifies the methods and procedures for the collection, measurement and analysis of data. There is no simple classification of research designs that covers the variations found in practice according to this source.

A case study will study one topic in depth, while a statistical study will study several topics, thereby allowing for wider research. Case studies therefore reside under the topical scope - breadth and depth - of the study. Statistical studies differ from case studies as they are designed for breadth more than depth. They attempt to capture a population's characteristics by making inferences from a sample's characteristics. Case studies place more emphasis on a full contextual analysis of fewer events or conditions and their interrelations. Although hypotheses are often used, the reliance on qualitative data makes support or rejection more difficult. An emphasis on detail provides valuable

insight for problem solving, evaluation and strategy. This detail is secured from multiple sources of information, allowing evidence to be verified and avoids missing data.

Case studies have often been maligned as scientifically worthless as they do not meet minimal design requirements for comparison; they in actual fact have a significant scientific role. Cooper and Schindler 2001:138 claim that a single well-designed case study can provide a major challenge to a theory and provide a source of new hypotheses and constructs simultaneously.

One organisation that is well-known for its case studies is the World Bank. Morra (Spring 1999) states that their Operations Evaluation Department uses case studies extensively. They use case studies for in-depth consideration of the results of a project or group of projects or to illustrate given points. Case studies have the advantage of being convincing and of capturing the reader's attention. She cautions that they are not generalisable, as with a case however well done, it is difficult to conclude if it is an isolated instance or whether the problem of success is widespread.

Linda concludes that a case study can be defined as a method of learning about a complex instance, based on a comprehensive understanding of that instance obtained through extensive description and analysis of that instance taken as a whole and in its context. Case studies are used to determine why or how a programme or project worked or did not work. The key is an exploratory or explanatory purpose rather than a frequent or extent purpose. In this instance **descriptive illustrative** case studies will be used as it is intended to enhance and add realism and in-depth examples to the literature and empirical studies. It describes what is happening and why, to show what a situation is like.

According Verwey (2003:65) and Worthen (1997:163), evaluators need to be patient to get behind the ethical aspects and truths in visiting and interviewing SMMEs. The best way is not to ask too many questions at all. "If you fire off a question it is like firing off a gun - bang it goes and everything takes flight and runs for shelter. But if you sit quite still and pretend not to be looking all the facts will come and peck round your feet situations will venture forth from thickets and intentions will creep out and sun themselves on a store; and if you are very patient, you will see and understand a great deal more than a man with a gun does." (Worthern 1997:163)

5.2 Case studies and how it links to the entrepreneurial process

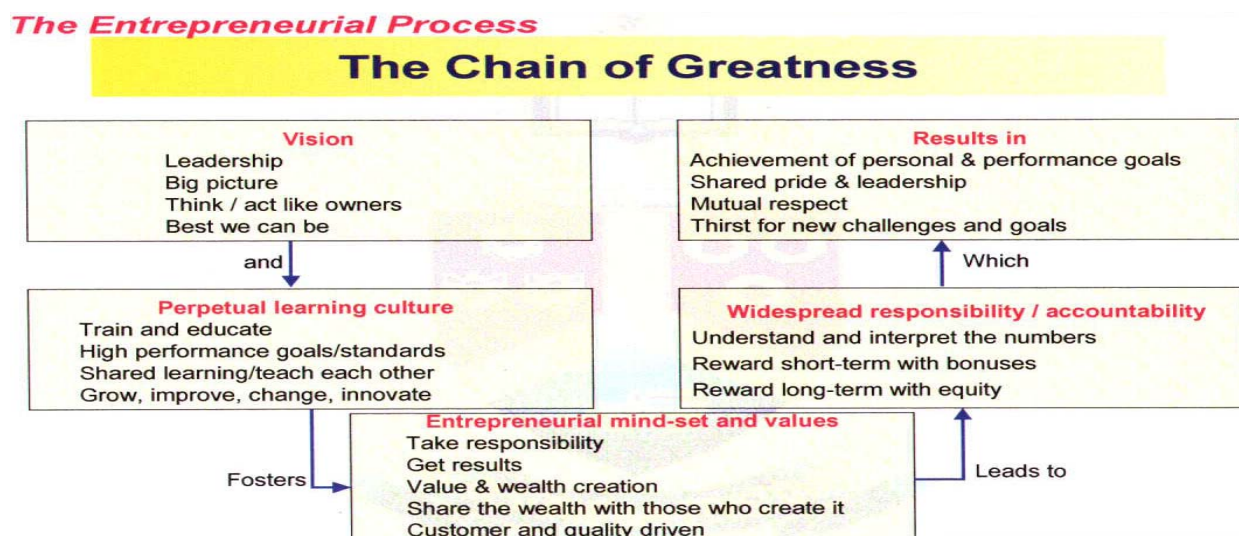
Case studies can be more meaningful if it is linked to the entrepreneurial process that will now be discussed in terms of innovation, triggering events, implementation and growth. Using the Hisrich & Peters (US) model as presented in Chapter 2, table 2.3, similarities and differences of women entrepreneurs in South Africa will be highlighted by way of SA and USA case studies in conjunction with the Entrepreneurial Process and the Chain of Greatness models to enhance the empirical study of the sample element:

Figure 5.1



Hisrich and Peters (1995:39)

Figure 5.2 The Chain of Greatness



Timmons (1999:528)

5.2.1 Innovation

In terms of the environment and personal motivation, according to Wickham, entrepreneurship is about bringing change and making a difference. "The world is not the same after the entrepreneur has finished with it.... The entrepreneur has the power to drive changes in the structure of a society. The kind of world that an entrepreneur envisages, perhaps the possibility of a better world..." can be an important motivating factor (Wickham 2001:35,36). Entering the previously male domain of construction, women entrepreneurs in construction are changing the face of the construction industry. Green of the Stocks and Stocks Basil Read Bouyeagues Joint Venture on the N4 Toll Road to Maputo reports that, during the time spent on the project, the women entrepreneurs in construction were the most loyal and conscientious in their approach to the work undertaken of the companies who sub-contracted to them, "showing *excellent initiative* in producing a very fine standard of workmanship and good quality work" (SAWiC 2000:19). Thus they are excellent role models.

"Entrepreneurship often presents win-win scenarios. The *new value* the entrepreneur creates can be shared in a variety of ways." (Wickham 2001:36) Reviewing Tineke Meijer's eye-catching murals of African design carved in wet plaster, the new value shared in a variety of ways is manifested in the way she designed, created, "...unleashed and helped promote *innovative* techniques whilst also empowering other women entrepreneurs in construction"(SAWiC 2001:26). Tineke, like many other women entrepreneurs in construction, is a good role model and she taught other SAWiC members her innovative technique. In 2004 her daughters and three SAWiC women entrepreneurs were commissioned by the Development Bank of Southern Africa to do the feature wall of their new auditorium in the newly built Vulindlela Training Institute. "In order to understand entrepreneurial motivation, it is essential to recognise that for many entrepreneurs what matters is not the *destination* of the business they finally build up, but the *journey* - the process of creating the business. ...They provide fellow citizens with jobs"(Wickham 2001:36).

An ***opportunity is a gap left in a market*** by those who currently serve it. It represents the potential to serve customers better than they are being served at present. The entrepreneur is responsible for scanning the business landscape for unexploited opportunities, or the possibility that something important might be done *differently* from the way it is done at the moment and, critically, done *better* than it is at the moment

(Wickham, 2001:38). For Kuratko and Welsch (2001:171) the "heart of entrepreneurship is an orientation toward seeing (and acting on) opportunities regardless of existing resources (Stevenson & Jarillo 1990)." Women entrepreneurs are filling the gap left by dwindling skills and technical expertise by taking up careers in project management for example (refer to Section 3.5 and Construction Education and Training Authority findings in CETA 2002:8). This happens regardless of existing resources, as is illustrated by the poverty profile of the sample element of this study.

5.2.2 Triggering events

Hisrich & Peters (1998:79) quote job frustration, interest in and recognition of opportunity in the area, as well as changes in personal circumstances as triggering events for women entrepreneurs. Dollinger (1999:44-45) theorizes that an entrepreneur's inclinations are propelled by negative displacement (e.g. losing a job), being between things (transition from school to career, etc.) positive pull (such as made by a parent, mentor, etc.), and are activated by situations which positively affect perceptions of desirability (message from culture, peers, etc.) and perceptions of feasibility (demonstration, etc.) and culminate in an entrepreneurial event.

The SAWiC association is a product of a programme of the Development Bank of Southern Africa (DBSA), promoting sustainable development and job creation through empowering women and facilitating support for their construction enterprises. The DBSA is "proud to be the *incubator* to this dynamic process of women constructing a brighter future" (SAWiC 2002:6). This *incubation* service is one of the positive pull factors, as is evident from the growth in membership in the SAWiC database from 60 in 1999 to more than 600 in 2004.

5.2.3 Implementation

After the minimum capital for start-up has been acquired, the entrepreneur must employ the capital through *implementation* of the business plan, according to Nieman and Bennett (2002:63). The business usually starts small with one or two employees besides the entrepreneur. The management style and key variables for success will need to be determined once the business starts growing. Managing and **growing** the business are sometimes difficult for entrepreneurs as this process "lacks the reward generally

inherent in the establishment of the business" Nieman and Bennett (2002:63). To illustrate the 'how?' the Hisrich & Peters model in Chapter 2 item 2.9 will be used in conjunction with the case studies that follows below. Starting with *motivation*, the model quotes that need for Achievement and accomplishment of a goal is important to women entrepreneurs in construction. Four of the women in the SA case studies to follow won awards for their projects. In all three case studies the "Independence - to do it alone" of the model is illustrated, being 'self-made' women, capable of strong leadership in their teamwork, but not averse to working with teams.

Looking at the *'Departure point'* in the model, it cites job frustration, interest in and recognition of opportunity in the area and change in personal circumstances. Once again this rings true of most of the role models in the case studies under scrutiny. Thandi Ndlovu left her career as a doctor to become a construction entrepreneur, whilst Monica Dzwimbo, who wanted to become an airhostess, but was frustrated by her physical appearance, became a construction entrepreneur, following in the footsteps of her mother. Phumelele Siphayi likewise left her banking career to become a construction manufacturer and supplier, following and relating to her exposure to construction through her mother and grandmother's building of their own and neighbours' houses and responding to role models.

'Sources of funds' is the next element in the model. 'Personal assets and savings as well as personal loans' are given as the sources. Again this is true of our South African case study examples, as Thandi Ndlovu used her income as medical doctor to set up her venture and laughingly states that the banks are chasing her nowadays, begging her to borrow money. She does not need it, as her venture is 'quite profitable'! Monica Dzwimbo and Stephina van Rooyen ploughed back their profits and made use of 'labour only' contracts, carefully managing their cash flow so as not to become indebted. Phumelele Siphayi used her own funds, although at one stage she and her husband, in the start-up year, borrowed a small sum that they repaid the same year. Phumelele has never needed to borrow money again as she too manages her cash flow strictly and deals only with cash.

'Occupational background' in the model states 'Experience in area of business. Middle management or administrative-level experience in the field. Service-related occupational background'. Many of the role models in the case studies have had experience in the area of business, but not Thandi. Her only exposure to construction was through her

sister who worked in the Housing Section of ABSA Bank and who subsequently also became a contractor. In her case, it was the needs of the community and the challenge that lured her into construction. A few of the role models came from middle management, but Phumelele Siphayi had administration level experience as per the model. Some but not all of the case study role models had had a service-related 'occupational background'. An example is Monica Dzwimbo who came into the field directly after completing her schooling.

'Personality characteristics' in the model are 'Flexible and tolerant. Goal oriented. Creative and realistic. Medium level of self-confidence. Enthusiastic and energetic. Ability to deal with the social and economic environment.' These ring true of the case models whose achievements and energetic creativity are reflected throughout the case studies.

'Background' is listed next in the model, quoting age when starting venture as 35 to 45. "Father was self-employed. College-educated - degree in liberal arts. First-born child." Here the South African (SA) role models differ from the findings of the model. Most of them started their construction entrepreneurial firms in their early or mid twenties. Most of the SA role models are middle children and only Thandi and Angela Broom have had a University or College education. Most of the USA role models have University or College backgrounds. Most of the SA role models' fathers were self-employed, the exceptions being Thandi's father who was a teacher and Stephina's father who worked for Stocks and Stocks Construction Company.

Under *'Support groups'* the model suggests close friends, spouse, family, and women professional groups, trade or women's associations. All four the role models in the case studies are members of the South African Women in Construction association and two of them have husbands who support their ventures. All of them count on their families and friends.

'Types of business started' in the model gives 'Service related - educational services, consulting, or public relations'. The South African case studies differ in this instance in that they are in construction and manufacturing, ironically the two types of businesses quoted for males in the Hisrich Peters model! This confirms that these two business types are viewed as non-traditional occupations (NTOs) as described in Chapter 2, item 2.4.

5.2.4 Growth: Defining the four growth perspectives model:

Financial growth relates to the development of the business as a commercial entity. It is concerned with increases in *turnover*, the *costs* and *investment* needed to achieve turnover, and the resulting *profits*, as well as increases in what the business owns: its *assets*. Related to this is the increase in the value of the business. It measures the additional value that the organisation is creating which is available for distribution to its stakeholders. It is a measure of the resources the market has allocated to the venture, the *success* of the venture and the business's performance in serving the needs of its markets (Wickham 2001:303, 304).

Strategic growth takes centre stage. It relates to the changes that take place in the way in which the organisation interacts with its environment as a coherent, *strategic*, whole. Primarily this is concerned with the way the business grows its capabilities to develop a presence in the market place. It is the profile of opportunities, which the venture exploits, and the assets, both tangible, which it acquires to create *sustainable competitive advantages* (Wickham 2001:304).

Structural growth relates to the *changes* in the way the business organises its internal systems, managerial roles, responsibilities, reporting relationships, communication links and resource control systems (Wickham 2001:304).

Organisational growth relates to the changes in the organisation's *processes, culture and attitude* as it grows and develops. It is also concerned with the changes that must take place in the entrepreneur's role and leadership style as the business moves from being a 'small' to a 'large' firm (Wickham 2001:304).

The *four types of growth* described are not independent of one another. They are merely different facets of the same underlying process. At the heart of that process is the awarding of valuable resources to the venture by external markets because it has demonstrated that it can make better use of them. That is, create more value from them,

than can the alternative on offer. That better use of resources is a consequence of the entrepreneur's decision making (Wickham 2001:304).

This model is applied to the case study on role model Phumelele Siphayi, Marketing Director of Phumken Trading (Pty) Ltd.

5.3 Mentoring as it impacts on growth of women-owned businesses

The Courtney Price Entrepreneurial Education Foundation published a paper based on an evaluation of the Committee of 200's Growing Entrepreneurs Mentoring Programme that was geared towards women business owners whose companies are grossing between \$3-8 million annual revenues in the USA. This mentoring programme annually selects up to 6 protégés, matched with two or three C200 members who serve as their mentors and act as an informal advisory board. The goal of this entrepreneurial education mentoring programme is to help these Chief Executive Officers (CEOs) achieve their visions, grow their companies, increase their profitability, enhance their leadership skills, develop sound exit strategies and increase their philanthropic giving decisions. The results summarize key factors contributing to business growth and increased knowledge about business options.

The evaluation of the mentoring model and its participants revealed significant growth in revenues, changes in the number and calibre to employees, profitability and sales. Benefits recorded in terms of business growth were expanded networks, reduction of the feeling of isolation, a supportive peer group and increased knowledge gained to the areas of expertise of role models and other protégés in the programme.

This study highlights the valuable role that mentoring plays in the development of women business owners and its direct correlation to their business' growth. C200 plans to promote mentoring as a meaningful and effective style of learning as it shares its recommendations and research with educators, policy makers and supporter of entrepreneurial development (Lloyd & Herko 2001:1).

5.4 Growth, Gender and Business Size: Does one size fit all?

A relatively unexplored dimension of entrepreneurship on which male and female entrepreneurs are supposed to differ is their attitude towards growth. An increasing number of researchers believe that the growth of a business enterprise is at least partially determined by the entrepreneurs' motivations and intentions.

Cliff (1998:523), however, researched whether gender differences do exist through quantitative as well as qualitative analysis of personal interviews with 229 small business owners in the Greater Vancouver area of British Columbia, Canada. Her study provided novel insights into the factors affecting an entrepreneur's growth decision and desired pace of expansion. She together with Allen and Truman (1992) found that both male and female entrepreneurs desire growth, but there are important differences with respect to how they wish to expand.

Female entrepreneurs are more likely to establish maximum business size thresholds beyond which they do not wish to expand. Moreover these thresholds are smaller than those set by male entrepreneurs. This size relates to what she can manage and control with comfort, balancing work and personal life. They tend to deliberately adopt a slow and steady pace of expansion, as personal considerations appear to override economic considerations in the business expansion decision. According to Cliff the attainment of such size thresholds appear to be a key trigger in the no-growth decision.

This managed approach by female entrepreneurs to business expansion, not letting growth get out of control, may result in ventures that are able to out-survive those headed by entrepreneurs pursuing more risky high-growth strategies. This might lead to banks viewing women as lesser loan risks, given their more cautious approach toward growth.

Further research is needed to determine whether these different strategy approaches towards growth would affect venture performance. If a more cautious approach leads to long-term survival of the firm, awareness should be raised of the favourable outcomes of

a more cautious approach. “This would require recognition that one approach to business ownership - the desire to head a large quickly growing enterprise - may not necessarily fit all (Cliff 1998:524).”

5.5 Gender differences in the value placed on growth

The social feminism theory asserts that women entrepreneurs have different, but equally effective qualities, values and ways of thinking due to variations in early and ongoing socialisation processes (Black 1989). Men are expected to have high levels of self-assertion, self-expansion and the urge to master, whereas women are expected to possess higher communal qualities such as selflessness, a concern for others and interpersonal sensitivity (Eagly and Wood 1991).

Female entrepreneurs tend to have less industry, management and prior business start-up experience and that contribute to their modest growth expectations (Cliff 1998:526). Women face domestic demands, remaining the primary parent, emotional nurturer and housekeeper despite their entrepreneurial ventures impacting on their ventures' growth prospects report Lee-Gosselin and Grisè (1990:431). Women entrepreneurs are not following the pattern of family and conjugal relationships according to Goffee and Scase (1985:122). In contrast the primary family responsibility of men - to be a good provider (Unger and Crawford 1992) - is compatible with heading a growing firm.

Empirical studies indicate that men tend to assign more emphasis on economic values and quantitative, non-ambiguous measures of achievement of success, such as status and wealth as opposed to women who tend to assign more importance to social values and qualitative ambiguous measures of achievement and success, such as personal fulfilment and strong interpersonal relations (Travis *et al* 1988; Unger and Crawford 1992; Williams 1987).

In terms of success men look at size while women will look at interpersonal relationships and other less objective criteria:

Brush (1992) noted that women business owners tend to pursue a balance between economic goals, such as profit and growth and non-economic goals such as product

quality, personal enjoyment and helping others. Many women entrepreneurs regard growth as 'risky' because it would deter them from achieving their goal of 'employer-employee relationship based upon trust and mutual respect.

The following case studies will serve as role models moving through the entrepreneurial process and value chain and testing the four main constructs of this comparative analysis between women entrepreneurs in construction in SA and USA:

5.6 South African Case Studies

Bliss and Garratt (2001:336, 343) highlight the crucial role that support organisations like SAWiC and NAWiC for women entrepreneurs in transitioning economies can play. They conclude that 'best practices' and understanding the unique needs of women entrepreneurs are the keys to developing effective support organisations that are viable. Networking and case studies are valuable learning tools for such organisations as SAWiC.

Kodithuwakkhu and Rosa (2002: 431) in their study of the successful emergence of entrepreneurs in a constrained environment concluded that the nature and impact of the entrepreneurial process on economic and business success is difficult to research as there are many intervening variables to consider. It is also a complex ongoing evolutionary process which can only be fully understood in the context of the wider socio-economic environment. Conventional cross-sectional quantitative approaches can only provide limited insights and answers on the entrepreneurial process. They found that the case study approach is useful to explore success of entrepreneurs in relation to the entrepreneurial process. Learning from their experience, the same approach will be followed using the above models to analyse case studies in South Africa and the USA and how they relate to the four constructs of this research study.

SA Case 1:

Illustrative case study on performance hampering barriers:

The fatal barrier of a women entrepreneur

Sarah Nhlapo was a successful construction entrepreneur, active South African Women in Construction (SAWiC) member and role model. She specialised in building houses and doing paving and she did it with love, passion and dedication. Sarah availed herself of many of the training courses that were presented via SAWiC and was mentored by the SAWiC guru, 'Magog' Xandra Vermaak, a contractor having 45 years experience and who is the SAWiC national treasurer. The nickname 'Magog' means grandma and guru and is the highest title of respect that African women give to another woman they respect immensely. Not only did Sarah constantly improve herself through training, but she cared also enough about other women and committed herself to develop SAWiC towards empowering women in the construction industry.

At the 2001 Rand Easter Show, she did duty at the SAWiC stall, marketing SAWiC and the women entrepreneurs in construction. Sarah, like many other women contractors, was also a wife and a mother of two children. The man in her life and their extended family often depended on Sarah's business ventures for an income. This prevented her from expanding her construction business to the extent that she would have liked to.

What SAWiC members did not realise was that her entrepreneurial performance sparked jealousy that brought out the "dark side of family life" (United Nations 1991:19). When Sarah wanted to grow her business she became the victim of discrimination, oppression and domestic violence and was beaten. At the height of her entrepreneurial career, and after she had completed an impressive housing project successfully, Sarah Nhlapo, in her early thirties, died a brutal death at the hands of her husband, his family and allies in their community. Her husband in turn was killed by Sarah's brother in revenge.

Sarah Nhlapo featured proudly on the cover page of the SAWiC Annual Report 2000 with the houses that she had built with her mainly women team in the background. One year later pictures of her funeral appeared in the 'In Memoriam' section of the SAWiC Annual Report (SAWiC 2001:18). A tragic victim of discrimination, oppression and violence, inflicted on her by her 'loved ones'. Violent discrimination against Sarah Nhlapo ended her successful entrepreneurial career.

How many women entrepreneurs like Sarah Nhlapo must suffer and die before it is realised that legislation and implementing measures, mechanisms and incentives are cheaper than orphaned children and lost human capital? Sarah's tragic death is one of the reasons why the author decided to include the section on discrimination, oppression and violence against women hampering their entrepreneurial development and performance (Verwey 2003:48).

Analysis of SA Case 1:

This case study highlights a woman with a high need for Achievement, highly motivated to do the best for her family, other women in construction and SAWiC. She was in construction because she loved it (positive pull factor), but also to raise the standard and quality of living of her family. In terms of the chain of greatness, it is clear that Sarah was a leader in her construction firm and had a vision for other women contractors and SAWiC as well as for her family. She was mentored and was mentoring her team. She did not have a college education, but believed in perpetual learning, availing herself of as many training courses as possible to improve her performance. She was respected in SAWiC and by her team of workers and respected them in turn. Her successful housing project is an example of how she achieved her goals. She embraced and lived the NAWiC core values to which SAWiC also aspires: She believed in herself, persevered with the courage of her convictions and dared to move into new horizons. She was successful in what she did because of living out those core values and wanted to expand and grow her business but she tragically faced the final barrier to her entrepreneurial construction career dying a brutal death.

SA Case 2

Women entrepreneurs in construction teaming up for success: Kamarifi Consortium

(The positive enabling role of SAWiC in success and overcoming barriers through networking)

If you thought the business of bricks and mortar was purely a man's domain, think again. Women are fast making in-roads into the industry and in a big way too. Kamarifi, a women's consortium comprising Kedibone Nyanga, Mapule Leshega, Refiloe Mekgwe, Florence Seathlolo and Tham Tam, have been subcontracted to build student flats in Auckland Park by Beckers Construction (Komane 2004:26).

Formed in 1991, Kamarifi is an acronym made up of the consortium's co-founders' names: Kedibone, Mapule and Refiloe. According to the women who are the breadwinners in their homes, the idea came about because most of them were not working. Prior to joining the construction industry, they were involved in unsuccessful sewing, catering and clothes selling projects. Their decision to form a consortium originated from joining South African Women in Construction who encouraged consortiums among women contractors to overcome capacity problems and to enhance access to funding. Pooling their expertise and resources helped to overcome many obstacles.

The camaraderie of the women and the comfort of the SAWiC support network on tap boost morale. Kedibone, Mapule and Refiloe say that South African Women in Construction (SAWiC) not only improved their networks, but since 1999 constantly empowered women contractors through the training and awareness workshops they offered. Kamarifi consortium were grateful for courses that over and above skills training like bricklaying, paving, painting and plumbing, also improved their tendering and pricing skills, not forgetting the Occupational Health and Safety Course that gives SAWiC members a competitive edge in the building sector.

Kamarifi built the student village that is called Laborie. (Komane 2004:26).

The Kemarifi group's spokesperson, Mapule Leshega is a divorcee and mother of five. About being in construction as a woman and commenting on latest building project she says: "It is a challenge to build a four storey building. Life in the building industry is tough, especially for women. Our motivation stems not only from the need to feed our families, but the love we have for construction. One does not become a contractor overnight. You must have perseverance, patience, dedication, as well as willingness to learn and to face challenges. My message to women is to form consortiums as each member has different skills and expertise to offer and by pooling resources it is easier to access and leverage more resources. Join an association in your field as SAWiC has offered us a platform to share experiences, expanded our networks and has been a voice for women in the building industry" (Leshega 2004).

Analysis of SA Case 2: The Kemarifi women are all single mothers who joined construction because previous entrepreneurial attempts at catering and sewing were not viable and they need to feed their families. Despite these negative push factors, they love construction and despite many challenges they choose to stay in construction because they love it (positive pull factors). None of them have college educations but all made use of SAWiC training courses and mentors like project manager Sita Vosloo (a woman and SAWiC service provider) and the Kemarifi women sought solutions to obstacles like finance. They believe in the nurturing provided by SAWiC and its networks. They too have the characteristics and behaviour quoted in the chain of Greatness in that they have the vision, are leaders in their communities for SAWiC as well as on their construction sites, are owners of their business, believe in perpetual learning, have the entrepreneurial mindset and values of taking responsibility, getting results, are customer and quality driven and pursue value and wealth creation. They have mutual respect in their consortium, their construction work force and share in the pride of SAWiC achieving women entrepreneurs. They look for new challenges and their latest project is successful as a first for them as a consortium. They, like Sarah in SA case 1 live out the NAWiC (also adopted by SAWiC) core values of **believing** in themselves as women; **persevering** with the strengths of their convictions; **daring** to move into new horizons.

SA Case 3

Joint venture: Husband and wife team: LFS Building projects

(Positive role of SAWiC and networking to overcome barriers, high motivation to mentor others and achieving success)

LFS Building projects is a construction company owned by a husband and wife team, Fred and Linda Smith. Their business was established in 1986, operating as a small contracting company in Eldorado Park, south of Johannesburg. Originally their market was confined to housing and insurance jobs in the black townships, until Caltex Oil gave them a breakthrough in maintenance work, re-branding service stations as well as concrete and steel work for Pylons. In 1996 they opened a hardware store to supply their construction projects and small contractors in the area. Subsequent to that they opened the first Dulux Paint Centre in the area in 2002.

They have an innovative team providing specialised services and they do not compromise on quality. "Success comes only with constant efforts and through education and training of your workforce." They see their role as meeting the client's needs within time and budget constraints, strategically adapting with changes in the environment.

Linda, a SAWiC member, comes from an accounting, secretarial and retail management background and she has a lot of experience in the financial side of the business. Linda believes for any business to grow it needs proper planning and administration. She was one of a delegation from NafcocJCCI who travelled to Belgium in the Chamber's Gazelle Programme in 1996 where she improved her business management skills. In 2004 she joined a SAWiC delegation for intensive training at NAWIC Convention 2004 in the USA where the courses focused on how to professionally run and improve your construction enterprise, association and how to enhance personal growth. Her husband, Fred, started his career in construction in the early 1970s, later working as a buyer for Wits University as an importer and afterwards moving into the insurance field. He was instrumental in founding one of the first black brokerages.

This husband and wife team is a living experience of a 'joint venture' of a different kind, complimenting each others skills and expertise, sharing each other's interests and

working towards a common goal of empowerment, not only of themselves but also those around them. Their membership of SAWiC and NafcocJCCI illustrate the benefits of joining professional associations and industry bodies for their own advancement, but also for sharing and mentoring other construction entrepreneurs.

Their future plans include a second development project in the Vaal Marina where there is a huge opportunity in property development, as well as Phase 1 of their own shopping complex that includes a supermarket, hardware and bottle store (NafcocJCCI 2004:10). Their entrepreneurial flair is evident from all these initiatives. They continuously scan the environment, move with the times and their advice to other entrepreneurs is as you improve yourself, also uplift others around you, investing in a brighter future in true SAWiC spirit. (Smith 2004)

Analysis of SA Case 3: The Smith couple entered into construction because they love it and are interested in it. In a bizarre way the limiting of black and coloured people to trade in their own areas only created a window of opportunity for them. The skills and training they both had were also positive pull factors into construction whilst their marriage was also a positive influence of motivation through joining skills and complementing each other in construction and entrepreneurship. In terms of the chain of greatness entrepreneurial process model they both showed leadership in their company, their community as well as in the Associations they belong to. They have vision, saw the bigger picture during the previous political era and they think and act as owners and do the very best they can. They believe in perpetual learning through their associations, share their learning and opportunities with others, grow, improve, change and innovate in expanding their business continuously. They show an entrepreneurial mindset, take responsibility, get results, create value and wealth and are customer and quality driven. Their successful continuously growing business demonstrated personal achievement of goals, as a couple they share pride in what they are doing with mutual respect a golden thread that runs throughout their years in business enterprising. They are still looking at new challenges and do not rest on their laurels after so many successes in construction entrepreneurship. Like the previous cases Linda and Fred Smith live out the NAWiC (also adopted by SAWiC) core values of **believing** in themselves as women; **persevering** with the strengths of their convictions; **daring** to move into new horizons.

SA Case 4: Going it alone: SAWiC member Meisie Ndlovu

(Overcoming negative barriers through positive high motivation and need for Achievement. Success crowned by African and SA awards)

Ten years ago Meisie Ndlovu lived in a corrugated iron and metal shack of 3x3 meters in the Soshanguve area North West of Pretoria. She was a domestic worker at first who later became a trainer for hairdressers. Her husband had left her for another woman and she had to fend for herself and their three kids as well as two kids from her brother's broken marriage. With her entrepreneurial spirit Meisie wanted to do better for herself and her extended family. She sent her one son to law school and the other one was trained in information technology, saying "I will get a pain if my children could not go to school, so I will work for the rest of my life for a better future for my children".

That same shack she lived in initially is now her tool shed. She still lives on the same stand, but now in a three-bedroom brick house. She built the house by herself and thought that she could do that for others too. Inspired by Soshanguve's reconstruction, she joined a women's construction co-operative called Bakgoni - Tswana for "we can do it". In the meantime she registered her own company, Meitho Construction. Lacking a truck, she hand-carried tools, cement and poles to her first job and hand-wrote invoices. That is how Meisie started her building career in 1999 (Framiery 2004).

She joined South African Women in Construction in the same year. For three months she hitchhiked 150km to Nelspruit in Mpumalanga to study construction management and skills. She received training on the N4 toll road, a project where women contractors tendered and participated successfully after preparatory workshops facilitated by SAWiC and the DBSA. A training budget was built into the contract package of the concessionaires. Meisie did paving and erected guardrails at the toll plazas and underpasses on the freeway project. Her evaluator wrote to SAWiC about her impressive work: "Excellent". It is therefore not surprising that the DBSA nominated Meisie with other women contractors for the prestigious Pan African Broadcast and Heritage Achievement Award for women builders in Africa during 2000 and that, together with two other women contractors, she emerged as a winner.

Subsequent to that Meisie worked on the Bakwena Platinum Highway, having had contracts with the Platinum Joint Venture. She was identified and sponsored through the Platinum Joint Venture's participation SMME programme in November 2003 to attend

an Entrepreneurs workshop presented by the South African Excellence Foundation. The workshop involved three days of seminars, workshops and group work on entrepreneurial principles. At the end of the workshop, Meisie Ndlovu was awarded a certificate of recognition for an emerging company (Bakwena 2004:4).

Throughout her contracts Meisie regularly attended and participated in the SAWiC workshops and meetings. Together with 229 other delegates countrywide she received her training certificate for successfully participating in the training course on Occupational Health, Safety, HIV Aids- Risk- and Environmental Awareness and Respect for people at a Women's day function in August 2004 at DBSA. The workshops formed part of a sustainable development series financed by the DBSA Development Fund and presented by experts recommended by the construction industry development board (cidb). Meisie's message to other women entrepreneurs is to persevere, not to forget your roots where you came from, have a learning spirit and to share experience and draw support from an association such as SAWiC. (Ndlovu M 2004)

Analysis of SA Case 4: Meisie is a shining example of motivation, need for achievement, selflessly working to provide a better environment for her family and others and not daunted by obstacles such as her husband leaving her for another woman and to care on her own for 5 children, two of them not even her own. She does not lick her wounds and she does not know the meaning of the words jealousy or selfishness. She came into construction not only because of the push factor of a husband cheating and jilting her, leaving her alone to care for the family, but rather because of positive pull factors of her entrepreneurial spirit wanting challenges, success and a better life and education for her children, not having had that privilege herself. Those challenges and satisfaction she found in construction, loving it enormously. She overcame barriers such as lack of own transport and equipment, steadily growing her business and improving her training to eventually buy those things she lacked at first. In terms of the chain of greatness she showed vision, leadership in her community and in SAWiC, acts and thinks like an owner, is perpetually improving her learning, take responsibility, gets results and success crowned by an SA and an African Award. Like the previous cases she lives out the NAWIC (also adopted by SAWiC) core values of **believing** in herself as a woman; **persevering** with the strengths of her convictions; **daring** to move into new horizons.

SA Case 5 Networking to make inroads into road-maintenance technology:

Angela Broom - an entrepreneurial manufacturer and innovator

(Need for Achievement, overcoming barriers through networking and success)

Angela, an entrepreneur and innovator, originates from the United Kingdom and moved to South Africa in 1981. She holds a marketing diploma from Damelin but became interested in roads technology. She started to develop herself by working with engineers, firstly at a subsidiary of Murray & Roberts in 1984, where she in 1986 launched prefabricated products. She left them in 1993 to start her own company, patented and launched her product nationally and internationally. It was a common sense solution to potholes and the need to maintain SA roads. The writer of this case study jokingly said to Angela during the interview that she must have got the idea from 'band-aid' as that is almost the same concept to 'make the road sore better'. But Angela did not stop there. She joined the South African Entrepreneurial Network (SAWEN) who in turn introduced her to SAWiC. SAWiC then linked her to Technology for Women in business where she at the Women's day celebrations in Kimberley offered opportunities and training to women entrepreneurs (Broom A 2004).

Analysis of SA Case 5: What is remarkable about Angela's life story is that she came to a foreign country, deviated from her marketing comfort zone and plunged into the highly sophisticated field of technology. The challenges she faced was firstly to be accepted as a foreigner in a new country, with no existing networks and having to build up her future from scratch. The next challenge was to be accepted in the male dominated building industry. Angela worked hard at establishing her networks and credibility. Her dedication, good inter-personal skills, professionalism, hard work and success earned her respect. Combining her entrepreneurial flair with common sense, learning from being interested in what happens around her, spotting an opportunity, working purposefully and dedicatedly to come up with a new invention, as well as applying good business skills and her marketing background is what lead to Angela's unprecedented success in a new area of expertise, a new country and a male-dominated area. Angela is a role model worth following and one of SAWiC's champions concerned with empowering women. Like the previous cases she lives out the NAWIC (also adopted by SAWiC) core values of *believing* in herself as a woman; *persevering* with the strengths of her convictions; *daring* to move into new horizons.

SA Case 6: Family as a role model - positive pull factors - Monica Dzwimbo

(Civil contractor: roads – Positive pull factors, Need for Achievement and Success)

Monica always dreamed of being an airhostess, but her weight kept her grounded, until she learnt to love the road. Today, she has a team of labourers helping her prevent soil erosion along the R2 billion Maputo Corridor Toll Road that cuts through South Africa's Mpumalanga Province on its way to Maputo, Mozambique. Her entrepreneurial mother, Mary, who used to own a housing construction company, MG Dzwimbo & Daughters, and built 450 low cost houses in Palm Springs, Vereeniging, is her inspiration. When Monica was in her matriculation year at school, she began mixing building sand for her mother's company. She initially thought the job was not smart enough for her, but now she is standing proudly under the blazing sun along the Schoemanskloof alternative road west of Nelspruit (Mpumalanga). She employs five men and five women having been awarded her first tender in 1999 to install underground drains. In 2001, she won the prestigious Pan African Broadcast and Heritage Achievement Award (PABHA) in Nigeria. The Southern African Development Bank nominated her for the award, which is coveted by many women entrepreneurs in Africa. She has completed a number of courses in civil engineering and business management and believes that women should seize such opportunities. Her hectic schedule allows her to see her husband and five year old son every second weekend only, but she has set her sights on scooping a tender for N4 Platinum Corridor Road that stretches from Warmbaths to Botswana. When she retires one day, she intends to start a truck hiring business, because she won't have the physical strength to work on roads.

Trans African Concession (Trac) won the 30-year concession to build, operate and transfer the Maputo Corridor Toll Road, and has eight women sub-contractors out of a total of 36, according to Trac Human Resources Manager, Hannes van Wyk (Singwane 2002:1).

Analysis of SA Case 6: Monica is woman who has dreams and goals and therefore vision, thinking into the future into her retirement age. She plans carefully, is accountable, achieves her goals and has received an African entrepreneurship award to crown her success. She believes in perpetual learning, perseveres, make sacrifices to

see her family only every second weekend. She is in construction because of positive pull factors, her mother being her entrepreneurial example in construction. In the beginning, having had to start from the bottom and work her way up, it did not seem very glamorous for her. She reaped the reward for that perseverance because receiving the Award and seeing your completed work contribute to the economy of South Africa is truly glamorous. She fits all the criteria of the Chain of Greatness and aspires to live the NAWIC (also adopted by SAWiC) core values of **believing** in herself as a woman; **persevering** with the strengths of her convictions; **daring** to move into new horizons.

SA Case 7: Overcoming barriers in a non-traditional occupation as civil projects contractor - Stephina van Rooyen

Another bright star in the SAWiC constellation is **Stephina van Rooyen** of Soshanguve, who is in the process of completing some projects for the Department of Agriculture. The projects are to install electric fencing at game farms, close to Potgietersrus (19 lines 40 km in length) and in the Marble Hall district at Arbie village, as well as a water canal construction project in Machadodorp. Stephina handles projects of R100 000 to R150 000 on a labour-only basis. This unique woman started her career as a construction entrepreneur because of her passion for building. Stephina's father worked for Stocks and Stocks and she sometimes used to accompany him to work. That is where it all started. Stephina, along with other SAWiC members, made a breakthrough as sub-contractors on the N4 Toll Road to Maputo through SAWiC intervention. She did so well completing her contracts ahead of time that she was soon approached to carry out more work in Mpumalanga. Once she told a consultant that she did not have the experience to do a specific contract he had asked her to take on. He told her that having watched her performance on the toll road sub-contracts, he was convinced she could do it - and she did!

Stephina, in the true SAWiC spirit, also empowers other women in construction. She works with a core team and then recruits local labour in the area where she works. In Marble Hall she was battling to find workers who could do calculations, measure accurately and work with a spirit level. She began to search for ladies who had taken Mathematics as a subject at school and who had passed their matriculation

examination. She found five young women who were unemployed and who met these criteria. They were a huge success. They had previously had some training through exposure on Non-Governmental Organisation (NGO) projects for Ruto and Eskom. Stephina currently employs 38 people, 10 of them women.

When asked how she manages the male workers in her team, being so petite and beautiful, she says that a professional attitude, being firm and fair, as well as laying down the rules in terms of productivity and related compensation (site economics) during the first personal interview, does the trick for her. She is permanently on site and makes sure she knows what is going on. Her core team is loyal and a great help on new projects and environments. She laughingly recalled an incident where some workers came to ask for jobs. As Stephina arrived to do the interviews one man, mistaking her for a fellow job seeker said: "Hi baby!" She pretended not to hear him and proceeded to the office. He was embarrassed when Stephina conducted interviews with prospective workers and when he realised she was the one who would be paying him! She is a no-nonsense person and tells them clearly that if they make trouble or do not perform, they will be in danger of losing their jobs.

Stephina says her success is because she personally interviews workers for employment, treats them strictly but fairly, and prices and plans her projects thoroughly. She does not experience problems with cash flow and bridging finance as she makes sure that she ploughs back some of her profits into the next project. She maintains that pricing correctly, being productive and having a hands-on approach leads to success. She never takes on more projects than she can handle, making sure that she delivers quality work on time and within budget. Although she owns a bakkie, she only uses it when suppliers cannot deliver items and makes use of public transport (taxis) to move from site to site. This is more cost effective and saves her unnecessary wear and tear and maintenance costs on her bakkie. She is full of praise for the Department of Agriculture and also for Siyaya fencing company in Potgietersrus, who went out of their way to empower her as a sub-contractor on one of their projects. Stephina is grateful for SAWiC's networks, support and interventions that have given her and other women contractors a breakthrough (Verwey 2003:23).

Analysis of SA Case 7: Following the criteria of the Chain of Greatness Stephina reveals leadership and vision, she acts and thinks like an owner in handling her business venture. She is in construction because of her father's example (a positive pull factor). She makes choices based on the economic viability of her enterprise like how and when to use own transport and when best to use public or delivery transport of supply firms. She is perpetually learning and encourages her staff to do the same. She watches out for opportunities to use women and youths in her projects thus empowering them. She recruited and successfully trained some jobless matriculants with mathematics for measuring work on site thus being a good example to others. She has an entrepreneurial mindset, takes responsibility and deals fairly with her staff. Attempts at sexual harassment by a man on one of her sites, she handled firmly and nipped that kind of behaviour in the bud by making an example of the culprit. She is customer and quality driven and for that reason received more work from Government after her good performance on the N4 Toll Road to Maputo. She gets results and achieves her personal and performance goals constantly. She is in demand by public and private sector clients alike. Her workers respect her and she respects them, giving them training opportunities and rewarding them for good performance. She is constantly on the look out for new opportunities that she shares with pride and leadership. She aspires to live the NAWIC (also adopted by SAWiC) core values of **believing** in herself as a woman; **persevering** with the strengths of her convictions; **daring** to move into new horizons.

SA Case 8: The Growth construct, networking and success as manufacturer and supplier - Phumelele Siphayi

Phumelele Siphayi, Marketing Director of Phumken Trading as Kenny's Bricks registration number 90/00948/07, this small manufacturing concern is situated on Stand 1170, Zone 8 Pimville, Soweto, along Old Potchefstroom Road. The company manufactures cement bricks and roof trusses, also rendering related building supply services mainly to emerging contractors, to some established contractors and home owners in the vicinity. Phumelele happens to be the secretary of Gauteng Women in Construction and she was awarded the Pabha (Pan African Broadcasting Heritage Award) in October 2001 in Nigeria, for her contribution to management influence and social development in Africa.

Phumelele is married to Kenny, a former disco owner and well-known show biz personality who headed the band “The Movers” in 1979. Phumelele comes from a banking background. They have four children, the first a daughter aged 20, who is an actress, the second daughter is an excellent swimmer and athlete, the third child is a twelve year old son, who is the SA Junior Champion golfer (under 12 boys) and is known as ‘the miracle child’ of SA golf. Their fourth child is another boy who is following in his brother’s footsteps as a golfer. Phumelele is devoting a lot of attention and energy in promoting this sport to children from disadvantaged backgrounds.

Ironically the political scene offered Phumelele and her husband a window of opportunity. It was Kenny’s show biz and band background that led to his discovery by Corobrik. Like many established or white building supply companies in the period 1983 to 1984, Corobrik was head-hunting well-known black personalities to take their products into the townships as they were not allowed to trade there. Kenny and Phumelele started their marketing campaign for Corobrik on a piece of land they bought in Diepkloof. At that time black people started owning their homes in the townships. As they were allowed to buy and sell houses, Phumelele and Kenny decided to build a show house. They demonstrated the use of face bricks, Hullett’s Aluminium ceilings, imported tiles from Brazil, marble baths, window frames and other products in their show house. It was immensely successful, as home owners started to improve their homes and their lifestyle or sell and make a profit. This was the beginning of a housing market for black people as they were acknowledged as a buying power and potentially profitable market.

The Siphayis then started a hardware store ‘Soweto Brick and Tile’, but the township people associated this name with Corobrik and they were forced, for cultural reasons, to personalise and change the name to Kenny’s Bricks. So it was perceptions that necessitated a cultural name change! As the business grew, it increasingly became Phumelele’s responsibility and they therefore decided to trade as Phumken Trading (Pty) Ltd. The Siphayis were so successful that they moved from Soweto to Bryanston, a suburb close to Sandton.

Phumelele believes that entrepreneurs should talk and listen to their clients. By handing out free samples and arranging many well handled promotions with Kenny’s show biz

know-how, business boomed. They listened to what people asked for at their counters and thus responded to the market by selling all housing related building materials. This proved to be much more effective than formal and costly market research initiatives! Their premises were big enough to manufacture cement bricks and they started manufacturing roof trusses under licence. They still sold Corobrik and other products.

In terms of the business concept, culture and dimensions of growth Phumelele and Kenny believe in a one-stop service approach. This approach was triggered because the banks had a policy of issuing one cheque only when they granted home (improvement) loans. The Siphayis started in a small way, did their homework listening and responding to clients needs, while scanning the political, cultural, economic and legal environments. At first they manufactured and supplied all the different needs of their customers and clients. Their staff and they themselves were trained to ensure best practice, and kept up to date with the technology of their suppliers, e.g. Corobrik, South African Pulp and Paper Industry (SAPPI), Lafarge. Once they saw how well their staff managed some of these services, they empowered the staff members to purchase them. The staff members thus became business owners, running these services from the Phumken Trading premises. They created a *culture* of focused service, trust, delegation, empowerment and reward.

This approach reminds one of the Richard Branson model. He sells off parts of his business as soon as it becomes too big. This method allowed Phumelele and Kenny to focus on what they do best, ensuring that they do not carry unnecessary overheads and earn some income while still benefiting from the mini 'Industrial Park' they created. In times of decline this helped them to survive. The fact that they are a one-stop shop and are located in Soweto, gives them a *competitive advantage*.

The venture's main clients are emerging contractors, some established contractors like Rainbow Construction, Nare and Rodascila construction firms and to a lesser extent home owners in Soweto and surrounding areas. Their main suppliers are Corobrik, SAPPI and Lafarge. Should a client want a specific brand, Phumken Trading makes an effort to obtain it from that specific supplier.

Their main competitors are established manufacturing and supply firms in and around Johannesburg and Gauteng.

Assets of the venture comprise of land and buildings. They own a prime site in Pimville, Soweto, less than 10 km away from South Gate, well connected to the N1, N12, M1 on Old Potch Road, close to railway station and taxi ranks, enough buildings to accommodate their own business, as well as other related construction supply businesses, to deliver a one-stop service to customers.

As far as staff, furniture and office equipment, show room and stock were concerned, in the beginning, pre-launch and start-up it was only Phumelele and Kenny and later on a secretary was employed. Phumelele now has a full time office manager, Esther, a sales lady named Cecilia and a secretary, Pearl Motaung. There is also a tea lady, as well as a lady who designs the trusses. Each of the manufacturing initiatives has its own manager and work team. This is also the case with the delivery trucks. On site there is the brick making, steel doors, security gates, mobile toilet structures and windows and truss plant and equipment, along with the timber, steel, sand and cement. They stock the normal hardware supplies and have a show room adjacent to the offices.

Phumken Trading owns all the equipment needed for manufacturing bricks, roof trusses, etc., as well as several big delivery trucks. At times they use their supplier's delivery services e.g. Corobrik when theirs are fully committed.

Phumelele grew up in an environment where her father worked in the urban areas to bring income back to his family in the rural area. Thus it was the responsibility of her mother and the children to build and maintain their home. Her mother and the children manufactured bricks in their backyard and they built their own home and helped neighbours to build theirs. So this business environment was not unfamiliar to Phumelele – it is the way she grew up! The Siphayi family nurtured and harnessed their show biz, golf, banking and Phumelele's women forum networks to build up and grow their family business. Combining all of that with their talent, expertise and experience they were able to spot and open the window of opportunity. As entrepreneurs they attracted and applied the required resources to serve their community (Verwey 2003:20).

Analysing SA Case 8:

Phumelele conforms to most of the criteria of the Chain of Greatness. In terms of vision Phumelele and her husband certainly had it when they built a first show house in

Soweto with quality finishes and were able to sell it and get orders for more. They kick-started the property market in Soweto at a time when no one thought it was possible. They saw the big picture, spotted the gap and capitalised on it.

Watching their entrepreneurial careers they both moved out of their comfort zones and Phumelele did not miss an opportunity to get training with SAWiC and other organisations. She believes in perpetual learning and also attended the international training offered at the NAWIC Convention 2004 in New York with 19 other SAWiC members.

Phumelele has won several awards, amongst others the African Phaba award for her entrepreneurial ventures. She continuously grew, improved, changed and innovated and those are the reasons for the success of the entrepreneurial ventures. She has demonstrated that she can take responsibility, get results, create value and wealth, sharing that with others around her, giving them entrepreneurial opportunities and supporting them to achieve like she did. Especially remarkable is her efforts to empower other women and it is noteworthy that the persons who does the roof truss designs in Phumelele's firm is a woman – in a non-traditional job. Phumelele is customer and quality driven and has shown that she rewards her staff with short-term bonuses as well as long-term equity, handing over some parts of her business over to them to run for their own accounts. She shares her pride and leadership with those around her. That shows mutual respect.

Phumelele achieves her personal and performance goals and always thirsts for new challenges and goals. She like the previous SA cases aspires to live the NAWIC (also adopted by SAWiC) core values of **believing** in herself as a woman; **persevering** with the strengths of her convictions; **daring** to move into new horizons.

(Verwey 2003:20-23)

Table 5.1: The Growth Stages of Kenny’s Bricks trading as Phumken Trading (Pty) Ltd

Growth Stages (Nieman & Bennett 2002:64)	Pre-Launch: Incubation “The heart of the entrepreneurial process. The People’s Club	Start-up and Infancy Hands-on approach by entrepreneur Soweto Brick & Tile	Growth/ Breakthrough Kenny’s Bricks later trading as Phumken Trading (Pty) Ltd	Maturity Phumken Trading (Pty) Ltd Manage time & delegate, control key issues	Decline/ Rejuvenation Phumken Trading (Pty) Ltd
Time Frame	1982-83	1984-1987	1988-94; 1997-2000	2000-2003	1992; 1995-1996
Pressure on Resources	Ideas sifted, opportunity identified and crystallised. Business plan developed. Licensing, staff selection and legal form of business attended to. Being dependent on established suppliers’ delivery trucks and drivers who played their own games, often delaying their deliveries. Then they started making use of emerging contractors in Soweto, with only gentlemen’s agreements, that worked well for them.	Business opened and started trading. Growing pains experienced. Siphayis were close to business and identified and removed obstacles. The Riots in Soweto; Trucks were burnt. They overcame this problem by using their own business names on the trucks belonging to white established business to safeguard them. The police escorted them in convoys for protection.	Acquired truss manufacturing plant and operations under licence - MII Mitek. Growth put pressure on resources. Had to match opportunity with resources. Closely watched and balanced cash flow, production, delivery and appointment of personnel. For cultural reasons had to change company name as the people in the township associated the name ‘Soweto Brick & Tile’ with Corobrik creating the perception that they were fronting for Corobrik! They therefore had to personalise the business name to ‘Kenny’s Bricks’, later trading as Phumken Trading (Pty) Ltd and that was acceptable. Competitive Advantage: Soweto-based One stop service ranging from designing houses and trusses (architectural & engineering	USAID conference on franchising. They wanted to go into a franchise with Corobrik, who became their main competitor and the deal fell through. Learned to manage time and to delegate. Key issues were expense control, productivity, entry into niche markets, investment in plant and equipment. Empowered and rewarded talented & committed staff members who performed well. Outsourced and sold many of the successful ventures on their premises to staff members. Shared the running costs and currently focus on their core business. Focus more on community services and effectively use their networks to the advantage of their business. They acknowledge the role that organisations such as SAWiC have played in expanding their networks, promoting their businesses and helping them to secure business partners. Phumelele started focusing on marketing. She found that the Junk	Transnet and Mining retrenchments impacted negatively on their business. Fewer contracts from those who previously had secure jobs. Had to come up with new and innovative ideas to maintain competitive advantage. Outsourced those activities that were not part of their core business, but retained them on their premises. Created a mini industrial park in Soweto, thus sharing running costs. Beneficial to all parties involved; provided one-stop service.

			services) to manufacturing cement bricks, steel windows and doors and security gates, to the range of hardware needed for housing schemes. Training of staff by suppliers	Mail brought them more business than the Sowetan advertisements. Held promotions & training sessions for their supply companies run on their business premises. Used discount coupons, brochures, leaflets at traffic lights and at trade shows. Also used signboards.	
Growth Stages (Nieman & Bennett 2002:64)	Pre-Launch: Incubation "The heart of the entrepreneurial process. The People's Club	Start-up and Infancy Hands-on approach by entrepreneur Soweto Brick & Tile	Growth/ Breakthrough Kenny's Bricks later trading as Phumken Trading (Pty) Ltd	Maturity Phumken Trading (Pty) Ltd Manage time & delegate, control key issues	Decline/ Rejuvenation Phumken Trading (Pty) Ltd
Time Frame	1982-83	1984-1987	1988-94; 1997-2000	2000-2003	1992; 1995-1996
• Capital	Diepkloof premises. Land & buildings	Diepkloof & Chiawelo show houses	Developed new site in Pimville, Soweto with SAPPI. Acquired new business in Dobsonville, acquired plant and equipment.	Maintained the status quo.	Closed Dobsonville operations and incorporated into the Pimville plant
• Cash	Personal savings Debtors and creditors strictly cash Turnover: R50 000	Personal savings & SBDC loan, repaid the same year Debtors and creditors strictly cash. Turnover: R100 000 up to R300 000	Ploughed back profit to grow Debtors and creditors strictly cash. Turnover: Up from R1 million up to R2 million during this period	Profit Turnover: R2 million up to R3 million	Survived on personal savings & retained profit. "Survived due to good management of cash." Maintained turnover
• Assets	No delivery trucks. Personal vehicle No computers or office equipment	Acquired one delivery truck and second personal car	Acquired a fleet of trucks and maintained personal vehicles	Maintain fleet of trucks and acquired new personal vehicles	Maintained fleet & used supplier vehicles where more cost efficient

Growth Stages (Nieman & Bennett 2002:64)	Pre-Launch: Incubation "The heart of the entrepreneurial process. The People's Club	Start-up and Infancy Hands-on approach by entrepreneur Soweto Brick & Tile	Growth/ Breakthrough Kenny's Bricks later trading as Phumken Trading (Pty) Ltd	Maturity Phumken Trading (Pty) Ltd Manage time & delegate, control key issues	Decline/ Rejuvenation Phumken Trading (Pty) Ltd
Time Frame	1982-83	1984-1987	1988-94; 1997-2000	2000-2003	1992; 1995-1996
• People	Phumelele & Kenny	Phumelele Kenny and secretary, lady to check truckloads and stocks. Driver.	Phumelele, Kenny, office manager, secretary, sales lady, staff member to check truckloads and stocks. Drivers, operations managers and supervisors, Roof truss designer, architect, labour & plant as needed. Staff complement of 60!	Maintained key staff, focused on what they do best	Maintained key staff and outsourced operations that could be viable on their own, empowering and rewarding deserving staff, but kept businesses on their premises to deliver one-stop service.
Growth Opportunities	Specialisation: New service in Soweto	Specialisation: Overcoming obstacles, gaining control over distribution channels and suppliers	Specialisation. Improving customer service. Acquisition. New product. Diversify Technology and market based. Geographical expansion.	Specialisation. Mergers with competition.	Holdings; maintenance. Pruning-outsourcing. Staying put.
Growth strategies	Grow organically – internal growth	Internal growth through increasing market share	Expansion into new markets. Branding. External growth through acquisition	Stabilising during maturity	Outsourcing non-core business elements
Growth methods	Strategic growth	Strategic and structural growth	Organisational growth and financial growth	Strategic, structural, and organisational growth	Strategic growth: Increase in turnover, profit, total assets, net assets, net worth and number of employees.

SA Case 9: How being a medical doctor can make you a successful contractor –

Dr Thandi Ndlovu (Overcoming barriers, nAch, love of construction and success)

Dr Thandi Ndlovu was born and bred in Soweto, the middle child in a family of five. Both her parents were school teachers; they were poor, but at least had a stable income. She worked hard to obtain scholarships and grants. From an early age Thandi was determined to portray herself as successful and never to let the world see her difficulties. Her motto is: "You are as good as you feel about yourself!"

In her final year Bachelor of Science (B Sc) degree at the University of Stellenbosch, a tragic event changed the course of her life when her brother was shot on the first day of the students' uprisings in Soweto in 1976. Because of harassment by the police and the impact of her brother's death, Thandi lost hope and confidence in the future of South Africa. She and her two sisters went into exile, where she worked full time in the Women's Section of the African National Congress (ANC) headquarters.

She came back to South Africa in 1991. On completing her medical studies, she went into partnership with doctors in Vereeniging, where she managed the practice for them. During this time she became aware of the needs of the community in Orange Farm where there was no doctor. The people had to travel by train and could not afford medical services. At the time a woman doctor was killed in the nearby Palm Springs. The unemployment rate was high, people were poor, crime was rampant and professional people became the target for attacks.

All of this did not dampen Thandi's spirit. Her entrepreneurial characteristics of facing challenges, spotting an opportunity, taking calculated risks, linked with her deep sense of social responsibility towards the community, came to the fore. She felt that if she built a relationship with the community, they would protect her. Their inability to pay would be overcome by the volume of patients and by charging low fees that included inexpensive medicine. At the time there were an estimated 250 000 people in Orange Farm. There was a hospital only 13 km away to which to refer serious cases. Thandi saw the gap in the economics of scale and charged R40 instead of the R60 to R70 that other doctors were charging. Her practice was profitable.

Thandi's triggering event to a career-change happened while working in Orange farm. Thandi saw many women in her practice and she talked to them about their problems. There was a serious shortage of housing, especially for the many single parent families often headed by women. Their poverty and desperate situation led Thandi to research housing subsidies and their accessibility to women. It so happened that her sister was working in the Housing Section of Absa Bank at the time. She realised that she did not know enough about construction and that apart from her research, she needed other skills on board, like that of an architect, land surveyor and town planner.

Having to create a new venture, she arranged a strategic planning weekend ('lekgotla') with her newly found housing developer team. She visited housing schemes across South Africa and soon realised that there was something missing in most of them. She and her team came up with a concept that included the essential community infrastructure like schools and clinics, lacking in other schemes. They aimed to create sustainable communities through their housing development schemes. In 1995 Thandi established a company named Motheo Construction (Pty) Ltd. 'Motheo' is a Sesotho word meaning 'foundation'. Her vision was to create a foundation for a different way of benefiting the community by means of the housing process.

In Orange Farm there was an illegal settlement where Thandi consulted with the Local Authority and the community. Land transfer was a challenge, but she managed to complete the pilot project, successfully serving the community in which she had built trust, and they benefited from more than her healing skills alone. The profit she made from her practice was ploughed into the construction firm and the pilot project. Her vision, driving force, dedication, entrepreneurial flair, love and care brought a better life to the community she served. A hobby brought hope to a seemingly hopeless situation!

Using her network led to a change in the scope of her project. Thandi met with the then Premier of Mpumalanga, Matthews Phosa, telling him about her vision of helping communities who did not have access to housing subsidies and her project concept for 1000 houses, a school and a clinic. Two days later she was invited to make a presentation to a gathering of mayors of six town councils. Three days later, the Premier called her with the news that her company could construct 10 500 houses in six areas! The size of her vision had changed dramatically. Her hobby was getting out of hand!

Undaunted by this sudden escalation, Thandi embarked on this exciting, but challenging project. At an early stage, she engaged in talks with the National Department of Housing to make the urban-only subsidies available to the rural areas. She undertook to use her own money to carry out the project. Then a hitch occurred. Unknown to Thandi, budgets were controlled by the National Department, and Mpumalanga had to budget for draw-downs at the time. Policy issues should never be underestimated. The Director-General then informed her that there was no budget for the Mpumalanga project. This resulted in a fight for the budget between Mpumalanga and the National Department of Housing. The contract had already been signed at that stage and Thandi realised that she would have to look for someone to take over her medical practice.

This was a serious test for Thandi. She was accused of having caused the dismissal of the Director General (DG) of the National Department of Housing. They alleged that Thandi was a "front", she had no track record and she had benefited from her "friendship" with the Minister of Housing! Thandi was devastated at the time. After a three-year investigation, Thandi was finally cleared. She immediately restarted the project, building on the same principles she used in 1994. Thandi won the Developer of the Year Award 2001 from the prestigious Institute for Housing for job creation, using local labour, empowering SMMEs, using local supplies and for setting up a block making facility next to the building site.

Thus Thandi achieved glory and victory, and her slanderers were shamed. Thandi managed to build 250 houses per month using 19 local small contractors, 3 of them women! Her management skills were key to this success story. She founded the Motheo construction firm, managed it through times of extreme trial and tribulation to acknowledged success. Longenecker (2003:448) states: "Ideally, the founder is able to add a measure of professional management without sacrificing the entrepreneurial spirit and basic values that gave the business a successful start." Thandi is an excellent example of such an ideal Founder. As Executive Manager, Thandi has "legitimate power based on position and acquired authority to delegate tasks to sub-ordinates", Nieman & Bennett (2002:113). In addition she has "expert power, based on the skill and knowledge of the person". She is an expert with a unique combination of medical, construction, entrepreneurial and managerial skills. Other people "depend on her for her knowledge, information and skills". She is respected not only in the Motheo Group, but also in the construction industry. Relationship

building and interaction with clients are important aspects of her work. In conclusion, Thandi's recipe for success is: "When you are an entrepreneur there is something that goes beyond profit. It is perseverance, the conviction to succeed and to make a difference!" (Verwey 2003: 17)

Analysis of SA Case 9: Thandi changed over to construction because of positive pull factors, like spotting a gap and addressing the needs of women in her community. She was not daunted by attack and malicious gossip as she had vision. As a true leader and caring about women she worked hard to raise their quality of life. She did not shy away from sacrifices to reach her goals. She had vision and believes in perpetual learning, acquiring new building skills and leaving her comfort zone as a medical doctor. She concerned herself with value and wealth creating not only for herself but also for others. She was customer and quality driven and therefore her firm grew to be one of the largest construction firms owned by a woman. Her scale of economies approach shows that she understands numbers and she shared her pride and leadership through empowering the communities that she worked with and they mutually respected her. She continuously looks for new opportunities and her success has been crowned when she received the Housing of the year Award. Thandi aspires to live the NAWIC (also adopted by SAWiC) core values of **believing** in herself as a woman; **persevering** with the strengths of her convictions; **daring** to move into new horizons.

5.7 USA Case Studies

USA Case 1: 2004 Crystal Achievement Award Winner Alise Martiny

Alise Martiny was the recipient of the 2004 Crystal Achievement Award. The author of this thesis, Ingrid Verwey, was the 2004 International Crystal Vision Award winner. Alise, a member of NAWIC's Greater Kansas City, Missouri, Chapter, received NAWIC's highest honour given to a member for repeatedly mentoring women in construction and breaking down barriers women face in the industry. Alise's knowledge of the construction industry has enabled her to forge a broader path for women in this male-dominated profession through recruiting, training and mentoring.

Alise began her career more than 24 years ago after hearing a radio advertisement recruiting women and minorities into the construction field. Alise applied for the programme and was accepted into the Kansas City Cement Masons Apprenticeship Programme in 1980. Alise's decision to enter the construction industry was not too surprising. Alise's sister Yvette was accepted and enrolled in the Cement Masons' Apprenticeship programme a year earlier, and Alise's father founded and owns the family business, JJ Martiny Concrete. With her sister's continuous encouragement and support, Alise successfully completed the three-year apprenticeship programme and worked as a journeyman in the family business on hundreds of job sites throughout the following years. It wasn't long before Alise earned the admiration and respect of her co-workers for being a hard worker and a team player. Interested in workers' rights, Alise became active in the Kansas City Cement Masons Union Local 518, and in 1990, she was elected to its board.

In 1993, Alise accepted the position of Cement Mason Apprenticeship Coordinator at the Builders' Association Education Center in North Kansas City. This position allowed her to pursue her *passion* for recruiting women and minorities into the trades and to personally train the future cement mason workforce. In addition to the apprenticeship programme's mission, Alise wanted to make non-traditional jobs, like cement masonry, accessible to more women. When Alise took over the programme, it was under used by the industry and had the lowest female participation rate in the area. She became involved in outreach programmes to entice women into the construction industry with real opportunities to earn between 25 to 35 dollars per hour plus benefits. Recognizing the lack of female interest in the cement masons trade, Alise built relationships with other crafts and assisted women into their apprenticeship programmes.

She concentrated on smaller class sizes, followed a hands-on approach and maintained close supervision of students. This approach helped grow the programme from eight students to more than 50 students each year. Alise's programmes now have the highest percentage of females in the community. In 1999, Alise accepted the position of Business Representative with Northwest Missouri and Kansas Cement Masons' & Plasterer Union Local 518. This natural advancement allowed her to be directly involved with the apprenticeship programmes and help with retention and the future employment of students. As Business Representative, Alise believed she would be able to help recruit and place

more females than she could ever employ at that time. Upon Alise's resignation from the programme, the Department of Labour presented her with an award for maintaining the most proactive recruitment agenda for women and minorities. Alise resigned from the programme in 2001 to help disadvantaged youth obtain positions in the construction industry at the Operative Plasterers' & Cement Masons' Job Corps Training Programme as its Region 5 Director.

Alise has made and continues to make positive contributions to various civic and political organizations where she actively promotes women in the construction industry. Through her NAWIC involvement, she makes presentations to the local Girl Scouts about the opportunities available to them in a construction career and assists them in obtaining their construction badges. Alise holds an annual job fair in conjunction with Block Kids so children can see the skills possessed by a Journeyperson. In the mid-90s, Governor Mel Carnahan appointed Alise to serve on the State of Missouri Employment and Training Council, a position she held for 6 years. On the council, Alise was responsible for supporting legislation and working with the governor's office to ensure policies were put in place for the betterment of women in the workforce.

In 2000, Alise received the "Woman of the Year" Award from the Missouri Women's Council for helping women in the state of Missouri break down traditional barriers and advance their economic, civil and family lives. She currently serves on her national union's international apprenticeship and training committee, while also serving her second term as president of her union local. Alise was the first woman in Missouri ever elected as president of a construction union local, and the youngest regardless of gender.

Alise is a delegate for union local 518 at all state conferences and national conventions and has served as NAWIC Region 6 Director for two years. In addition, Alise has been recently appointed, again, by Governor Carnahan to serve on the State of Missouri Employment and Training Council. An industry leader by any measurement, Alise has gone above and beyond to represent women in the construction industry. As for Alise's success - she attributes it to her mentors, like her sister, Yvette.

Alise believes the invaluable support **mentoring** provides is the **key to success**. This is why Alise has endlessly dedicated her time, energy and support to help other women and young girls recognize they have the strength and ability within themselves to succeed. Undoubtedly, Alise has positively impacted many women's lives and the world of

construction by enabling women to succeed and advocating their acceptance within a male-dominated industry. Alise has served as a role model, leader and mentor to women, children and men alike. Her vision and determination to help others' dreams come true is a testament to the strength of her character. SAWiC and NAWIC acknowledge her as a role model of motivation, mentoring and success: A champion for the role of women in construction (Martiny 2004).

Analysis of USA Case 1: This case study highlights positive pull factors as Alise was motivated by her sister, inspired by her father's entrepreneurial example and driven by a need for achievement not only for herself, but for women in the construction industry. She was 'pulled' by a love for and interest in construction and for mentoring others and in that way she achieves her goals constantly. In terms of achieving success she sees mentoring as the key. Alise as a highly motivated person felt a strong need to remove barriers for women in construction and for them and herself to achieve. She has vision, believes in perpetual learning, is a learning go-getter and long for challenges and always pursues new horizons. That is why she won the Crystal Achiever Award 2004 following many other similar awards previously. She is accountable, has an entrepreneurial spirit and is a great networker. She too fits the criteria of the Chain of Greatness the NAWIC (also adopted by SAWiC) core values of **believing** in herself as a woman; **persevering** with the strengths of her convictions; **daring** to move into new horizons.

**USA Case 2: High need for Achievement and perseverance to overcome barriers -
Deborah Naybor**

Deborah Naybor was born in Manhasset, New York in 1957. Her father, Edward V. Naybor, was an electrical engineer and inventor. He was self-employed as the owner of Naybor Laboratories. Edward died in 1972, when Deborah was 13 years old, changing the family's economic situation from comfort to struggle. Unlike her older brother and sister, there would be no financial support for university studies and Deborah went to work at age 13, tending to gardens, caring for children and working two or three jobs at a time to raise funds for her studies.

Deborah always loved the outdoors and in 1975 she enrolled at Paul Smith's College to earn an Associates degree in Forestry. While attending school, she cleaned homes and classrooms to help pay for her studies. She graduated with honours in 1977 and moved to Buffalo, NY. Unable to find a job as a woman in the male dominated field of forestry, she worked briefly as a gardener, planting flowers and cutting grass. Her studies had included 2 drafting and two surveying classes and with no experience, she applied for a job drafting maps for a professional land surveyor but her desire to work outdoors caused her to change job in 1978. She worked for various companies as a field surveyor.

Deborah got married in 1984 and the couple built their own home together. In 1985, she became only the 12th woman in New York State to become a professional land surveyor. She had excelled in her examination scores enough to be noticed by the National Council of Engineering Examiners and in 1985, became the youngest professional to serve on the board which wrote national professional surveying examinations.

Always finding it hard to accept the rules made by others, Deborah started her own business, Deborah A. Naybor, Professional Land Surveyor, in 1988 with \$1000US and an old truck which often had to be pushed onto the project site because of engine troubles. She hired a friend to work part time and trained her to assist with field measurements for construction surveys. Deborah worked long hours to find new clients, perform calculations and drafting of projects, and manage the economic health of the company.

Her husband had received his professional surveyor's license in 1987 but continued to work for other companies until 1990, when he encouraged her to hire him and his former employer to run the day-to-day business. This disastrous decision caused many difficulties and after approximately a year, the older surveyor was dismissed for inept management. Her husband remained with her company, constantly arguing over control of operations and the future of the firm.

By 1990, the company was well known for work on government projects and well established as a Women's Business Enterprise which gives some advantages to women owned firms bidding on public improvement projects. By 1991, the firm had grown to 23 employees and was contracted to perform over \$1.5 million in government contracts over a

two year period. Unfortunately, a change in regional leadership in 1992 caused all contracts to be cancelled.

Decreasing staff from 23 to 3 employees over the next few months was not easy and the loss of work shook Deborah's confidence in herself and her career choice but she made the decision to rebuild her firm by finding privately owned construction and design firms who would hire her to perform surveying services. By 1996, she had rebuilt the company to 18 employees and was invoicing over \$1 million per year. She has held it at approximately this same size until the present time despite economic downturns in the United States.

Deborah won many awards for her business success, her ability to overcome obstacles and her community service. In 1997, she was honoured as one of the top women business owners in the United States as a winner of the national Women of Enterprise Award. The highest honour for a woman business owner at this time, the award was extremely prestigious and Deborah knew it would be life changing.

Her husband became increasingly jealous and angry, claiming the company's success was due to his management skills though he never was a partner nor managed the operation of the company. He became increasingly violent and threatening until Deborah filed for divorce in 1999. The divorce lasted three years and in order to maintain ownership of the company and its assets, she gave up her home, was evicted from the office building her company had occupied for 3 years and lost all her personal investments and assets. But her ability to overcome difficult times helped her to continue to run the company through difficult economic times and recover from her personal loss.

In 1998, Deborah met two women who would change her life. Joyce Banda of Malawi met Deborah for only 10 minutes at an awards dinner in New York State. Ingrid Verwey of South Africa met her at a conference of the National Association of Women in Construction (NAWIC) in California. Both women asked her to travel to Africa to speak to women about empowerment issues and to teach leadership and business skills. In 2000, Deborah travelled to Malawi and South Africa to speak to various groups and found her ability to see clear solutions to complex problems was extremely useful in helping African women. She created a strong bond with South African Women in Construction and helped strengthen the union between SAWiC and NAWIC. In 2004, after a joint effort between Deborah and

Ingrid and the members of both organizations, 21 women from South Africa travelled to the United States to learn about construction, business and culture and to educate women in the USA about life in South Africa.

In May 2004 Deborah was awarded the Women's Venture Fund's Highest Leaf Award (NAWIC 2004:15). This unique honours programme recognises senior women executives in all segments of business and professions across the US nation for their entrepreneurial spirit, ability to leverage resources and stature as role models and mentors within their businesses. (Naybor 2004)

Analysis of USA Case 2: Deborah aspires to live the NAWIC (also adopted by SAWiC) core values of *believing* in herself as a woman; *persevering* with the strengths of her convictions; *daring* to move into new horizons. She has a high need for Achievement coupled with a caring nature that makes her mentor and promote other women entrepreneurs. She came into construction because of a high need for Achievement, with her father as a role model pulling her positively into construction. When he died, she was pushed into jobs to survive, but she went to college and her decision to enter and study a career in construction came only later and as a result of love for construction and challenges. She overcame the barrier of a jealous threatening husband, loosing her assets, going through ups and downs in the construction cycle. Yet she rebuilt her business, even venturing into new related areas. Deborah has great networking skills. Fortunately Deborah's case did not end as a fatal barrier the way the SA case of Sarah Nhlapo ended, but she was able to take charge of the situation, change it and setting new challenges went on to enrich her own life and that of other women entrepreneurs.

USA Case 3: Brick by Brick: A woman's journey - Lynn Donohue:

Lynn Donohue delivered her 'Brick by brick' - a woman's journey presentation at the NAWIC Convention in August 2004 in New York. She was a school drop-out at the age of 15, going nowhere in a family that looked good from outside but inside had no structure, with a dad that had few good words for their mother when she read an advertisement about a course in masonry. Surprisingly she was interested, took it up and embarked on a career as a

bricklayer. The work was hard and the money good, but the beauty and rhythm of the work gave her a sense of purpose and empowerment.

Lynn learnt the hard way to break through the union, prejudice and the perception that a woman cannot be a foreman. She started her own company that became a multi-million-dollar business with 50 full time employees to earn her a solid reputation in the construction world, having built schools, hospitals and public buildings. Behind her tough-as-nails exterior, she was still vulnerable taking on the journey of personal growth. She faced the demons of her troubled past and learned to open her heart to family, friends, love and forgiveness realising that those things placed her even more 'in charge' and to emerge as a winner in all respects, having inner strength and peace. She then created her 'Brick by Brick' Foundation to help school dropouts. She conducts workshops and speaks on entrepreneurship and personal success. She lives in Massachusetts with her husband and two children. Her message is clear and simple: Have structure in your home and in your workplace, set goals, small in the beginning and as you gain success and confidence go bigger and higher...brick by brick, not forgetting where you come from and mentoring others facing similar odds (Donohue 2000).

Analysis of USA Case 3: Lynn aspires to live the NAWIC (also adopted by SAWiC) core values of *believing* in herself as a woman; *persevering* with the strengths of her convictions; *daring* to move into new horizons. She started off in life with a negative family situation of a father not treating her mother with respect. In rebellion she almost ruined her life by reacting in a negative way. This is however not what made her go into construction. In her dire straits she saw an advertisement of construction, it positively pulled her out of a negative situation into a career that she loved. Deep down she had a need for achievement. She loved the challenges that construction brought, she loved showing men that women should be respected for the good work they do and then she started out making sure that other people do not fall into the same destructive path that she pursued, by showing them that constructing useful and beautiful buildings and infrastructure, is therapeutic and brings healing, respect and success. Her networking skills ensured her success.

USA Case 4: Growth in construction as experienced by women in construction in the USA - Nobleza Magsanoc President of the NAWIC Hawaii Chapter

Nobleza Magsanoc looking back at how she ended up in construction can only see it as destiny and a calling. As an operations manager for The Pacific Resource Partnership in Honolulu, Hawaii, which promotes the benefits of the carpentry industry for unionised contractors, she always thought she would be part of 'corporate' America. After graduating from the University of Hawaii (UH) Manoa, Nobleza she worked in public accounting for the big, very corporate accounting firm Coopers and Lybrand (they are also in SA!). A couple of years later she got her MBA in management from UH before going to work for Morrison Knudsen, a large Mainland construction firm. In 1994 Nobleza joined Pacific Resource Partnership after Honolulu City Council voted down a proposed light –rail mass transit plan and Morrison Knudsen, one of the proposed contractors, closed up shop in the state. Her timing could not have been worse as the state slipped into a decade-long economic slump that hit the construction industry and trade unions particularly hard. According to Nobleza the Carpenters' Union lost half of its 8000 members from 1996 and 1997, most of whom relocated to the Mainland.

However, that was a different decade and a vastly different story. With a revived economy and billions of dollars being spent on military housing construction, the construction industry in Hawaii is looking forward to a decade of steady business. Nobleza believes that proper planning for steady growth will keep the upcoming construction boom in Hawaii from going bust.

Nationally women in construction in Hawaii make up about 10% of the total construction work force. They comprise of contractors, trades people, engineers, architects, administrative workers other related occupations that are all integral parts of the industry. The trades women in Hawaii make up only 5% of the workforce locally and nationally. On the positive side, enrolment of women at the UH school of engineering is increasing rapidly. In Hawaii there are a lot of single women who have to support a family and construction is an area in Hawaii that pays well so that you do not have to work two or three jobs at a time as is often the case with women in Hawaii.

As a 'numbers person' Nobleza finds it encouraging that in 2003 there were \$3,1 billion's work in Hawaii and in 2002 they had \$2,4billion. In 2004, they are looking for double-digit

growth over 2003, largely because of the military-privatisation projects, which kick in \$1,7 billion over the next ten years. However it is not just military work they are optimistic about. Over the last five years the construction industry has been experiencing steady growth across the board. It was slow but steady growth despite Sept 11 and the SARS virus. To the contrary a lot of once-stalled projects are coming back to life. Projects are now larger which is good for the state and good for the union. Nobleza is representing union carpenters that are signatories with the carpenter's Union. The Union has made a commitment to train as many tradespeople as needed and they are in the process of building a training facility. The biggest concern Nobleza, NAWIC and the Union has is enduring that they are accurate about the industry demand for labour.

There is the danger of bringing in many new workers just to realise later that there is no work for them. Nobleza has poled NAWIC and the Union in close collaboration with UH and they have come up with an estimate of 7000 to 10000 new and replacement workers that will be needed. On being asked what lessons the union has learned from the last downturn in the industry that are applicable to the coming boom times she responded that the old school leadership would have answered recruit, recruit and recruit to get as many workers out in the field as possible but the union takes a more business-like approach. The keys are studying exactly what the needs of the market are and then go out and train workers as best one can. Construction is cyclical, so there will be another slowdown in business. With current prospects it is not likely to happen for a while though. Even so Nobleza, NAWIC and the Union will be preparing for that eventuality. They have been waiting long in Hawaii for this turnaround in business and they are all excited about how the industry is shaping up. Nevertheless the cycle will come to an end sooner or later and they will prepare for both the good and the bad times (Choo 2004:19).

Analysis of USA Case 4: Nobleza aspires to live the NAWIC (also adopted by SAWiC) core values of *believing* in herself as a woman; *persevering* with the strengths of her convictions; *daring* to move into new horizons. She entered into construction during a time when the industry was in a down-swing and bad shape. There is no doubt that Nobleza loves construction and entered into it because of positive pull factors that included love of challenges that it would bring. She is a great networker, using her financial expertise and knowledge of the economy to plan for growth of construction in her area.

USA Case 5: Taking a chance on dreams - Anna Cecilia Merenda

At the age of 82 Anna Cecilia Merenda is retiring after 53 years working as a construction contractor in Houston Texas. A member of the Houston Texas chapter since 1967, Anna is content with where life has taken her - or rather where she has taken life! Her life and mindset echo NAWIC's core values: Believe in themselves as women; Persevere with the strengths of our convictions; Dare to move into new horizons.

Anna, standing at barely 5 feet tall, lives in the house her family built in 1934 when she was in fourth grade. An only child, her father was a baker and her mother a housewife. Anna, never one to be afraid of taking chances, 'has done a little bit of everything'. After high school she held a variety of jobs, like inspecting rocket ironworks for the US Navy during World War II. She was also a flight attendant for Pioneer Airlines, worked in a brewery and obtained a broker's license. She learned to fly an airplane somewhere along the way, but it turned out she was too short to be a pilot.

In the early 1950's Anna was introduced to the construction industry by a boyfriend. She loaned him money to start a concrete business. Anna did not know how to run such a business, but her business partner needed her help. After only a short time answering phones, Anna began working-up estimates for jobs. When her relationship with her boyfriend ended, she started her own business, AC Construction and Supply, to prove she could run a business without him. She succeeded, all by herself and AC Construction and Supply became extremely successful. The company built road construction, flood controls, sewer lines, sidewalks and home foundations. At its most successful point the company had an average weekly payroll of \$30 000 and bid on jobs up to \$500 000. Anna says she has done work for everyone, both government and private entities.

When asked about challenges she faced as a woman in a male-dominated industry Anna says, "I never had a problem as a woman contractor. I did what I needed to do and did it well." There was a time though when she could not oversee a plant project because women were not allowed on the site. Also she was denied a business loan once because she was a single woman, but she just went to another bank. To Anna these were not obstacles but only small challenges and they did not stop her from going after her dreams.

She credits the good people who worked for her as another reason for her success. Anna treated her employees like family, often loaning them money to help out during the tough

times. She has been described a tough woman with a good heart. However, she was a stickler for doing things right. Everyone knew she expected only the best, which is no less than what she expected of herself.

Anna prides herself in her honest business dealings. She believed in being honest and doing her best on each and every job. She remembers a time when a well-known customer threatened not to give her any more jobs if she did not buy the customer a Cadillac®. She did not buy the customer a Cadillac® because she knew it was not the right thing to do. She never worked for that customer again. She comments, “If my work did not satisfy I should not be working for them.” Anna admits that it was not always easy and she had her share of battles to fight. One of the most difficult incidents occurred in 1987 when she was diagnosed with breast cancer. She underwent a double mastectomy and survived the disease. Within a couple of months her mother passed away and her business had acquired a \$1 million debt. It would have been easy for Anna to give up, but she persevered. She developed a strategy to pay back the company’s debt that included selling her business equipment. It took seven years, but she paid back every cent of the company’s debt. She then turned around and began buying equipment for her business to rebuild it – and she did!

Once again Anna is in the process of selling equipment, but this time it is not to pay back a debt. Although she is retiring from being a construction contractor, Anna’s future is still shining brightly. She is considering opening a real estate office and why not? After all, she already has her broker’s license.

Houston Texas member Grace Dockal says “Members like Anna is few and far between. She is great! While NAWIC is made up of many great members, Anna is an inspiration to all. It is clear she never settles for less than she deserves from life. She has done and continues to do what is difficult: She believes in herself, she is not afraid to take risks on something new and she knows how to persevere.”

Anna urges women following in her footsteps to not be afraid to take a chance on their dreams. She advises, “Do whatever you want to do so you do not have regrets later on. Be honest and to the best you can.” Her words challenge women in construction to live out NAWIC’s Core Values – Believe, Persevere. Dare (Overman 2004:8,23).

Analysis of USA Case 5: Anna aspires to live the NAWIC (also adopted by SAWiC) core values of *believing* in herself as a woman; *persevering* with the strengths of her convictions; *daring* to move into new horizons. Anna started in construction to show her ex-boyfriend that women can be successful in construction. Her need for achievement and for challenges and success, pulled her into construction. She was able to turn her business around when it was in trouble and to overcome problems and barriers, learning from her mistakes and that of other, keeping her integrity and even at a high age, she is moving into a new area.

USA Case 6: Nancy Eaton installed as National President of NAWIC

Nancy A Eaton, CCA CIT, leads NAWIC into its 50th year of taking care of business in the construction industry. In August 2004 the National Association of women in Construction (NAWIC) USA installed Nancy A Eaton as its 50th national president during NAWIC's 50th Annual meeting and Convention in New York City. Nancy is Chief Financial Officer for Par-3 Landscape & Maintenance, Inc located in Las Vegas Nevada.

Nancy was born in Meadville, Pa. where she developed an interest in construction at an early age while visiting job sites with her father. She attended Florida State University in Tallahassee and moved to Las Vegas, Nevada in 1977 where she began her construction career. After 25 years with Las Vegas Fertilizer Company, a distribution wholesaler for landscape and irrigation materials owned by the Jaramillo family, Nancy retired and went to work for Par-3 Landscape & Maintenance Inc also owned by the Jaramillo family. She commutes from Las Vegas to her home in Utah, where she spends time with her husband William. Besides NAWIC her interests include horses and snowmobiles.

Nancy became a member of the Las Vegas Nevada Chapter of NAWIC in 1986. There she served as chapter president, director and treasurer. She later served as a national director of region 12 which encompasses southern California, Hawaii and Las Vegas Nevada. Nancy has participated in the following capacities: Treasurer 2000-2002; Vice President 2002-2003 and President-Elect 2003-2004. Nancy aspired to promote NAWIC's 50 years of enhancing success of women in the construction industry by "taking care of business," and

she hopes to ensure the Association continues to take care of business for the future construction work force (Lopez 2004:19)

Analysis of USA Case 6: Nancy aspires to live the NAWIC (also adopted by SAWiC) core values of *believing* in herself as a woman; *persevering* with the strengths of her convictions; *daring* to move into new horizons. Being positively pulled into construction by role models (family/friends), she is a great leader and networker as is proved by her position as President of NAWIC, excelling in financial expertise and professionalism.

5.8 Findings and Conclusions

For purposes of comparison between SA and USA cases, the Hisrich Peters model (1998:79) table 2.3 in Chapter two, the growth-, entrepreneurial process - and the chain of greatness models discussed earlier in this chapter are used.

5.8.1 Comparison between SA and USA cases

Having discussed the SA and USA case studies, analysis show similarities and differences between the women entrepreneurs in construction in the two countries, as follows:

- **Childhood and family.**

In the SA cases only Angela are not from a disadvantaged background where as none of the USA cases came from a disadvantaged background. From the USA cases only Deborah Naybor's situation changed when her father died, when she became disadvantaged. None of the SA cases had negative family situations or bad childhood experiences in terms of family life, whilst in the USA two cases had negative family situations that could be termed as unhappy childhoods.

- **Educational background.**

From the SA cases three women entrepreneurs had college or university education, namely Angela, Phumelele and Thandi. From the USA only one, namely Anna, did not have a university or college education.

- **Marital status.**

In the SA case studies, 4 women are single mothers, their husbands

having deserted them, while the rest are married. In the USA case studies 4 women are single or divorced.

- **Reason for becoming entrepreneurs in construction**

Four SA entrepreneurs, namely Monica (mother role model), Stephina (father role model), Thandi (sister role model) and Phumelele (mother and grandmother role models) went into construction because of positive pull factor of a family or friend being in construction. In the USA four of the case study models joined construction because of positive pull factors, namely Alise (sister role model), Deborah (father role model), Anna (ex-boyfriend role model) and Nancy (family and friends as role models).

- **Age on becoming entrepreneurs in construction**

In both SA and the USA all the case study examples joined construction between the ages of 25-35, contrary to the GEM 2004 report on women entrepreneurs that SA women entrepreneurs start their ventures at a later age.

- **Type of entrepreneur**

In SA all the case study examples own their own businesses. In the USA case studies three women entrepreneurs own their own businesses, namely Deborah, Lynn and Anna. The others are corporate entrepreneurs. Two SA cases are husband and wife teams that work together successfully. In SA there are two women manufacturers/inventors, namely Phumelele and Angela.

- **Barriers**

In SA all the case study models at some stage experienced problems in accessing finance. In USA the three business owners have at some stage experienced problems in accessing finance. In SA all the single mothers had problems with jealous men who could not handle their success and in Sarah's instance it was fatal. In USA Deborah had to divorce to escape a threatening husband and Anna was deserted by a jealous boyfriend.

- **Success**

All the SA and USA examples are successful in what they do. In SA Thandi, Phumelele, Meisie and Monica have received awards while in the USA Alise and Deborah both have

received awards. The size and scope of firms and projects are generally of a much greater order and magnitude in the USA than in SA. Women entrepreneurs in SA often form joint ventures to overcome capacity or financial barriers to become successful as per the Kemarifi example.

- **Networking and mentoring**

In SA most of the case studies have been mentored, whilst Stephina, Thandi and Phumelele are mentors to other SA women entrepreneurs. In the USA most of the entrepreneurs are mentors to other women entrepreneurs. SA and USA case study models all believe in extensive networking as a success factor and they are dedicated members of their associations, seeing it as a positive influence in their careers and for promoting women in the construction industry. They all share their experiences and expertise in their associations.

- **Growth**

Cliff (1998:523) as mentioned in item 5.4 found that women and men are equally committed to growth but that women set thresholds and expand their businesses in a managed and controlled manner. This was found to be true of all the SA and USA cases, but in SA Linda, Thandi, Phumelele and Angela were more adventurous in terms of growth than the other SA cases and in the USA Lynn and Anna as business owners were more adventurous in terms of growth, whilst Nobleza as a corporate entrepreneur very carefully planned and ensured sustained growth for the Hawaii chapter, taking a special interest in it. All the SA and USA cases agreed with the following statement by Amy Miller, a Texas-based entrepreneur often featured in business media: “Our success lies not in bottom-line growth, but in our ability to meet challenges adequately: our responsiveness to our communities’ changing needs, our continued commitment to innovative employee training and motivation and our commitment to constant improvement in service standards” (Cliff 1998:523).

5.8.2 Comparisons in relation to constructs

The SA and USA case studies each in more than one way affirms the constructs elaborated on in Chapter 6. In summary the conclusion is as follows:

Table 5.2: Case study findings illustrating the constructs

CONSTRUCTS ILLUSTRATED	Construct 1: Positive pull factors	Construct 2: Negative push factors	Construct 3 Negative barriers	Construct 4: Positive motivational & success factor
CASE STUDY				
SA CASE 1 Sarah Nhlapo (a couple in construction)	nAch; Love of construction		Fatal entrepreneurial barrier – killed by jealous husband; family burdens restricting growth	Successful housing project Successful training, mentoring and networks through SAWiC
SA CASE 2 Kemarifi Consortium	nAch; Love of construction	Previous unsuccessful ventures in sewing and catering; single mothers needing to take care of their families	Financial	Successful three storey student accommodation. Successful training, mentoring and networks through SAWiC
SA CASE 3 Linda and Fred Smith Husband and wife team	nAch Love of construction; Entrepreneurial opportunities in construction. In a bizarre way 'apartheid' created some of those gaps as whites could not safely enter or trade in the townships		Initially the previous political dispensation restricted them to operate in their community only and not in the 'white' areas.	Various successful ventures in construction. Successful training, mentoring and networks via SAWiC and NAFCOC JCCI Successfully sharing with and mentoring others
SA CASE 4 Meisie Ndlovu Going it alone	nAch; Love of construction Love of training and mentoring others	Husband left her for another woman; a family of four to care for; Previous job training hair dresser not satisfying in challenge or financial rewards	Single parent caring for a family of four; finance; lack of own transport and tools and equipment	Successfully growing her business through motivation & perseverance. Overcoming obstacles via SAWiC network -& mentoring

Table 5.2 CONSTRUCTS ILLUSTRATED CASE STUDY	Construct 1: Positive pull factors	Construct 2: Negative push factors	Construct 3 Negative barriers	Construct 4: Positive motivational and success factors
SA CASE 5 Angela Broom	nAch Love of construction innovation and technology and entrepreneurial challenges	Lack of personal opportunities for her in her home country Britain led her to look for opportunities in SA that she saw as having more entrepreneurial opportunities	New country new field moving out of her marketing comfort zone Male dominated field	Successfully patenting a new roads product in her new country. Through SAWiC TWiB and SAWEN offering franchises and opportunities in her own company to other women
SA CASE 6 Monica Dzwimbo	nAch Positive pull factors of her mother as a successful woman contractor and Love of construction		Finance	Successful in her roads projects Received an African Award through SAWiC mentoring and networks
SA CASE 7 Stephina van Rooyen	nAch Positive pull factor of her father as a successful contractor and Love of construction	Single mother left with two children to care for	Jealous husband who could not take her success and then took off. Sexual harassment on site	Successful civil contractor whose excellence was spotted on site of the N4 toll road and landed her private sector contracts beyond her comfort zone
SA CASE 8 Dr Thandi Ndlovu 'The construction doctor!'	nAch Love of construction networking and mentoring and entrepreneurial challenges	Single mother with one son, but more than capable of taking care of herself and her son	Husband could not handle her success, independent spirit and took off	Thandi is a stunning achiever, role model & one of few construction firms in SAWiC handling work of R30-100million

Table 5.2 CONSTRUCTS ILLUSTRATED CASE STUDY	Construct 1: Positive pull factors	Construct 2: Negative push factors	Construct 3 Negative barriers	Construct 4: Positive motivational and success factors
SA CASE 9 Phumelele Siphayi and her husband Kenny of Kenny's Bricks The manufacturer and growth example in construction	nAch Love of construction, property development, manufacturing and entrepreneurship		Political environment and perceptions it created in the community	A role model per excellence in growing your business, using networks. African Award Winner
USA Case 1: 2004 Crystal Achievement Award winner Alise Martiny Going it alone in the trades as an industry leader	nAch Love of construction, motivating and training others, Sister is in construction and her example drew Alise			Pioneer in the construction trades. Several awards and achievements in construction especially for motivating and mentoring others. Highly successful and motivated
USA Case 2: Deborah Naybor High achiever Initially a husband and wife team	nAch c College Educ; Love of construction, motivating and training others and love of entrepreneurship and new challenges Father was an electrical engineer having his own business and this example drew Deborah into construction.	Death of her father	A husband who could not handle her achievements, slump in the industry	An achiever par excellence who firmly believes she should make a difference in the world and her achievements are honoured and awarded across the globe for her motivation and mentoring others as well as job creation across the globe

Table 5.2 CONSTRUCTS ILLUSTRATED CASE STUDY	Construct 1: Positive pull factors	Construct 2: Negative push factors	Construct 3 Negative barriers	Construct 4: Positive motivational and success factors
USA Case 3: Lynn Donohue: Brick by Brick: A woman's journey	nAch Love of construction College Education	Negative family situation	Rebellious as a teenager because her mother did not stand up to an abusive husband. Having to conquer her own negative thinking, hatred and eventually drug addiction Men's reaction to her in a male dominated field	Hugely successful construction firm. Motivational speaker and youth leader Successful networker and mentor. Writer of motivational books
USA Case 4: Nobleza Magsanoc President of the NAWIC Hawaii Chapter Going it alone breaking through non- traditional job barriers: Growth in construction	nAch Love of construction, trades and finance – a numbers person! University Education		Male dominated field Industry slump in Hawaii during which time she joined construction, not being deterred by that	Highly successful Trades Union leader, NAWIC Hawaii Chapter President. Growth strategies for construction Successful networker, mentor and motivational to others in the industry
USA Case 5: Anna Cecilia Merenda - Take a chance on your dreams: Going it alone!	Initially boyfriend went into construction. She financed & partnered him, loving construction, challenges and full of new ideas nAch		Single child Jilted by boyfriend Attempt to blackmail her to pay a bribe. Finance refused at one stage. Company debt	Highly successful turnaround of her business Successful mentor and networker and at the age of 82 starting a new venture!

Table 5.2 CONSTRUCTS ILLUSTRATED CASE STUDY	Construct 1: Positive pull factors	Construct 2: Negative push factors	Construct 3 Negative barriers	Construct 4: Positive motivational and success factors
USA Case 6: Nancy Eaton installed as National President of NAWIC 2004 to 2005 Corporate Entrepreneur	nAch Love of construction Example of family business drew her Love of nature and a financial 'numbers' person. University Education		Have to commute to her work daily	Highly successful in family corporate initiative as well as the achievement of becoming President of NAWIC

Furthermore it can be concluded that:

The entrepreneurial process is important for the creation and success of new business ventures in SA and USA. As women and male entrepreneurs have different attributes, the model of comparison in Hisrich & Peters (1998) illustrates how women in their own unique way pursue the entrepreneurial process.

The case studies helped to bring a local perspective compared with the international study findings of the Hisrich & Peters model. For the Siphayis and Smiths, the growth, direction and success of their family business "is a reward for identifying the right opportunities, understanding how they might be exploited and competing effectively to take advantage of them" (Wickham 2001:305). They had the right attitude, built on their networks, skills and talents, managed their venture the right way, created the right culture and provided direction using their joint vision and leadership as entrepreneurs and so realised the potential for their business to grow. There are both similarities and differences in comparing SA and USA case study models.

The evaluation paper on the mentoring programme of the C200 group concluded that mentoring is an important ingredient in success and it provides tremendous advantages and economic impact to those who engage in it across a wide range of industries and throughout a business owner's career.

The statement: "Cash is the lifeblood of the small business" (Nieman & Bennett 2002:65) is proved true in the survival of all the women entrepreneurs in construction under scrutiny during difficult times in the entrepreneurial process. They prospered as a result of prudent management of their cash flow. Apart from running successful businesses and managing growth responsibly, they must be commended for empowering others and for their achievements in the 'non-traditional occupations'. Maslow's theory that once the basic needs of human beings are met, they advance to higher levels of needs, is proved by these successful initiatives: These case studies are good examples of job and wealth creation by managing growth!

Chapter 6: Empirical analysis: Instrument design and testing

6.1 Introduction

As briefly referred to in Chapter 1, Chapters 2 to 5 analysed the four main constructs of the thesis regarding the literature study and case studies. The empirical chapters, Chapter 6 for detailed methodology and instrument testing, and Chapter 7 for analysis, follow the same pattern. The four main hypotheses were formulated according to the constructs presented in Chapter 1 and developed in Chapters 3 and 4: (Each comprising of 9 statements or questions; in 3 groups also referred to as sub-constructs).

6.2 Instrument development

These four constructs led to the development of elements (sub-constructs) that are analysed and discussed in Chapter 7. The constructs and elements are the main reasons behind the formulation of questions 1 to 48 in the questionnaire.

Each chapter, from 2 to 5 is handling one of the main research dilemmas of SAWiC. These dilemmas were translated into the research questions stipulated in item 1.5 above. Each chapter is introduced by a literature study of the question, followed by Chapter 6, the empirical research and analysis based on sections of the questionnaire and then compared to NAWiC in the USA. The literature contains models that are helpful in analysing the case studies and informing the empirical research.

A comprehensive questionnaire was designed as part of the SAWiC Research Programme developed by the author with the SAWiC Management. The results from this questionnaire could also be used for further research on SAWiC and NAWiC. The SAWiC Research Programme is also investigating the opinions of service providers, (including contract sources and originators) on their needs regarding success, qualities and quantities of women entrepreneurs in construction.

The instrument is developed to analyse the following four constructs, each with three elements and three statements (See Table 6.1)

Table 6.2.1: Construct and element formulation from questions

	Yourself	Men	Women
C1: Construct 1: Positive pull factors why entrepreneurs are involved in construction			
C1.1: Element 1.1: The need for Achievement as important positive pull factor; as measured by the following individual questions:			
13. the need to be an achiever			
14. the need to be constructive			
15. the satisfaction gained from success			
C1.2: Element 1.2: New opportunities, challenges and ideas as positive pull factor; as measured by the following individual questions:			
16. enjoying new opportunities			
17. new challenges and horizons			
18. new ideas to be tested			
C1.3: Element 1.3: The need for independence and individualism as positive pull factor; as measured by the following individual questions:			
19. the need to do your own thing			
20. the desire to have an own business			
21. not being willing to work for a boss.			
C2: Construct 2: Negative push factors why entrepreneurs are involved in construction			
C2.1: Element 2.1: Negative family circumstances as push factors; as measured by the following individual questions:			
22. negative family circumstances			
23. being left single (e.g. widowed)			
24. a divorce that act as a push factor			
C2.2: Element 2.2: Previous job related circumstances as negative push factors; as measured by the following individual questions:			
25. resigning from a previous job			
26. rejoining after other failures			
27. dissatisfaction in a formal job			
C2.3: Element 2.3: Obligatory financial circumstances as negative push factors; as measured by the following individual questions:			
28. the necessity to have a job			
29. job loss or retrenchment			
30. the obligation to earn an income.			

**C3: Construct 3: The experiencing of negative barriers
Inhibiting performance as construction entrepreneurs**

**C3.1: Element 3.1: The exploitation, discrimination and
harassment by society as negative push factor;
as measured by the following individual questions:**

31. Exploitation in society
32. Abuse and discrimination in society
33. Sexual harassment in society

**C3.2: Element 3.2: The exploitation, discrimination and
harassment at work as negative push factor;
as measured by the following individual questions:**

34. Exploitation in the workplace
35. Abuse and discrimination at work
36. Sexual harassment at work

**C3.3: Element: Sophisticated blaming, framing and
unfair labour practices as negative push factor;
as measured by the following individual questions:**

37. Sophisticated blaming and framing
38. Unfair disciplinary practices
39. Planned mismatch of tasks and skills

**C4: Construct 4: Experiencing positive motivational,
planning and process success factors.**

**C4.1: Element 4.1: Being successfully independent,
in control, achieving goals and job satisfaction;
as measured by the following individual questions:**

40. being independent and in control
41. achievement of goals
42. to job satisfaction

**C4.2: Element 4.2: Being successful by planning
for growth factors;
as measured by the following individual questions:**

43. increases in turnover annually
44. competitive advantage
45. changes in the environment

**C4.3: Element 4.3: Being successful by
sustaining growth in their businesses;
as measured by the following individual questions:**

46. adapting internal systems
47. good communication links
48. an organisation's culture

6.3 Sampling

The SAWiC and NAWIC databases of ± 600 and 6000 members respectively were used to identify the entrepreneurial members. Some 417 members including stakeholders completed questionnaires in workshops dedicated for this purpose. The results of each section of this research programme questionnaire are reflected in Chapter 7.

It was submitted in a workshop to delegates in the SAWiC (developing country) and NAWIC (developed country) databases. This method is called a **convenience sample** where workshop delegates complete the questionnaire in a workshop situation. After the questionnaire was filled out, a short individual interview with each respondent was done in order to limit rejected questionnaires.

6.4 Instrument implementation: Hard copies and interactive website

The questionnaire was designed as an instrument to answer the research questions. The data for this 'interrogative study' were collected in South Africa by means of workshops with participant members and stakeholders of SAWiC completing the questionnaire supported by interviews.

The workshops had on average 30 to 40 participants, but in the Gauteng province in SA there were more respondents because of the urban setting and population density. A total of 330 questionnaires were completed in SA and 87 in the USA, representing most of the states of the USA.

In the USA the same questionnaire was handled in a workshop with interviews and an internet interactive website, to be accessed using a password to prevent tampering or skewing of results by unauthorised persons. Only 7 responses were received through the web which was surprising. On checking with the World Bank Rist (2004) reported that they receive about a 5% return through the web and Breytenbach (2004) reported a 3% return at the University of North West. Theunissen (2004) reported that on a specific sector initiative they received about 300 responses from the USA on the web, as an exception.

Four and five point scales were used where possible. A pilot test was run to test the questionnaires. For a copy of the hard copy questionnaire, please see annexure.

6.5 Electronic Questionnaire for website: Development Methodology

For the development of the electronic/on-line questionnaire the author approached two software developers. The development commenced with a short planning and initial requirement solicitation session with the developers. From this session the developers were able to estimate the scope and complexity of the solution that was needed. Using the information gathered from the session the developers decided to follow a customised/derivative of the extreme programming (XP) software development methodology [Beck 2000, XP URL]. Furthermore the developers opted to primarily use open source software solutions (OSS) as part of the development effort. As such the code base of the questionnaire is licensed under the GNU General Public License (GPL) [GPL URL].

The practises of note that formed part of the development project were pair-programming and test driven development. These practises are briefly described below.

Pair-programming:

“All code to be included in a production release is created by two people working together at a single computer. Pair programming increases software quality without impacting time to deliver.”[XP URL].

The two developers of the system used pair-programming when writing the production code. This enhanced the quality and correctness of the code and the system. In turn this practise insures redundancy on the knowledge of the system for future maintenance.

Test Driven Development:

Code to test the actual production code is written first and used throughout the development process to verify the correctness of the system. These include both functional test cases (to test the features available through the system) and unit tests (to test the low level code implementation).

Using this practise increases the quality and correctness of the system and provides insurance that the system functions as specified. Furthermore it ensures that when changes are made to portion of the system, these do not break another part of the system (this is known as regression testing).

Software development technologies used:

HTML (Hyper-Text Mark-up Language): Static web pages were used.

PHP (PHP: Hypertext Preprocessor): PHP “is a widely-used open-source programming language primarily for server-side applications and developing dynamic web content.”[Wikipedia URL]. For the system under discussion PHP was used to process the input provided by respondents and in turn populate a database with the responses for further analysis.

For an open source relational database management system responses are captured in a MySQL database for analysis. See [MySQL URL].

A feature testing harness that is capable of testing dynamic websites. The system under discussion used Jameleon as the tool to enable Test Driven Development as prescribed by the software development methodology followed during the development of the system. See [Jameleon URL].

The developed system was deployed on a web-server during the duration of the study on a server that met the technological requirements of as indicated in the previous section. The respondents were then asked to access the system through the web-interface and complete the questionnaire.

After the conclusion of the request for response all the data was queried and a raw data report was generated for statistical analysis (Theunissen 2004).

6.6 Data editing and quality control

A short interview was held with each respondent to ensure that the questions were understood and all the questions answered in order to minimise missing data. The data was edited to ensure that it is accurate, consistent, uniformly entered, completed and arranged to simplify the coding and tabulation.

The feedback from the respondents via the internet was disappointing as only seven people made use of the electronic questionnaire.

6.7 Statistical tools applied in analysing the responses

6.7.1 Selection of statistical techniques by measurement level and testing situation

	One-Sample case	Two-Samples Case		<i>k</i> -Samples Case	
Measurement Level		Related Samples	Independent Samples	Related Samples	Independent Samples
Nominal	Binomial χ^2 One-sample	McNemar	Fisher exact test χ^2 Two-samples test	Cochran	χ^2 for k-samples
Ordinal	Kolmogorov-Smirnov one-sample test Runs test	Sign test Wilcoxon matched pairs	Median test Mann-Whitney U Kolmogorov-Smirnov Wald-Wolfowitz	Friedman two-way Anova	Median extension Kruskal-Wallis One-way Anova
Interval and ratio	t-test Z-test	t-test for paired samples	t-test Z test	Repeated measures Anova	One-way ANOVA n-way ANOVA

Source: Cooper & Schindler (2001:498)

6.7.2 Computer programme

To serve the purpose of this research, descriptive and inferential statistics were used to analyse the data. The data were analysed by using SAS computer programme (SAS 1988).

6.7.3 Means and standard deviations

The arithmetic mean (\bar{X}) comprises a point, which coincides with the sum of the scores divided by the number of scores. The standard deviation (S) shows the variation about the average of the data.

Arithmetic means (\bar{X}) and standard deviations (S) are reported in this research.

6.7.4 Chi-square

The chi-square test is probably the most widely used nonparametric test of significance that is useful for tests involving nominal data, but it can be used for higher scales as well like cases where persons, events or objects are grouped in two or more nominal categories such as 'yes-no' or cases A, B, C or D. This technique is used to test for significant differences between the observed distribution of data among categories and the expected distribution based on the null hypothesis. Chi-Square is also useful in cases of one-sample analysis, two independent samples or k independent samples. It must be calculated with actual counts rather than percentages (Cooper & Schindler, 2001:499)

By using the Anova ('Blom' transformation) and the Friedman two-way analysis of variance, dichotomous data have been accommodated in the analysis of significant differences between observations.

6.7.5 ANOVA (Analysis of Variance)

SAS (1988) works out a P-value that automatically incorporates the values in the F statistical tables. Least Square (LS) Means, similar to Tukey and Scheffè, will be used where p-values indicate the direction of the statistical significance.

The statistical method for testing the null hypothesis, that the means of several populations are equal, is analysis of variance (ANOVA). The distance from one value to its group's mean should be independent of the distances of other values to that mean (independence of error). ANOVA is reasonably robust and minor variations from normality and equal variance are tolerable. ANOVA uses squared deviations of the variance.

The test statistic for ANOVA is the F ratio. The F -ratio is computed by SAS into the P -value. Previously the P -value had to be obtained from tables. The F -ratio or translate P -value compares the variance from the last two sources:

$$F = \frac{\text{Between-groups variance}}{\text{Within-groups variance}} = \frac{\text{Mean square}_{\text{between}}}{\text{Mean square}_{\text{within}}}$$

where:

$$\text{Mean square}_{\text{between}} = \frac{\text{Sum of squares}_{\text{between}}}{\text{Degrees of freedom}_{\text{between}}}$$

$$\text{Mean Square}_{\text{within}} = \frac{\text{Sum of squares}_{\text{within}}}{\text{Degrees of freedom}_{\text{within}}}$$

The F distribution determines the size of ratio necessary to reject the null hypothesis for a particular sample size and level of significance (Cooper & Schindler, 2001:509).

6.7.6 Probability Values (p values) measuring statistical significance

SAS computes a P -value that automatically incorporates the F -values. Results will be regarded as significant if the p -values are smaller than 0.05, because this value presents an acceptable level on a 95% confidence interval ($p \leq 0.05$).

The p -value is the probability of observing a sample value as extreme as, or more extreme than, the value actually observed, given that the null hypothesis is true. This area represents the probability of a Type 1 error that must be assumed if the null hypothesis is rejected.

The p -value is compared to the significance level (α) and on this basis the null hypothesis is either rejected or not rejected. If the p value is less than the significance level, the null hypothesis is rejected (if p value $<$ α , reject null). If p is greater than or equal to the significance level, the null hypothesis is not rejected (if p value $>$ α , don't reject null). If the p value is less than 0.05, the null hypothesis will be rejected.

The p value is determined by using the standard normal distribution. The small p value represents the risk of rejecting the null hypothesis. It is the probability of a Type 1 error if the null hypothesis is rejected (Cooper & Schindler 2001:494).

A difference has statistical significance if there is good reason to believe the difference does not represent random sampling fluctuations only. While it is of statistical significance, whether it is of practical significance is another question. If the controller judges that this variation has no real importance, then it is of little practical significance (Cooper & Schindler 2001: 486, 487).

Results will be regarded as significant if the p -values are smaller than 0.05, because this value is used as cut-off point in most behavioural science research.

6.7.7 Friedman ANOVA (Analysis of variance)

For nonparametric tests, Cooper & Schindler (2001:519) found that when the data is at least ordinal, the Friedman two-way analysis of variance is appropriate. It tests matched samples, ranking each case and calculating the mean rank for each variable across all cases. It tests matched samples, ranking each case and calculating the mean rank for each variable across all cases. It uses ranks to compute a test statistic. The product is a two-way table where the rows represent subjects and the columns represent treatment conditions.

Many tests of univariate differences apply the theory of difference distributions. These distributions are analogous to sampling distributions but involve two populations, in this study the SA and USA samples. Because these distributions approximate the shape of the normal distribution, the power of this distribution can be used in the analysis. All group tests follow the general format of the difference scores of means or proportions divided by the standard error of the difference of means or proportions.

The z -test of proportions is one of the class of statistical tests. It is used when the data is dichotomous and the samples are assumed to be independent (Davis 2000:406).

6.7.8 ANOVA ('Blom' Transformation)

Data were transformed using the normal 'Blom' transformation in order to adhere to the assumptions for Anova, namely normality residuals and homogeneity of variances. Least square means (LS means) were used for post-hoc test with the Anova.

The 'Blom' method of compiling normal scores involves the inverse cumulative normal (PROBIT) function of the following:

$$\frac{(R_i - 3/8)}{(n + 1/4)}$$

Where r_i is the rank and n is the number of non-missing rows.

The 'Blom' method appears to fit slightly better than Tukey. It is the default method if normal scores are requested (SAS 2003).

6.7.9 Kendall coefficient of concordance

When a subject that ranks higher on one variable also ranks higher on the other variable, the pairs of observations are said to be concordant. Whenever a pair is ordered oppositely, it is referred to as 'discordant' with a value of -1.0. Kendall's tau varies from -1.0 to +1.0. Kendall is used for measuring ordinal data (Cooper & Schindler, 2001:533).

6.7.10 Cohen-d values measuring practical significance

The most commonly used effect size estimates are Cohen's d (Becker 1999 quoting Cohen, 1988) and the effect size correlation. Cohen's d is found by dividing the mean difference by the pooled standard deviation. The effect size correlation for a t test is computed as the Pearson's product moment correlation between the independent variable with two groups and the dependent variable. By convention, effect size measures are positive if the mean difference supports the hypothesis, and negative if the mean difference is opposite to that predicted by the hypothesis.

The practical significance of the results (d -values) will be computed when the p -value was statistically significant ($p \leq 0.05$). According to Steyn (1998:13), Cohen (1977) recommends the following guidelines for practical significance:

$d = 0.2$ smaller effect;

$d = 0.5$ medium effect;

$d = 0.8$ large effect (Steyn 1998:13):

$$\text{Cohen } d = \frac{\mu_1 - \mu_2}{\sigma} \quad (\text{Cohen 1988})$$

6.8 Statistical tools used for the confirmation of validity and reliability

6.8.1 Factor analysis

A Factor analysis was done on the constructs. Factor analysis looks for patterns among the variables to discover whether an underlying combination of the original variables (a factor) can summarise the original set. Factor analysis attempts to reduce the number of variables and discover the underlying constructs that explain the variance (Cooper & Schindler 2001:214, 574, 575, 591 and 604).

Davis (2000: 432) regards the factorial analysis of variance as providing one solution to a research problem by allowing the effect of an independent variable to be averaged over levels of another relevant variable(s). One important form of factorial Anova is the two-way Anova. The classification variables in this form of Anova are called factors and the categories within the factors are referred to levels of a factor. In a two-way Anova there are two classification variables and one dependent variable.

According to Davis (200:432) the factorial design contains a very important analytical convention: an *interaction effect*. The estimation of the interaction effect is important for the researcher. Sometimes the researcher is not concerned with the effects of any one independent variable on a dependent variable. Therefore the estimation of main effects (differences across groups) is useless. The two-way analysis of variance enables the researcher to evaluate the combined effects of two independent variables on a dependent variable in one analysis. He concludes that the interaction effect is the focus of the two-way analysis.

A good factor solution should show invariance in structure when the factor loadings are derived from various solution techniques. Similarly solutions should be cross-validated by using split samples to estimate and rotate the initial factor structure. Good solutions require that various techniques should produce cross-validated samples. Generally factor analysis is a mathematical procedure not a statistical one, and often misused under this guise. The factor loadings are produced by sampling information, but they cannot be easily tested for significance. The user should have some idea of underlying patterns in the data before analysis begins (Davis 2000:484). In this instance the factors came out closely as the researcher envisaged as can be seen from the following tables:

Table 6.8.1: Yourself: Factor correlations for rotated factors (not yet equal to constructs)

Variables	1 st Factor	2 nd Factor	3 rd Factor	4 th Factor
Y35 Abuse & Discrimination at work	0.837	0.000	0.000	0.000
Y36 Sexual harassment @ work	0.823	0.000	0.000	0.000
Y33 Sexual harassment in society	0.789	0.000	0.000	0.000
Y34 Exploitation at work	0.753	0.000	0.000	0.000
Y38 Unfair disciplinary practices	0.745	0.000	0.000	0.000
Y32 Abuse & Discrim. in society	0.744	0.000	0.000	0.000
Y39 Planned mismatch: tasks, skills	0.688	0.000	0.000	0.000
Y37 Sophisticated blaming & framing	0.687	0.000	0.000	0.000
Y31 Exploitation in society	0.546	0.000	0.000	0.000
Y41 Achievement of goals	0.000	0.780	0.000	0.000
Y40 Being independent & in control	0.000	0.755	0.000	0.000
Y42 Job satisfaction	0.000	0.736	0.000	0.000
Y44 Competitive advantage	0.000	0.724	0.000	0.000
Y47 Good communication links	0.000	0.690	0.000	0.000
Y46 Adapting internal systems	0.000	0.662	0.000	0.000
Y45 Changes in environment	0.000	0.629	0.000	0.000
Y48 Organisation's culture	0.000	0.574	0.000	0.000
Y43 Increases in turnover annually	0.000	0.556	0.000	0.000
Y16 Enjoy new opportunities	0.000	0.000	0.817	0.000
Y17 New challenges / horizons	0.000	0.000	0.798	0.000
Y14 Need to be constructive	0.000	0.000	0.727	0.000
Y18 New ideas to be tested	0.000	0.000	0.696	0.000
Y13 The need to be an achiever	0.000	0.000	0.669	0.000
Y19 Need to do your own thing	0.000	0.000	0.576	0.000
Y15 Satisfaction from success	0.000	0.000	0.531	0.000
Y25 Resigning from previous job	0.000	0.000	0.000	0.738
Y26 Rejoining after failures	0.000	0.000	0.000	0.723
Y29 Job loss or retrenchment	0.000	0.000	0.000	0.721
Y27 Dissatisfaction formal job	0.000	0.000	0.000	0.701
Y28 Necessity to have a job	0.000	0.000	0.000	0.554
Y30 Obligation to earn income	0.000	0.000	0.000	0.546
Y21 Not willing to work for a boss	0.000	0.000	0.380 R	0.000
Y20 Desire to have an own business	0.000	0.000	0.494 R	0.000

Goodness-of-fit: Chi-sq=1723.767; Degrees of freedom=402; P-value=0.000* R=Rejected

The original Factor analysis was ranked from the highest 0.837, to the lowest value 0.546, as 1st Factor, 2nd Factor etc. Within each group the questions were also ranked from the highest to the lowest value. 1st Factor is therefore not the same as Factor 1. The Factors were later used to be equal to the Constructs, thus later became Factor 1 = Construct 1.

Table 6.8.2: Men: Factor correlations for rotated factors (not yet equal to constructs)

Variables	1 st Factor	2 nd Factor	3 rd Factor	4 th Factor
M36 Sexual harassment @ work	0.853	0.000	0.000	0.000
M35 Abuse & Discrimination at work	0.832	0.000	0.000	0.000
M34 Exploitation at work	0.803	0.000	0.000	0.000
M33 Sexual harassment in society	0.773	0.000	0.000	0.000
M37 Sophisticated blaming & fram.	0.760	0.000	0.000	0.000
M32 Abuse & Discrimination in soc	0.756	0.000	0.000	0.000
M38 Unfair disciplinary practices	0.741	0.000	0.000	0.000
M39 Planned mismatch tasks +skills	0.715	0.000	0.000	0.000
M31 Exploitation in society	0.639	0.000	0.000	0.000
M42 Job satisfaction	0.000	0.796	0.000	0.000
M44 Competitive advantage	0.000	0.775	0.000	0.000
M41 Achievement of goals	0.000	0.756	0.000	0.000
M40 Being independent & in control	0.000	0.734	0.000	0.000
M43 Increases in turnover annually	0.000	0.724	0.000	0.000
M45 Changes in environment	0.000	0.705	0.000	0.000
M46 Adapting internal systems	0.000	0.686	0.000	0.000
M47 Good communication links	0.000	0.655	0.000	0.000
M48 Organisation's culture	0.000	0.587	0.000	0.000
M17 New challenges / horizons	0.000	0.000	0.865	0.000
M16 Enjoy new opportunities	0.000	0.000	0.824	0.000
M18 New ideas to be tested	0.000	0.000	0.800	0.000
M15 Satisfaction from success	0.000	0.000	0.696	0.000
M14 Need to be constructive	0.000	0.000	0.667	0.000
M13 The need to be an achiever	0.000	0.000	0.669	0.000
M20 Desire to have an own business	0.000	0.000	0.572	0.000
M19 Need to do your own thing	0.000	0.000	0.554	0.000
M27 Dissatisfaction formal job	0.000	0.000	0.000	0.768
M29 Job loss or retrenchment	0.000	0.000	0.000	0.738
M26 Rejoining after failures	0.000	0.000	0.000	0.704
M28 Necessity to have a job	0.000	0.000	0.000	0.690
M25 Resigning from previous job	0.000	0.000	0.000	0.673
M30 Obligation to earn income	0.000	0.000	0.000	0.663
M21 Not willing to work for a boss	0.000	0.000	0.397 R	0.000

Goodness of fit: Chi-square=1704.901; Degrees of freedom=402; P-value=0.000*

R=Rejected questions not used in further analysis.

Table 6.8.3: Women: Factor correlations for rotated factors (not yet equal to constructs)

Variables	1 st Factor	2 nd Factor	3 rd Factor	4 th Factor
W44 Competitive advantage	0.776	0.000	0.000	0.000
W42 Job satisfaction	0.744	0.000	0.000	0.000
W46 Adapting internal systems	0.739	0.000	0.000	0.000
W45 Changes in environment	0.738	0.000	0.000	0.000
W40 Being independent & in control	0.733	0.000	0.000	0.000
W43 Increases in turnover annually	0.726	0.000	0.000	0.000
W47 Good communication links	0.719	0.000	0.000	0.000
W41 Achievement of goals	0.702	0.000	0.000	0.000
W48 Organisation's culture	0.625	0.000	0.000	0.000
W35 Abuse & Discrimination at work	0.000	0.821	0.000	0.000
W36 Sexual harassment @ work	0.000	0.809	0.000	0.000
W34 Exploitation at work	0.000	0.780	0.000	0.000
W33 Sexual harassment in society	0.000	0.743	0.000	0.000
W37 Sophisticated blaming & fram.	0.000	0.730	0.000	0.000
W32 Abuse & Discrimination in soc.	0.000	0.696	0.000	0.000
W38 Unfair disciplinary practices	0.000	0.660	0.000	0.000
W39 Planned mismatch tasks skills	0.000	0.633	0.000	0.000
W31 Exploitation in society	0.000	0.507	0.000	0.000
W16 Enjoy new opportunities	0.000	0.000	0.895	0.000
W17 New challenges / horizons	0.000	0.000	0.878	0.000
W18 New ideas to be tested	0.000	0.000	0.751	0.000
W14 Need to be constructive	0.000	0.000	0.738	0.000
W15 Satisfaction from success	0.000	0.000	0.648	0.000
W13 The need to be an achiever	0.000	0.000	0.620	0.000
W20 Desire to have own business	0.000	0.000	0.600	0.000
W19 Need to do your own thing	0.000	0.000	0.557	0.000
W21 Not willing to work for a boss	0.000	0.000	0.512	0.000
W25 Resigning from previous job	0.000	0.000	0.000	0.806
W26 Rejoining after failures	0.000	0.000	0.000	0.767
W27 Dissatisfaction formal job	0.000	0.000	0.000	0.767
W29 Job loss or retrenchment	0.000	0.000	0.000	0.728
W28 Necessity to have a job	0.000	0.000	0.000	0.583
W30 Obligation to earn income	0.000	0.000	0.000	0.498

Goodness of fit: Chi-square=1600.503; Degrees of freedom=402; P-value=0.000*

The factor analysis assumes that all the variables are caused by underlying factors (Kim & Mueller 1987:78). Factor analysis can be used to check out the meaning of a particular variable or element to see if it fits the construct. If it does not fit the element may be dropped (Kim & Mueller 1978a:10).

This happened in factor 3 (as underlined in tables above) where the element on negative family circumstances for men gave skewed results due to the perceptions of women, who are in the majority. Therefore Questions 22-24 were dropped because of the factor analysis.

Table 6.8.4: Factor analysis: Variance explained by factor

Factor	Yourself	Men	Women
1st Factor	8.5995	8.7767	10.2882
2nd Factor	4.0554	4.1769	3.6692
3rd Factor	2.3551	3.1727	2.6556
4th Factor	1.7765	2.0184	2.3040

The 'Eigen values of Factors Reported' derived one factor from each construct from the questions asked, and therefore represents good constructs.

6.8.2 Cronbach Alpha analysis

A Cronbach Alpha value of above 0.5 is regarded as an indication of reliability. Cronbach's Alpha is regarded as one of the most important reliability estimates. It measures internal consistency and the degree to which instrument items are homogeneous and reflect the same underlying construct(s) (Cooper & Schindler 2001:216-217).

Table 6.8.1 Cronbach Alpha results

Con-struct No	Constructs developed from the 36 five point Likert scale statements in Questionnaire	Yourself	Men	Women
C1	Positive pull factors why entrepreneurs are involved in construction	0.8756	0.8949	0.9092
C2	Negative push factors why entrepreneurs are involved in construction	0.8449	0.8618	0.8563
C3	The experiencing of negative barriers inhibiting performance as construction entrepreneurs	0.9174	0.9309	0.9081
C4	Experiencing positive motivational, planning and process success factors.	0.8966	0.9110	0.9177

From the 36 questions, grouped into 3 elements or sub-constructs the derived four constructs delivered excellent Cronbach Alpha results.

6.10 Conclusions

The instrument developed is reliable and viable. It can be used in other similar research. The constructs and propositions were formulated. Chapter 7 will now analyze the propositions as stipulated in Chapter 6.

Chapter 7: Empirical analysis: Comparison between SA USA and the nine SA provinces regarding the constructs formulated in Chapters 3, 4 and 6

7.1 Introduction

With the methodology explained in Chapters 1 and 6, Chapter 7 is analysing the results of the empirical study. The format in which the results of the analysis are presented is the same for all four constructs with their three elements:

- Each analysis starts with a figure (histogram) which refers to the yes-no questions (1 to 12 of the questionnaire) for SA and USA for Yourself, Men and Women;
- An ANOVA between SA and USA reflecting the opinions of SA & USA construction entrepreneurs on the four constructs regarding Yourself, Men and Women;
- An ANOVA between the USA and the nine provinces of SA by the construction entrepreneurs on the four constructs regarding Yourself, Men and Women;
- A Friedman two-way ANOVA test to determine the direction of each construct regarding Yourself, Men and Women for SA and USA combined.

In order not to snowball the thesis, an analysis of the elements will only be presented by means of histograms.

The constructs C1, C2, C3 and C4 have shown in Chapter 6 to be valid and reliable factors, therefore they will also be referred to as factors, F1, F2, F3 and F4.

An analysis from the last section of the questionnaire will also be presented by means of histograms such as:

- Where involved in construction: SA and USA entrepreneurs; Capacity of involvement;
- Age groups of SA and USA entrepreneurs; and how long in construction;
- Break even of SA and USA entrepreneurs; Profitability; Success; Client satisfaction;
- Role of SAWiC NAWIC of SA and USA entrepreneurs;
- Number of people employed.

7.2 Positive pull factors as reason why entrepreneurs are involved in construction; Construct 1 or Factor 1 (C1 or F1)

7.2.1 Results of the dichotomous questions

The following dichotomous questions were asked as an introduction to the positive pull factors as reasons why people are involved in construction:

Are you specifically, men and women in general involved in construction because of:

1. the positive need for Achievement?
2. the love for construction opportunities?
3. a need for independence?

The combined results of the three questions are as follows:

Figure 7.2.1: The number of respondents who answered Yes on Q1-Q3



Interesting to note that an extremely high percentage of 94% of the respondents in SA were of the opinion that they are involved in construction because of positive pull factors. As much as 78% of the USA group felt the same. This correlates how they feel about women in general in their respective countries (92% and 80%), but seems to be in contrast in both countries how they feel why men are in construction (69% and 68%).

In order to facilitate more in depth ANOVA analysis, the positive pull factors are also a collection of the following elements or sub-constructs that were each tested with three statements each in the questionnaire. These elements were introduced with the three dichotomous questions mentioned above:

C1.1	Need for achievement as positive pull factor
C1.2	Ideas, opportunities & challenges
C1.3	Need for independence & individualism

7.2.2 Results of an ANOVA between SA and USA (Positive pull factors C1 or F1)

This allowed for an ANOVA analysis on the two data sets of each country on this construct for the three categories; Yourself, Men and Women.

Table 7.2.1: Positive pull factor differences between SA and USA

Opinion of:	Country	N	\bar{X}	S	P-value	Cohen-d
Yourself	SA	330	4,43	0,64	0,0001*	0.60
	USA	87	3,98	0,75		
Men	SA	330	3,81	0,83	0,6728	0.00
	USA	87	3,81	0,73		
Women	SA	330	4,32	0,70	0,0001*	0.57
	USA	87	3,89	0,75		

A mean above 3 = high; * = statistical significance, $\alpha = 0.05$; +++ indicates practical significance.

Propositions:

1C1.Y: Rejected

There **is** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the positive pull factors why entrepreneurs are involved in construction about “Yourself” (respondents themselves).

Although the means are both high, (SA is 4,43 and USA is 3,98) but different, resulting in a P- value of $0.0001 < 0,05$; thus pointing to a significant statistical difference between SA and the USA; the practical effect of this difference is between medium and large according to the Cohen-d analysis.

1C1.M: Accepted

There **is not** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the positive pull factors why entrepreneurs are involved in construction about Men in general.

There is no difference between the USA and SA and incidentally the means are exactly the same at 3,81 for the USA and 3,81 for SA and a P-value of 0,6728 that is $>0,05$.

1C1.W: Rejected

There is a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the positive pull factors why entrepreneurs are involved in construction about Women in general.

The tendency for women is almost the same as for 'yourself'; with a significant difference between USA and SA. Although different with a P-value of $<0,05$ the means are extremely high with 3,32 for SA and 3,98 for the USA. The practical effect of this difference is between medium and large according to the Cohen-d analysis.

The results of the above C1 correlate with the percentages of Table 7.2.1 of the dichotomous questions because the means for yourself and women are in each case higher than the means for men.

7.2.3 Results of an ANOVA between USA and the SA nine provinces (Positive pull)

Least square means were used for a post-hoc test with the ANOVA between USA and the SA nine provinces.

Table 7.2.2: ANOVA P-values for USA and SA's nine provinces regarding: Positive pull factors (C1 or F1)

No	Province	Yourself	Men	Women
1	Gauteng	0.0101*	<u>0.7186</u>	0.0101*
2	Limpopo	0.0011*	<u>0.8365</u>	0.0198*
3	KZN	0.0174*	<u>0.5839</u>	0.0148*
4	Mpumalanga	<u>0.0614</u>	<u>0.7218</u>	0.0152*
5	Eastern Cape	0.0365*	<u>0.3501</u>	0.0039*
6	Free State	0.0001**	<u>0.4333</u>	0.0001**
7	Northern Cape	0.0001**	<u>0.9026</u>	0.0002*
8	Western Cape	0.0164*	<u>0.5337</u>	0.0041*
9	North West	0.0192*	<u>0.4488</u>	0.0138*

*= statistical significance, **= 0,0001 and $\alpha = 0.05$

Regarding the comparison between the USA and the nine provinces in SA on the positive pull factors, the results can be interpreted as follows:

Yourself:

There are significant differences between the USA and eight of the nine provinces where the 'yourself' results reflect first hand knowledge and responses of the respondents about themselves. However the USA and Mpumalanga seem to be on par on this construct, positive pull factors. Although the USA and Mpumalanga test lower on positive pull factors it is clear that they feel strongly that it is the main reason for entering into construction entrepreneurship. They are just acknowledging that other factors also play a role. They (the entrepreneurs themselves) still rate positive pull factors higher than other initiating factors. Demographically USA and Mpumalanga differ in that Mpumalanga is more rural, smaller in size with less resources and less opportunities than the USA. Tourism is picking up in the province with more opportunities coming forth, but economically it is still nowhere close to that of the USA. Another factor that should be kept in mind is that USA has a high percentage of corporate entrepreneurs and SA and Mpumalanga have a high percentage of entrepreneurs. The similar results will have to be the subject for future research to come up with a realistic explanation.

Men:

Contrary to the above the USA and all nine SA provinces seem to be in agreement as to why men are involved in construction regarding this construct. All respondents in SA and USA (men and women) are of the opinion that men score lower on positive pull factors as a reason for entering construction.

Women:

The results for 'women' are similar to the results for 'yourself'. In all provinces there is a significant difference in relation to the USA. Here one should remember that all the respondents (women and men) in SA and USA are giving their opinions about the reasons

for women in general entering into construction entrepreneurship. On comparing results from SA on 'yourself' and 'women' it is of the same high order, and the same observation can be made of the USA for 'yourself' and 'women' although high for both, the responses are substantially lower than for SA. The reason may be inherent in the fact that there are more corporate entrepreneurs than entrepreneurs (business owners) in the USA. In order to come up with a scientifically substantiated answer, though, it will have to be the subject of future research.

7.2.4 Results of the Friedman two way ANOVA test (Positive pull factors)

An Analysis of Variance (Friedman two-way ANOVA test) is done to compute multiple comparisons between the opinions of all 417 respondents (SA and USA combined) about themselves, men in general and women in general.

Please refer to Table 7.2.3 (See next page please)

From the analysis of why people in SA and USA are involved in construction there is a clear indication that the respondents are of the opinion that:

- They (mainly women) are involved in construction mainly because of positive pull factors;
- There is a significant difference ($P=0.0000$) in the results why the respondents themselves versus, women in general, and men in general are involved in construction.

Table 7.2.3: Positive pull factor (C1 or F1): Results of Friedman ANOVA

Opinion of:	Yourself (Y)	Men (M)	Women (W)
Results:			
Number of respondents: N	417	417	417
Mean: \bar{X}	4.3327	3.8075	4.2325
Standard Deviation: S	0.6892	0.8083	0.7324
Friedman Rank Sum:	951.5	665.0	885.5
Friedman Test Statistic:	107.96		
P-value:	0.0000** < 0.05		
Kendall Coeff of Concord.	0.1294		
Comparison: Z-Stat: Difference: Direction:	YF1 - MF1 9.92** 286.50 YF1 > MF1		
Comparison: Z-Stat: Difference: Direction:		MF1 - WF1 7.64** -220.50 MF1 < WF1	
Overall Direction	MF1 < WF1 < YF1		

*= statistical significance, **= 0,0001 and $\alpha = 0.05$

Overall direction MF1 < WF1 < YF1 means that Women (W), in SA and USA, seem to be involved in construction because of positive pull factors (F1), while men (M) seem to be involved because of other reasons than positive pull factors (F1).

Please note that because Construct 1 is the same as Factor 1 (C1 = F1), these terms are therefore used interchangeably in the thesis.

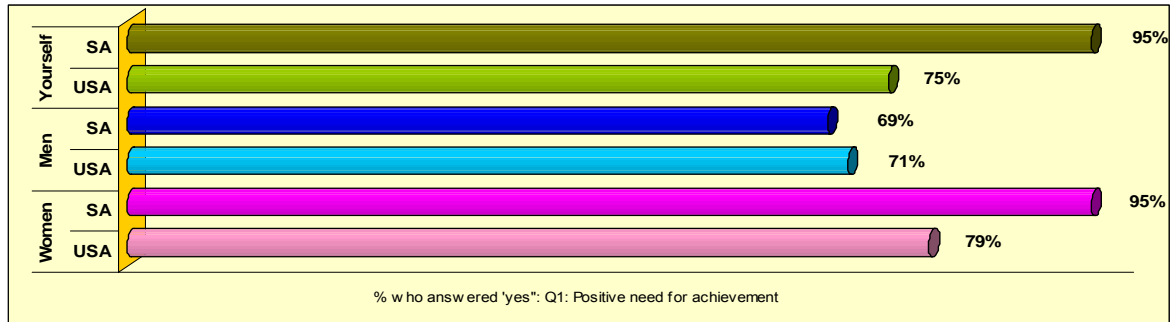
The following three elements that made up the construct 1 (C1) “Positive pull factors” or analysed as Factor 1 (F1) will be described in Section 7.3 by means of histograms.

C1.1	Need for achievement as positive pull factor
C1.2	Ideas, opportunities & challenges
C1.3	Need for independence & individualism

7.3 Positive pull elements as reason for involvement: Need for Achievement; Ideas, opportunities & challenges; Need for independence & individualism

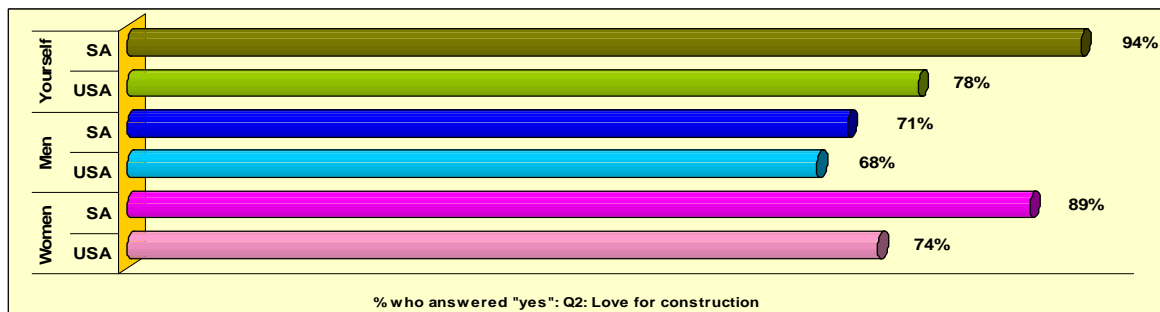
7.3.1 The need for Achievement as important positive pull factor

Figure 7.3.1: The number of respondents who answered Yes on Q1



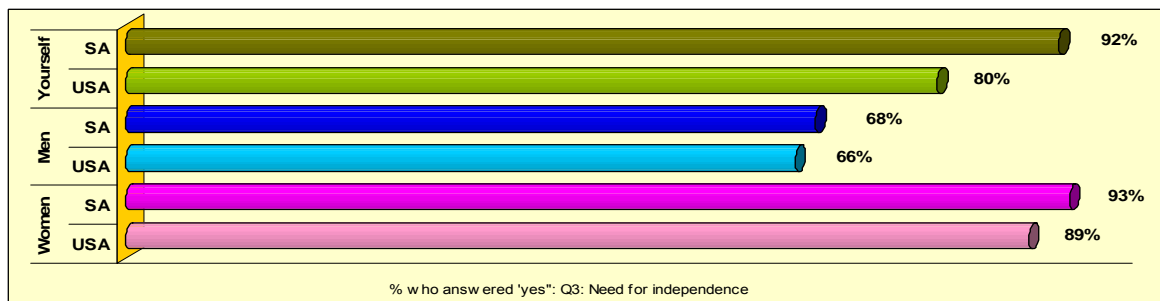
7.3.2 New opportunities, challenges and ideas why entrepreneurs are involved in construction; Construct 1.2

Figure 7.3.2 : The number of respondents who answered Yes on Q2



7.3.3 The need for independence and individualism as positive pull factor

Figure 7.3.3: The number of respondents who answered Yes on Q3



7.4 Negative push factors why entrepreneurs are involved in construction (C2; F2)

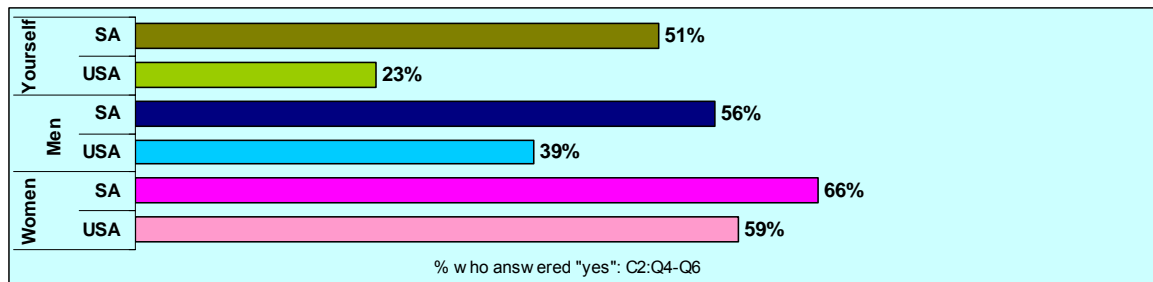
7.4.1 Results of the dichotomous questions

Similar to Section 7.2 the following dichotomous questions were asked as an introduction to the negative push factors as reasons why people are involved in construction:

- Are you specifically, men and women in general involved in construction because of:
4. negative family circumstances?
 5. dissatisfaction in previous job?
 6. economic or financial pressure?

The results were as follows:

Figure 7.4.1: The number of respondents who answered Yes on Q4-Q6



The percentages who answered “Yes” on the push factors as reason why they are involved in construction are much lower than the similar percentages for the positive pull factors. The percentages are in each case much higher in SA than in USA, and it is remarkable that 66% of the SA respondents believed that women in SA are pushed into construction due to negative family circumstances, dissatisfaction in previous jobs or economic or financial pressure.

Similar to Section 7.2 a more in depth analysis will follow. The “Negative Push Factors” are also a collection of the following elements that were each tested with three statements in the questionnaire:

C2.1	Negative family circumstances
C2.2	Previous job related as negative push factors
C2.3	Obligatory financial circumstances

7.4.2 Results of an ANOVA between SA and USA (Negative push factors C2 or F2)

An ANOVA analysis are done on the two data sets of each country on this construct for the three categories; Yourself, Men and Women.

Table 7.4.1: Differences between SA and USA

Opinion of:	Country	N	\bar{X}	S	P-value	Cohen-d
Yourself	SA	330	3,25	1,1	0,0036*	0.7
	USA	87	2,52	1,02		
Men	SA	330	3,70	0,91	0,9975	-
	USA	87	3,61	0,87		
Women	SA	330	3,58	1,02	0,4243	-
	USA	87	3,42	0,96		

A mean above 3 = high; *= statistical significance, $\alpha = 0.05$; +++ indicates practical significance.

On the basis of the above results, the following are accepted/ rejected:

Propositions:

1C2.Y: Rejected

There **is** a significant difference ($P=0.0036^*$) in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “Negative Push Factors” why entrepreneurs are involved in construction about “Yourself” (respondents themselves). Cohen–d shows a medium to large practical effect.

1C2.M: Accepted

There **is not** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “Negative Push Factors” why entrepreneurs are involved in construction about Men in general.

1C2.W: Accepted

There **is not** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “Negative Push Factors” why entrepreneurs are involved in construction about Women in general.

7.4.3 Results of an ANOVA between USA and the SA nine provinces

Least square means were used for a post-hoc test with the ANOVA between USA and the SA nine provinces.

Table 7.4.2: ANOVA P-values for USA and SA’s nine provinces regarding: Negative push factors (C2 or F2)

No	Province	Yourself	Men	Women
1	Gauteng	0.0111*	<u>0.1745</u>	<u>0.7684</u>
2	Limpopo	<u>0.9341</u>	<u>0.3043</u>	<u>0.8205</u>
3	KZN	<u>0.5841</u>	<u>0.0595</u>	<u>0.7083</u>
4	Mpumalanga	0.0001*	<u>0.0662</u>	0.0020*
5	Eastern Cape	<u>0.1382</u>	<u>0.1259</u>	<u>0.8009</u>
6	Free State	0.0001**	0.0228*	0.0094*
7	Northern Cape	0.0002**	0.0474*	0.0312*
8	Western Cape	<u>0.2377</u>	<u>0.3186</u>	<u>0.2874</u>
9	North West	<u>0.9863</u>	<u>0.7670</u>	<u>0.4348</u>

*= statistical significance, **= 0,0001 and $\alpha = 0.05$

Regarding the comparison between the USA and the nine provinces in SA on the negative push factors, the results can be interpreted as follows:

Yourself:

There are significant differences between the USA and four of the nine provinces (Gauteng, Mpumalanga, Free State and Northern Cape). However the USA and the other five

provinces seem to be on par on this construct, negative push factors. Aspects to be kept in mind here is that all respondents (women and men) in SA and USA reported for themselves (Yourself) that negative push factors are not playing such a big role in their decision to become entrepreneurs in construction.

Men:

There are significant differences between the USA and two of the nine provinces (Free State and Northern Cape). The USA and the other seven provinces seem to agree on this construct, negative push factors. The USA, Free State and Northern Cape concur in their opinions that negative push factors do not play such a big role for men, whilst the rest of the SA provinces feel that it does play a major role in the decision for men to become construction entrepreneurs.

Women:

There are significant differences between the USA and three of the nine provinces (Mpumalanga, Free State and Northern Cape). The USA and the other six provinces seem to agree on this construct, negative push factors. They are of the opinion that it plays a major role for women in general, although lower for the USA than for SA. These opinions may be aimed at policy decision-makers to make them aware that women entrepreneurs in construction come from disadvantaged backgrounds and therefore need more support in terms of capacity building, special procurement procedures and support in terms of resources. The agreement results between the six SA provinces and the USA on negative push factors are still of importance in terms of its message indicating the need for research and policy interventions.

7.4.4 Results of the Friedman two way ANOVA test (Negative push factors)

A Friedman ANOVA is done to compute multiple comparisons between the opinions of respondents (SA and USA combined) about themselves, men and women in general.

Table 7.4.3: Negative push (C2 or F2): Results of Friedman ANOVA

Opinion of:	Yourself (Y)	Men (M)	Women (W)
Results:			
Number of respondents: N	417	417	417
Mean: \bar{X}	3.1022	3.6782	3.5507
Standard Deviation: S	1.1315	0.9013	1.0096
Friedman Rank Sum:	690.5	921.0	890.5
Friedman Test Statistic:	75.18		
P-value:	0.0000* < 0.05		
Kendall Coeff of Concord.	0.0901		
Comparison: Z-Stat: Difference: Direction:	YF2 – MF2 7.98** -230.50 YF2 < MF2		
Comparison: Z-Stat: Difference: Direction:	YF2 – WF2 6.93** -200.00 YF2 < WF2		
Overall direction	YF2 < WF2 < MF2		

*= statistical significance, $\alpha = 0.05$

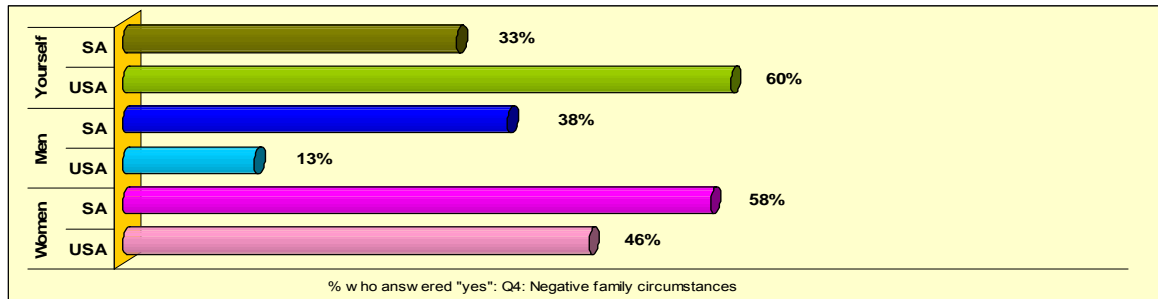
YF2 < WF2 < MF2 means that the respondents are of the opinion that they “yourselves” (Y) are not really involved in construction because of negative push factors (F2); other women (W) (but not themselves) might be involved in construction because of some negative push factors (F2); and men (M) seem to be involved in construction because of negative push factors (F2). The reasons are similar to those discussed in 7.4.3

Contrary to Section 7.2 the direction of this construct (C2 or F2) is: YF2 < WF2 < MF2

7.5 Negative push elements: Family; previous job; obligatory financial circumstances as negative push factors

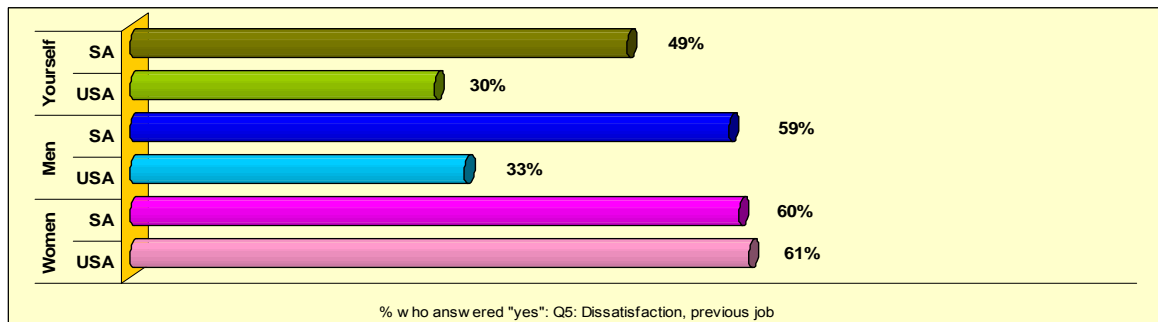
7.5.1 Negative family circumstances as push factors

Figure 7.5.1: The number of respondents who answered Yes on Q4



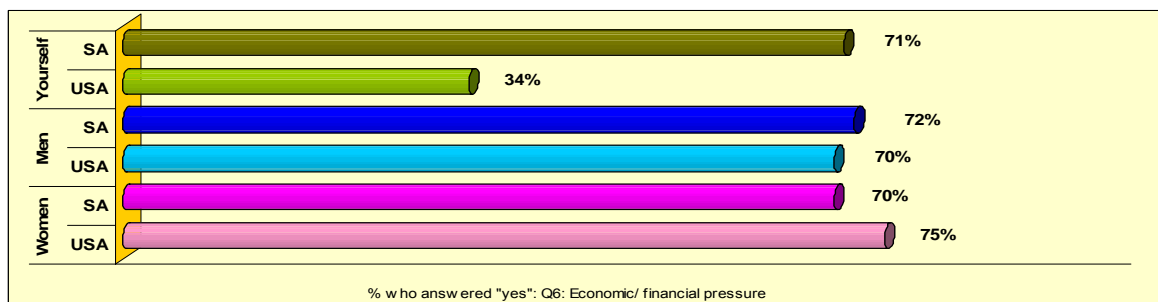
7.5.2 Previous job related circumstances as negative push factors

Figure 7.5.2: The number of respondents who answered Yes on Q5



7.5.3 Obligatory financial circumstances as negative push factors

Figure 7.5.3: The number of respondents who answered Yes on Q6



7.6 The experiencing of negative barriers inhibiting performance (C3 or F3) as construction entrepreneurs

7.6.1 Results of the dichotomous questions

Similar to Sections 7.2 and 7.4 the following dichotomous questions were asked as an introduction to the experiencing of negative barriers inhibiting performance as construction entrepreneurs:

In your opinion do men in general envy successful women:

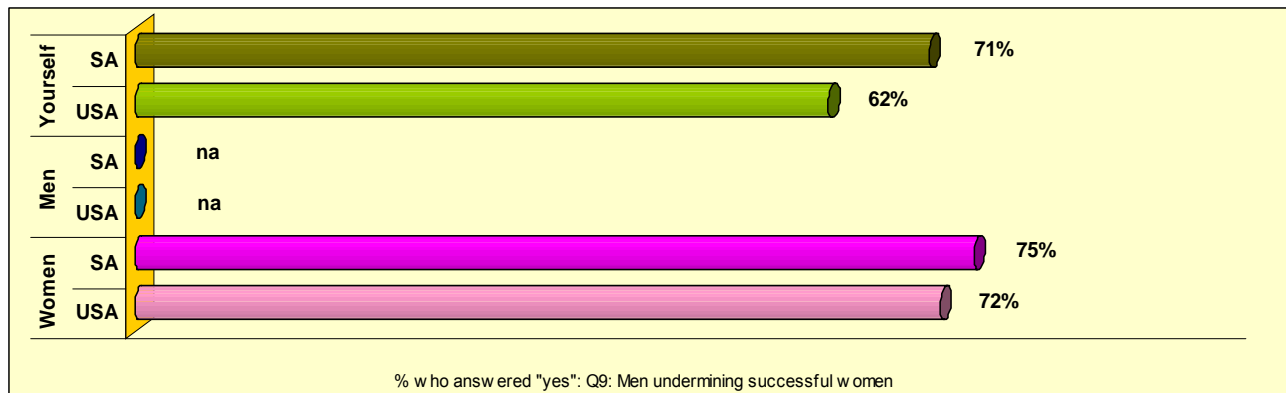
7. in your society?
8. in your workplace?
9. or undermine successful women?

Questions 7 and 8 are positively formulated, while question 9 is negatively formulated.

Therefore the sum total of the three questions cannot be used. The one question that marks discrimination the best is Question 9. The results were as follows:

Figure 7.6.1: The number of respondents who answered Yes on Q9:

In your opinion do men in general undermine successful women?



It is noteworthy that 71% of the South African respondents felt that men undermine successful women, while the percentage is even higher at 75% for women in general. The tendency is similar for USA where 62% feel that they are undermined while 72% answered yes regarding the undermining of other women in construction.

7.6.2 Results of an ANOVA between SA and USA (Negative barriers C3 or F3)

Table 7.6.1: Differences between SA and USA

Opinion of:	Country	N	\bar{X}	S	P-value	Cohen-d
Yourself	SA	330	3,72	1,00	0,0001*	0.6
	USA	87	3,13	1,03		
Men	SA	330	2,91	1,05	0,0001*	0.8+++
	USA	87	2,08	0,92		
Women	SA	330	4,04	0,84	0,0372*	0.2
	USA	87	3,85	0,79		

A mean above 3 = high; *= statistical significance, $\alpha = 0.05$; +++ indicates practical significance.

On the basis of the above results, the following are accepted/ rejected:

Propositions:

1C3.Y: Rejected

There **is** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “negative barriers” inhibiting performance as construction entrepreneurs for “Yourself” (respondents themselves). Cohen–d shows a medium to large practical effect. The SA respondents overwhelmingly responded that they are experiencing major negative barriers that influence their performance negatively. This is further confirmed in their realistic views on their rate of success, profitability, client satisfaction and time taken to break-even in their businesses that will be analysed and discussed in item 7.11. USA respondents felt that this was not such a major influence on their performance and again this is in line with their responses reported in item 7.11

1C3.M: Rejected

There **is** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “negative barriers” inhibiting performance as construction entrepreneurs about Men in general. Cohen-d shows a large practical significance. Here SA respondents overwhelmingly perceive men not to have little or no barriers influencing their entrepreneurial performance.

1C3.W: Rejected

There **is** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “negative barriers” inhibiting performance as construction entrepreneurs about Women in general. Cohen–d shows a low practical effect.

7.6.3 Results of an ANOVA between USA and the SA nine provinces (C3 or F3)

Least square means were used for an ANOVA between USA and the SA nine provinces.

Table 7.6.2: ANOVA P-values for USA and SA’s nine provinces regarding: Negative barriers (C3 or F3)

No	Province	Yourself	Men	Women
1	Gauteng	0.0027*	0.0001*	<u>0.1590</u>
2	Limpopo	0.0292*	0.0159*	<u>0.2475</u>
3	KZN	<u>0.0534</u>	0.0001*	<u>0.9724</u>
4	Mpumalanga	0.0005*	0.0001*	0.0188*
5	Eastern Cape	<u>0.1399</u>	0.0105*	<u>0.7660</u>
6	Free State	0.0001*	0.0001*	0.0001*
7	Northern Cape	0.0002*	0.0001*	0.0161*
8	Western Cape	<u>0.1727</u>	0.0001*	<u>0.8490</u>
9	North West	<u>0.2822</u>	0.0403*	<u>0.7016</u>

*= statistical significance, $\alpha = 0.05$

Regarding the comparison between the USA and the nine provinces in SA on the negative barriers, the results can be interpreted as follows:

Yourself:

There are significant differences between the USA and five of the nine provinces (Gauteng, Limpopo, Mpumalanga, Free State and Northern Cape). The USA and the other four provinces seem agree on this construct. Future research will have to determine the reasons for this agreement.

Men:

There are significant differences between the USA and all nine provinces. This finding is in line with the SA - USA comparison where the USA respondents felt that men in the USA have very few barriers (Mean = 2.08), while the respondents in SA felt that men in SA might have barriers (Mean = 2.91) inhibiting their performance as construction entrepreneurs.

Women:

There are significant differences between the USA and three of the nine provinces (Mpumalanga, Free State and Northern Cape). The USA and the other six provinces seem to agree on this construct. Future research will have to determine the reasons for this agreement.

7.6.4 Results of the Friedman two way ANOVA test (Negative barriers C3 or F3)

Table 7.6.3: Negative barriers (C3 or F3): Results of Friedman ANOVA

Opinion of:	Yourself (Y)	Men (M)	Women (W)
Results:			
Number of respondents: N	417	417	417
Mean: \bar{X}	3.5962	2.7340	3.9983
Standard Deviation: S	1.0355	1.0777	0.8319
Friedman Rank Sum:	864.5	586.5	1051.0
Friedman Test Statistic:	262.05		
P-value:	0.0000* < 0.05		
Kendall Coeff of Concord.	0.3142		
Comparison: Z-Stat: Difference: Direction:	YF3 – MF3 9.63** -278.00 YF3 > MF3		
Comparison: Z-Stat: Difference: Direction:		MF3– WF3 6.46** -186.50 MF3 < WF3	
Comparison: Z-Stat: Difference: Direction:	YF3 – WF3 16.08** -464.50 YF3 < WF3		
Overall Direction:	MF3 < YF3 < WF3		

*= statistical significance, $\alpha = 0.05$

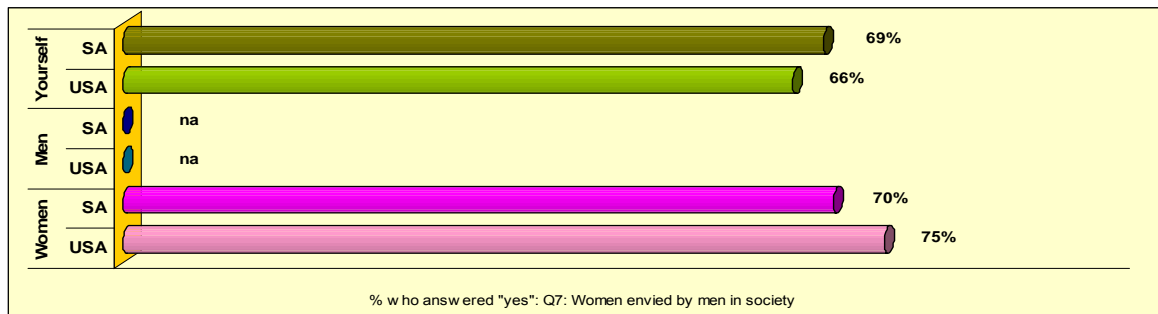
The overall direction MF3 < YF3 < WF3 means that negative barriers inhibiting performance of construction entrepreneurs (F3 or C3) are mostly found amongst women (W), while the respondents (Y) who are mainly women also feel that they suffer from negative barriers, while men (M) seems not to be influenced by negative barriers. A possible reason for this finding is that women mostly take care of family nurturing and child care, while men are free

to pursue their careers and interests, with women forming the support base and bearing the brunt.

7.7 Negative barrier elements:

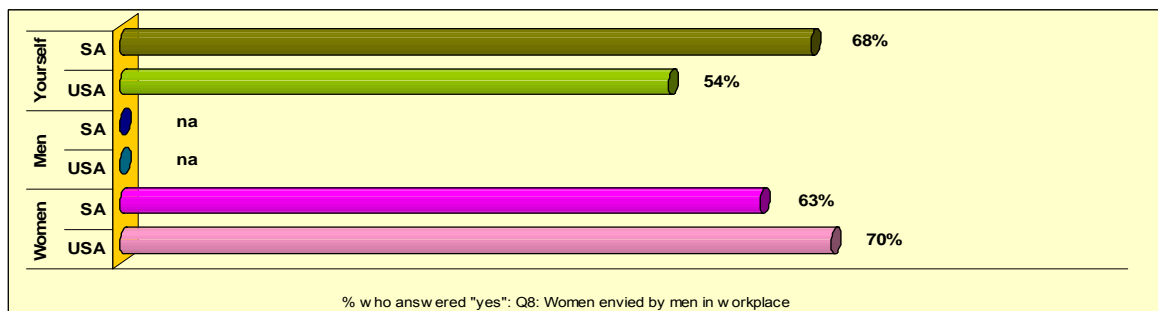
7.7.1 The exploitation, discrimination and harassment by society as negative push factor

Figure 7.7.1: The number of respondents who answered Yes on Q7



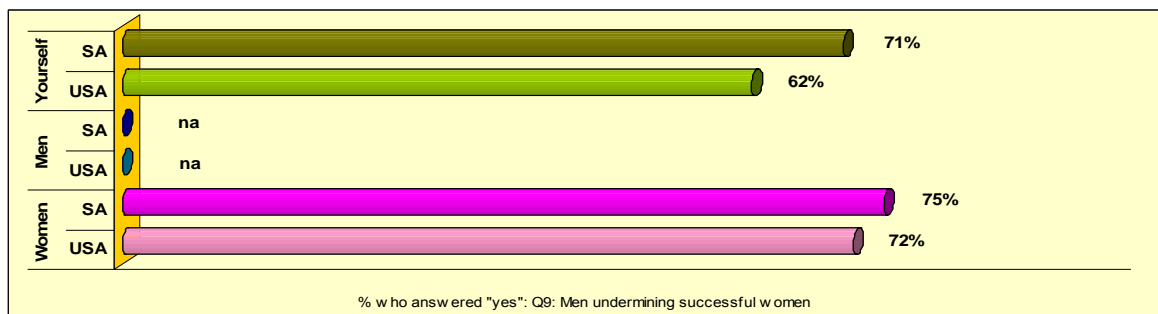
7.7.2 The exploitation, discrimination and harassment at work as negative push factor

Figure 7.7.2: The number of respondents who answered Yes on Q8



7.7.3 Sophisticated blaming, faming and unfair labour practices as negative push factor;

Figure 7.7.3: The number of respondents who answered Yes on Q9



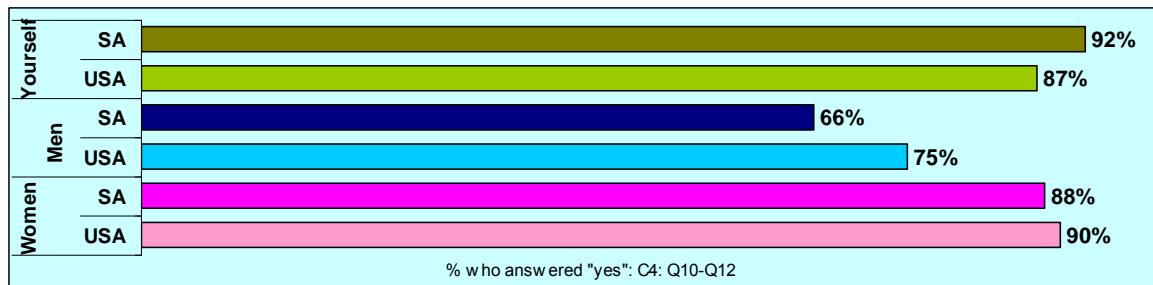
7.8 Experiencing positive motivational, planning & process success factors

7.8.1 Results of the dichotomous questions

The following dichotomous questions were asked as an introduction to the experiencing positive motivational, planning & process success factors:

- Are you specifically, men and women in general successful because you / they
10. are highly motivated?
 11. plan for growth in business?
 12. sustain growth in business?

Figure 7.8.1: The number of respondents who answered Yes on Q10-12



A lower percentage of the respondents think that men in both SA and USA are successful because the reasons given above.

7.8.2 Results of an ANOVA between SA and USA (Positive factors C4 or F4)

Table 7.8.2: Differences between SA and USA

Opinion of:	Country	N	\bar{X}	S	P-value	Cohen-d
Yourself	SA	330	4.32	0.72	0.0001*	0.7
	USA	87	3.85	0.69		
Men	SA	330	3.72	0.89	0.0306*	0.2
	USA	87	3.55	0.69		
Women	SA	330	4.24	0.75	0.0001*	0.5
	USA	87	3.83	0.71		

A mean above 3 = high; *= statistical significance, $\alpha = 0.05$; +++ indicates practical significance.

On the basis of the above results, the following are accepted/ rejected:

Propositions:

1C4.Y: Rejected

There **is** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “positive success factors” as construction entrepreneurs for “Yourselves” (respondents themselves). Cohen-d shows a medium to large practical effect. These results are similar to the positive pull factor results as they deal with motivation (as discussed in chapter 3 reflecting the work of Boshoff 1991 and Hoffstede 1980).

1C4.M: Rejected

There **is** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “positive success factors” as construction entrepreneurs about Men in general. Cohen-d shows a low practical significance. SA respondents are of the opinion that men are in construction mainly because of negative push factors and that they lack motivation.

1C4.W: Rejected

There **is** a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regarding the “positive success factors” as construction entrepreneurs about Women in general. Cohen-d shows a medium practical effect.

7.8.3 Results of an ANOVA between USA & SA nine provinces (Positive factors)

Least square means were used for an ANOVA between USA and the SA nine provinces.

**Table 7.8.3: ANOVA P-values for USA and SA's nine provinces regarding:
Positive success factors (C4 or F4)**

No	Province	Yourself	Men	Women
1	Gauteng	0.0370*	<u>0.2810</u>	0.0127*
2	Limpopo	0.0023*	<u>0.4381</u>	0.0113*
3	KZN	0.0001*	0.0230*	0.0001*
4	Mpumalanga	0.0003*	0.0005*	0.0001*
5	Eastern Cape	<u>0.0592</u>	<u>0.8745</u>	<u>0.5936</u>
6	Free State	0.0001*	0.0162*	0.0001*
7	Northern Cape	0.0002*	<u>0.2283</u>	0.0005*
8	Western Cape	0.0391*	0.0175*	0.0470*
9	North West	<u>0.0591</u>	<u>0.4112</u>	<u>0.0569</u>

*= statistical significance, $\alpha = 0.05$

Regarding the comparison between the USA and the nine provinces in SA on the negative barriers, the results can be interpreted as follows:

Yourself:

There are significant differences between the USA and seven of the nine provinces. The USA and the Eastern Cape and North West provinces seem to agree on this construct. Future research will have to determine the reasons for the agreement between USA, Eastern Cape and North West. Demographically they are quite different and answers are not readily available.

Men:

There are significant differences between the USA and four provinces, and similarities in five provinces.

Women:

There are significant differences between the USA and seven of the nine provinces. The USA and the Eastern Cape and North West provinces seem to agree on this construct.

7.8.4 Results of the Friedman two-way ANOVA test (Positive factors C4 or F4)

The following ANOVA computes multiple comparisons between the opinions of the 417 respondents about themselves, men in general and women in general.

Table 7.8.1: Positive motivational, planning and process success factors. (F4): Results of Friedman ANOVA

Opinion of:	Yourself (Y)	Men (M)	Women (W)
Results:			
Number of respondents: N	417	417	417
Mean: \bar{X}	4.2240	3.6810	4.1507
Standard Deviation: S	0.7415	0.8584	0.7606
Friedman Rank Sum:	947.5	638.5	916.0
Friedman Test Statistic:	138.67		
P-value:	0.0000* < 0.05		
Kendall Coeff of Concord.	0.1663		
Comparison:	YF4 – MF4		
Z-Stat:	10.70**		
Difference:	309.00		
Direction:	YF4 > MF4		
Comparison:		MF4– WF4	
Z-Stat:		9.61**	
Difference:		-277.50	
Direction:		MF4 < WF4	
Overall direction	MF4<WF4<YF4		

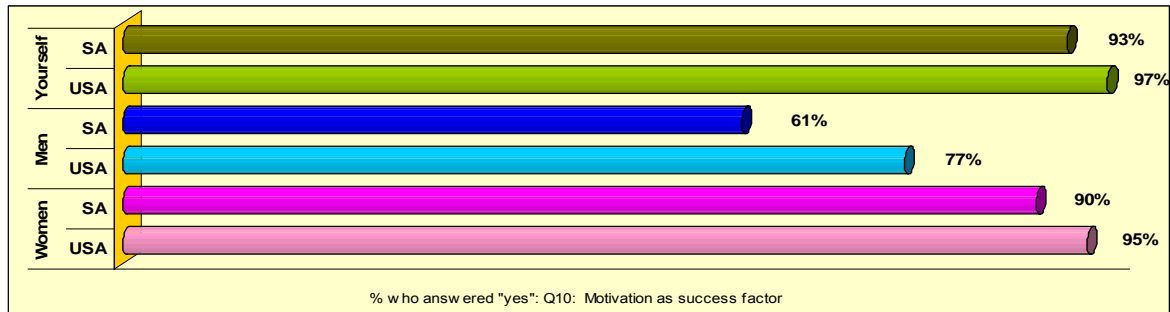
*= statistical significance, $\alpha = 0.05$

The results of the above analysis is MF4<WF4<YF4 which means that “positive success factors” (F4) of construction entrepreneurs are mostly found amongst (Y) themselves (the respondents who are mainly women), while they also feel that women (W) benefit from positive success factors, while men (M) seems not to be influenced by positive success factors.

7.9 Elements motivational, planning & process success factors

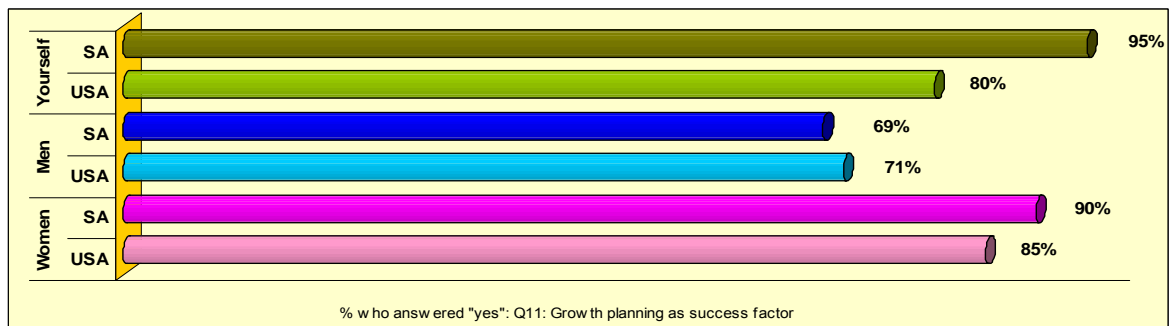
7.9.1 Being successfully independent, in control, achieving goals and job satisfaction

Figure 7.9.1: The number of respondents who answered Yes on Q10



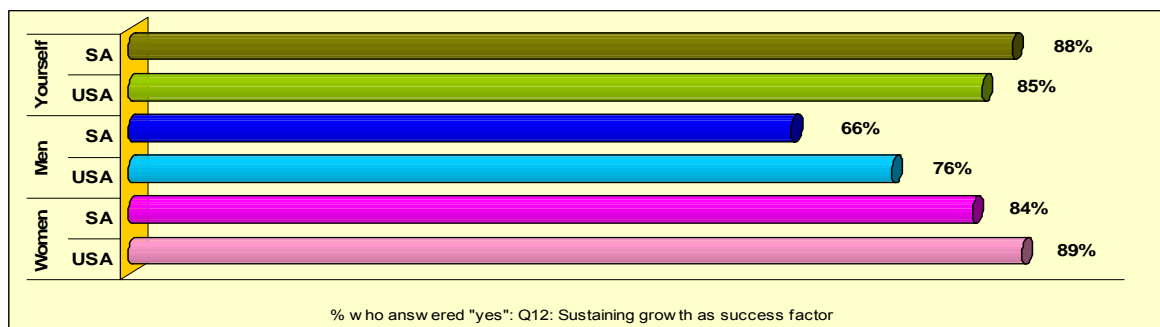
7.9.2 Being successful by planning for growth factors

Figure 7.9.2: The number of respondents who answered Yes on Q11



7.9.3 Being successful by sustaining growth in their businesses

Figure 7.9.3: The number of respondents who answered Yes on Q12

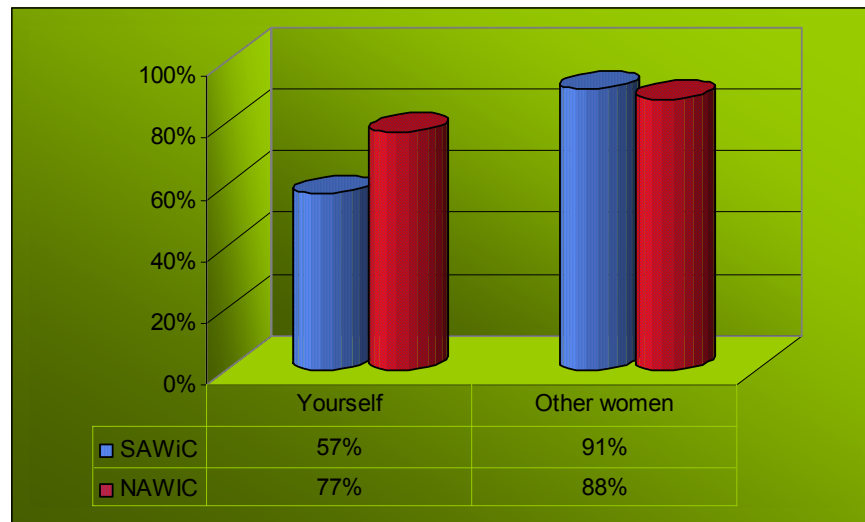


7.10 Role that SAWiC (SA) and NAWIC (USA) play in entrepreneurial success (Q49)

On the question ‘Was SAWiC instrumental to the success of your business?’ 56,87% of the SA respondents answered yes, while 91,05% responded that SAWiC was instrumental in the success of other women. For NAWIC 76,74% of the respondents acknowledged that NAWIC was instrumental in their own success and 88,37% for other women.

There are two possible reasons for this difference: Firstly, as SAWiC is a much younger organisation than NAWIC (5 years as opposed to 50 years in existence) there is a significant difference between NAWIC and SAWiC in the percentage of respondents who said yes for themselves. This should improve over time in SA. Secondly it is important to note that the age group 30 to 40 was not fully represented amongst the SAWiC respondents, because they obtained contracts through SAWiC affiliation and could not attend meetings where the SAWiC survey was done, due to work pressure and contractual obligations.

Figure 7.10.1: ‘Yes’ answers to SAWiC and NAWIC being instrumental to the success of members.



It is clear that there is an overwhelming agreement in SA and USA that both organisations are instrumental in the success of other women and the percentages for other women are on par at 91% for SAWiC and 88% for NAWIC.

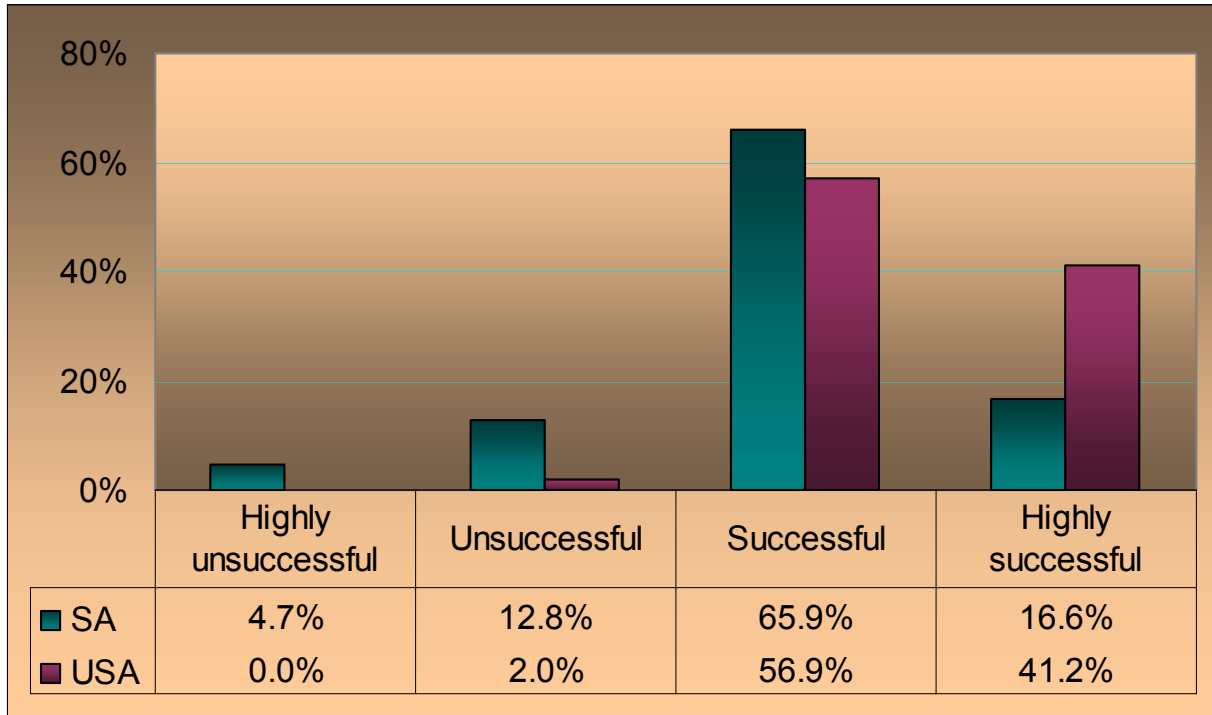
Chi-square Yourself: Degrees of Freedom DF=1, Value=11.2780, and Probability = 0.0008*

Chi-square Women: Degrees of Freedom DF=1, Value=0.5633, and Probability = 0.4529

7.11 Break even of SA and USA entrepreneurs (optional questions Q50-53 for business owners and managers only)

In terms of Q50-53 there were differences between responses for SA and USA on respondents' views about their own rate of success, profitability and client satisfaction as can be seen from the following figure:

Figure 7.11.1: Success rates (Q50)

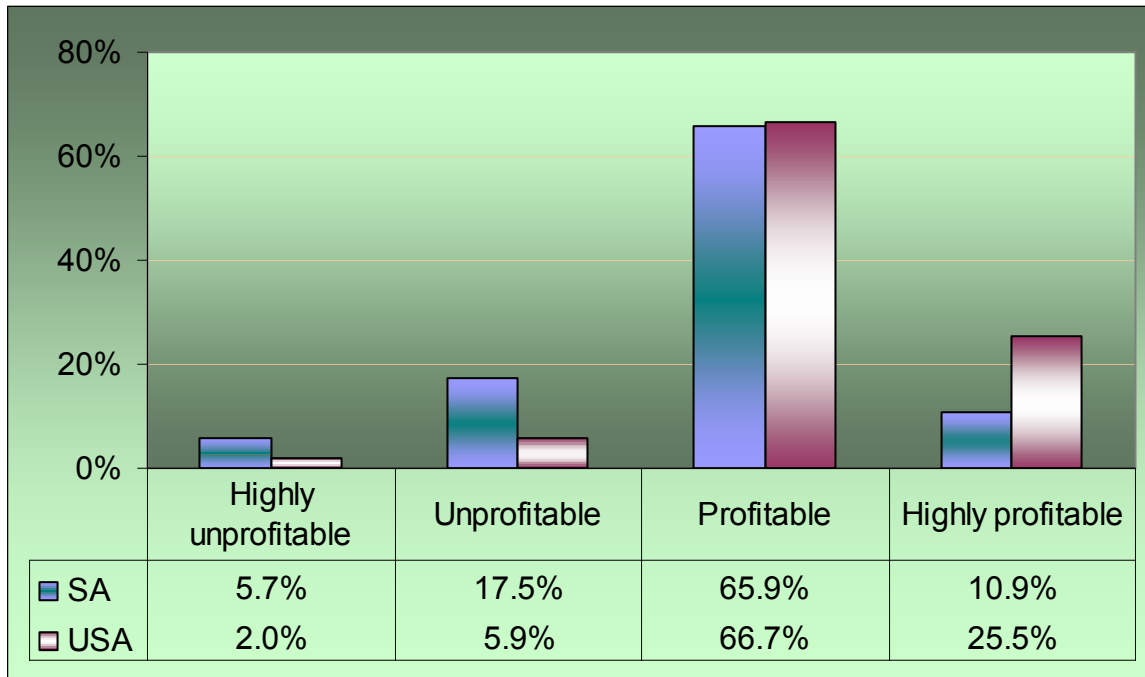


In both countries the respondents regarded themselves mainly as successful. From Figure 7.11.1 it can be inferred that more SA respondents felt that they are successful (65,9%) than in the USA (56,9%), but to the contrary, on highly successful 16,6% in SA felt that they were very successful as compared to 41,2%. This significant difference can be explained in terms of the USA being a developed country with longer experience in construction than SA with less experience in construction than those respondents in the USA.

The test statistic, **Chi-square**, for the “breakeven questions” by country at 3 degrees of freedom had a value of 8,4151 giving a probability of 0,0382, which is < 0.05.

Closely related to the question regarding success followed the one on profitability. The tendency revealed by the two questions is almost the same.

Figure 7.11.2: Profitability (Q51)



As can be seen from Figure 7.11.2, in terms of profitability there were significant differences between SA (17,5%) and USA respondents (5,9%) who felt that they were unprofitable, while on the other hand 10,9% of SA respondents felt they were highly profitable compared to the 25.5% in the USA.

Similar to the success question, these significant differences can be explained in terms of:

1. The USA being a developed country with more resources and longer experience in construction than SA that is a developing country with less resources and experience in construction than those respondents in the USA.
2. The age group 30 to 40 was not fully represented amongst the SAWiC respondents, because they obtained contracts through SAWiC affiliation and could not attend meetings where the SAWiC survey was done, due to contractual obligations.

In question 52 business owners and managers were asked to rate their businesses in terms of Client satisfaction rates according to a four point Likert scale.

The results show a correlation with all four questions in this group and were as follows:

Figure: 7.11.3: Client satisfaction rates (Q52)

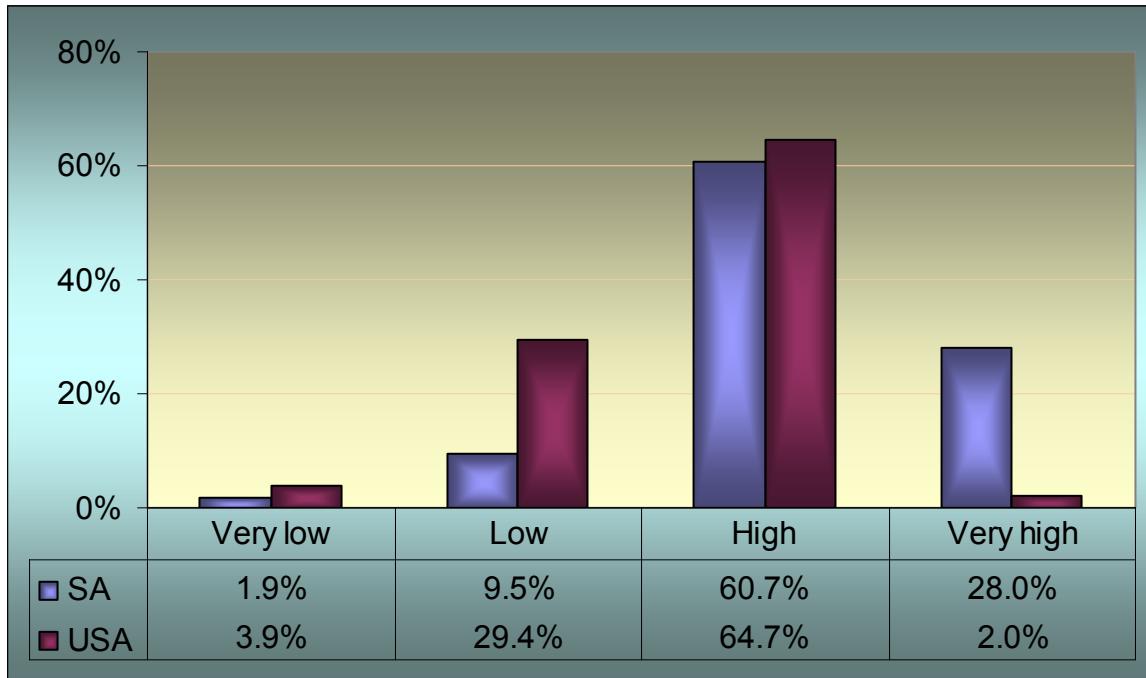


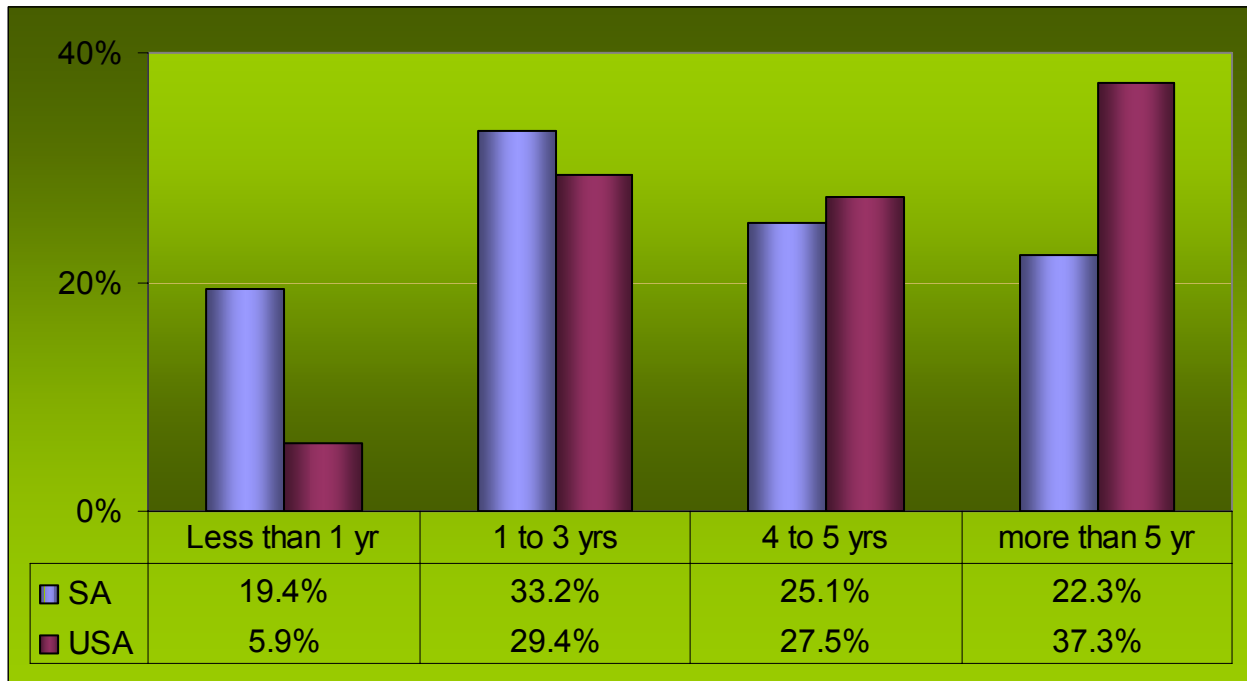
Figure 7.11.3 above shows a difference between SA respondents (9,5%) and 29,4% USA respondents that felt that they had low client satisfaction. The USA was more modest about their clients being “highly satisfied” (2%) than the SA group with 28%.

The “High” category for both SA and USA was closely correlated with 60.7% for SA and 64.7% for USA.

The only possible explanations for the above tendency are that there are more corporate entrepreneurs in the USA who has less control or impact personally on this variable or they are not close enough to clients to assess this variable adequately.

The final question (Q53) in this group that were directed to business owners and managers was the time that it took their businesses to break even. The break even point was explained as the point where the income starts to become bigger than the cost, enabling the enterprise to realise a profit.

Figure 7.11.4: Time it took the business to break even (Q53)



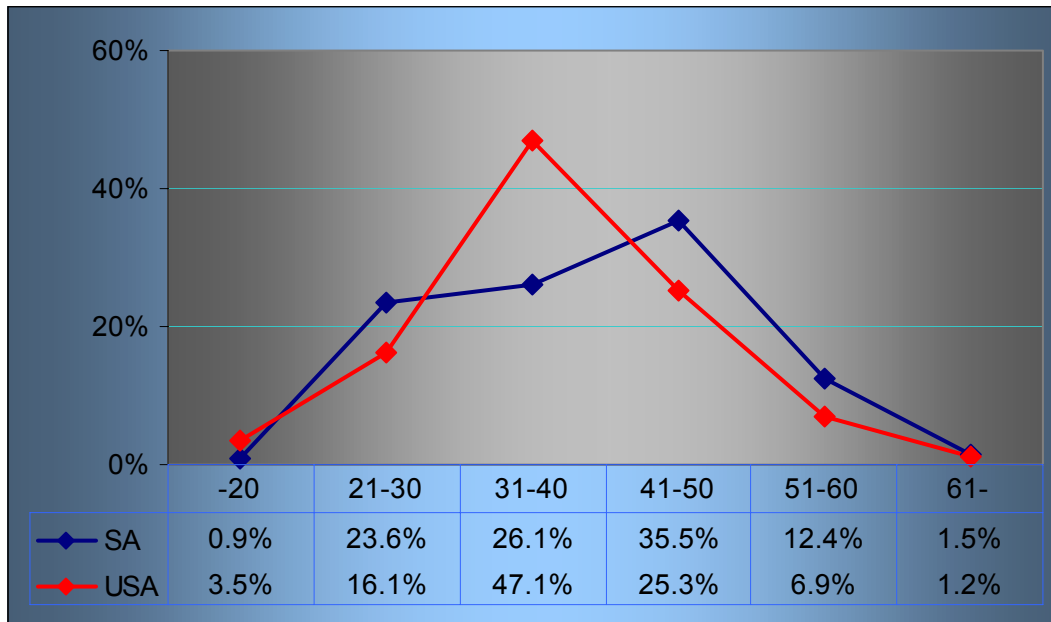
USA firms took much longer than SA firms to show a profit. On breakeven there were significant differences on the time it took to breakeven with 37.3% of USA respondents that took longer than 5 years to breakeven as opposed to 22.3% of SA respondents. Of the firms that SA respondents were involved 19,4% broke even in less than a year compared to only 5,9% of their American counterparts.

It is surprising that less USA than SA respondents broke even in less than one year, but it may possibly be attributed to the fact that there are less business owners (entrepreneurs) in the USA, but more corporate entrepreneurs that implies a huge difference in business size, magnitude and turnover compared to the SA respondents.

7.12 Age groups of SA and USA entrepreneurs (Q56)

In terms of age groups the results are as follows:

Figure 7.12.1: Age groups of the respondents



From the above results it is clear that SA women entrepreneurs in construction who attended the SAWiC survey, start their careers at an earlier age than their American counterparts, whereas the USA women entrepreneurs in construction, who took part in the survey, remain active in their careers up to a higher age, with SA women seeming to retire earlier than their American counterparts.

The age group 30 to 40 of SAWiC was not fully represented amongst the SAWiC respondents, because many SAWiC members in this "productive" age group obtained contracts through SAWiC affiliation and could not attend meetings where the SAWiC survey was done.

For the following comparisons no **Chi-squares** are available because the comparisons contain factual data of the respondents.

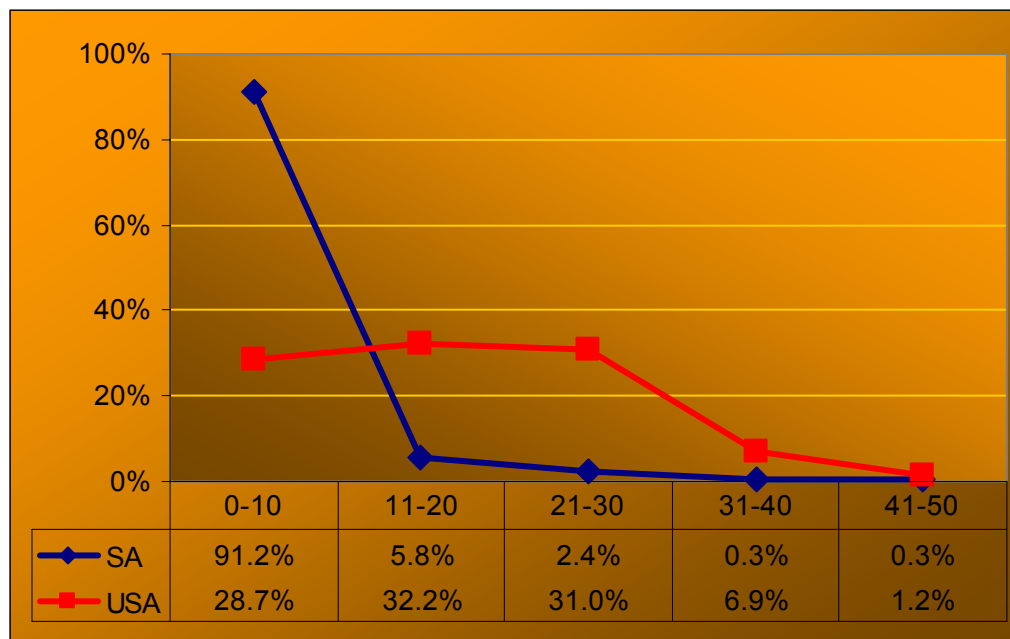
7.13 Comparison in marital status of SA and USA respondents (Q57)

High to relatively high percentage of the women that took part in the survey is single both in the USA and SA. In SA 52,7% of the respondents were single (divorced or never married) as opposed to 44,8% in the USA.

7.14: SA and USA comparison in terms of years involved in construction (Q58)

The years involved in construction is a good indication of the level of experience, but also an indication of women starting to make construction a career during the last decade due to barriers that existed before 1990.

Figure 7.14.1: SA and USA comparison in terms of years involved in construction

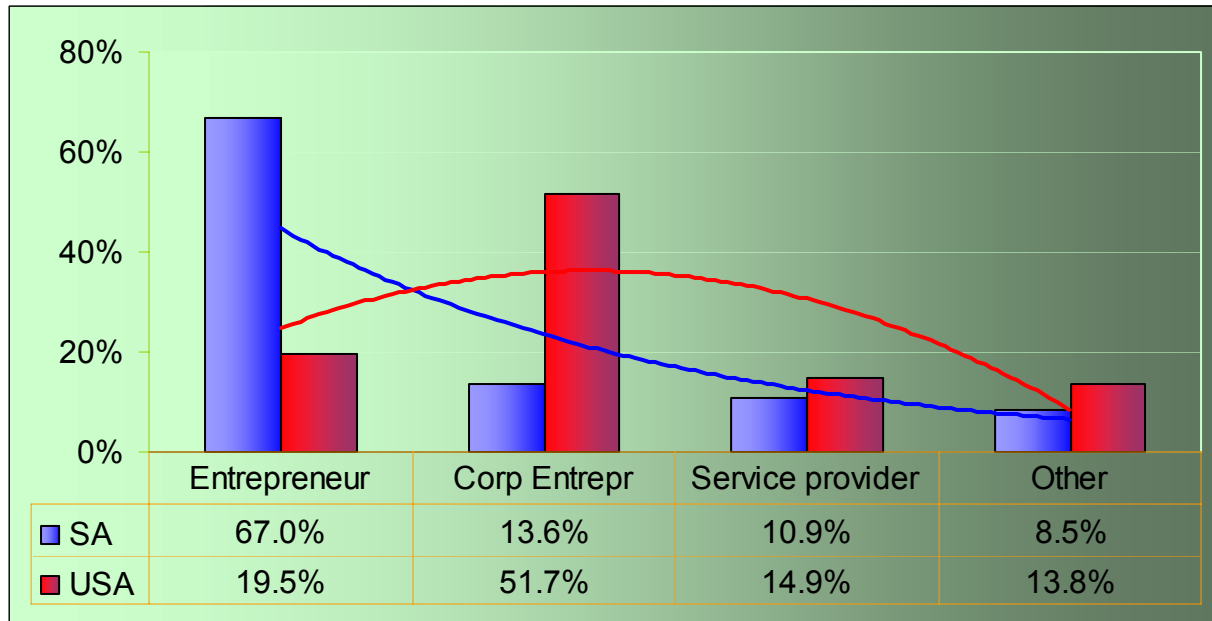


From the above table it is clear that USA respondents have been in construction longer than their SA counterparts. There is a significant difference in the 0-10 year experience category with most SA women entrepreneurs falling into this category. This is due to the affirmative action campaigns of government of the previous 10 years that allocated more construction contracts to women entrepreneurs.

7.15 Where involved in construction: SA and USA entrepreneurs (Q59)

The trend-line of Figure 7.15.1 shows that SA and USA comparison in terms of where involved or rather the capacity in which they are involved in construction, are directly opposite. The largest difference is between entrepreneur and corporate entrepreneur.

Figure 7.15.1: SA and USA comparison in terms of capacity involved in construction



In SA 67,0% of SAWiC respondents are entrepreneurs (business owners or contractors) while 13, 6% are corporate entrepreneurs, 10,9% service providers and 8,48% other stakeholders.

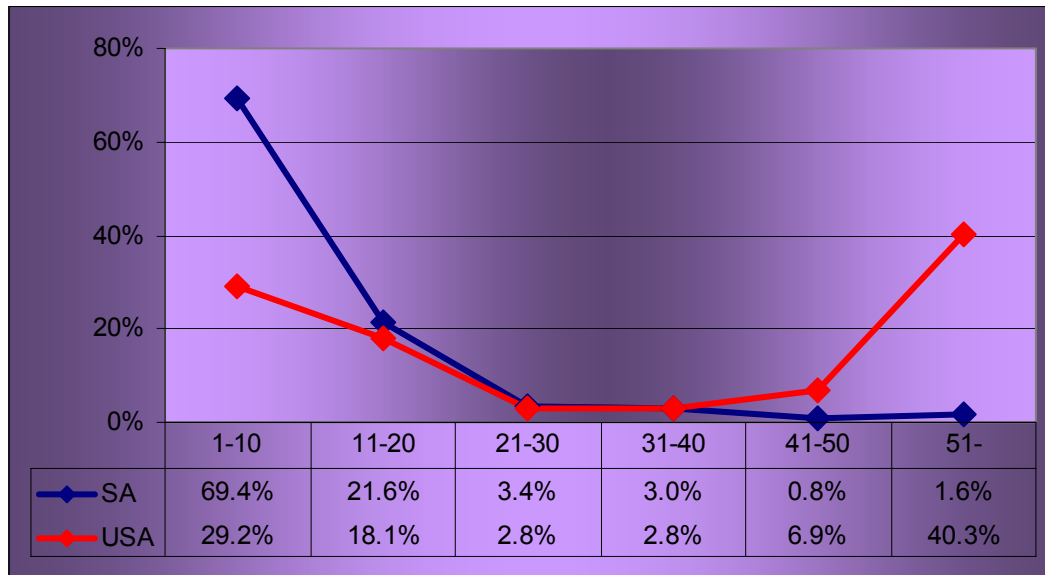
In the USA only 19.5% of NAWIC respondents are entrepreneurs or business owners, while 51.7% are corporate entrepreneurs in construction or construction related firms, 14, 95% are service providers to women in construction and 13,79% are other stakeholders.

There is an imperative difference between the capacity of involvement of respondents in SA and USA where SA has more entrepreneurs (business owners) than the USA and where the USA NAWIC members are mainly corporate entrepreneurs. Service providers seem to be on par.

7.16 SA and USA comparison of company sizes in terms of number of staff (Q61)

This analysis shows a large correlation with the capacity ownership graph.

Table 7.16.1: SA and USA comparison of company sizes in terms of number of staff



The results of this table show significant differences and that correspond with the finding of Q 59 that in the USA the respondents were mainly corporate entrepreneurs, looking at the 40,3% of firms with more than 50 staff members. In SA in the category 1-10 staff members, there is a 69,4% of firms in this category.

This finding is confirming the fact that they are entrepreneurs owning small businesses and that they are relatively new in construction and that firms in SA still have to go a long way in terms of growth to reach enterprise sizes of the USA magnitude, especially regarding USA corporate entrepreneurship.

7.17 Conclusion

The results of the empirical study can be analysed in detail in follow up studies, e.g. the Element "Need for achievement" is not analysed separately but as part of the Construct "Positive pull factors". The dataset allows for such further studies.

For a summary of the above findings, please refer to Chapter 8.

Chapter 8:

Findings, conclusions, recommendations and future research

8.1 General findings

The main findings in terms of the literature review, case studies and empirical analysis are:

- Women have claimed their rightful place in construction as entrepreneurs and it is a myth that they are mainly involved in labour.
- There are significant differences and similarities as to how women in SA and the USA are involved in construction for example in the USA they are mostly Corporate Entrepreneurs (CE) and in SA they are mainly Entrepreneurs (E) while they agree on how successful their associations are in promoting women in construction.
- Positive pull factors are the main reason why women are in construction as they demonstrate entrepreneurial behaviour and display entrepreneurial characteristics.
- Negative push factors is a lesser reason why some women are in construction as their love for construction with, challenges and innovation opportunities are superior to their need to make a living.
- The severity of discrimination became apparent in some case studies, where in an instance it was the fatal barrier of a successful women entrepreneur.
- The majority of respondents see themselves as successful and determined to develop key aspects of their businesses to expand their competitive edge.
- SAWiC played a pioneering role in developing a database to prevent clients from justifying their non-compliance of the law in terms of non-availability of women entrepreneurs in construction.

8.2 Summary of empirical findings

Table 8.1: Proposition summary of SA versus USA on the constructs and elements regarding Yourselfs, Men, and Women in general)

Pro- Posi- tion	There is not a significant difference in the opinions of SA & USA construction entrepreneurs on their respective sectors regardingY ...about Yourselfs (respondents themselves)	.M ...about Men in general	.W ...about Women in general
1C1	...the positive pull factors why entrepreneurs are involved in construction...	Rejected	Accepted	Rejected
1C2	...the negative push factors why entrepreneurs are involved in construction...	Rejected	Accepted	Accepted
1C3	...experiencing negative barriers Inhibiting performance as construction entrepreneurs...	Rejected	Rejected	Rejected
1C4	...experiencing positive motivational, planning and process success factors...	Rejected	Rejected	Rejected

When the proposition or hypothesis is accepted it means that there **is not** a significant difference...

When the proposition or hypothesis is rejected it means that there **is** a significant difference...

Table 8.2: Proposition summary of SA’s nine provinces on the constructs regarding Yourselfs, Men, and Women in general

Prop- osition	There is not a significant difference in the opinions of the construction entrepreneurs in the nine provinces of SA and USA regardingY ...about Yourselfs (respondents themselves) Rejected in:	.M ...about Men in general Rejected in:	.W ...about Women in general Rejected in:
2C1	...the positive pull factors why entrepreneurs are involved in construction...	Gauteng Limpopo KZN E Cape Fr State N Cape W Cape N West	None	Gauteng Limpopo KZN Mpumal. E Cape Fr State N Cape W Cape N West
2C2	...the negative push factors why entrepreneurs are involved in construction...	Gauteng Mpumal. Fr State N Cape	Fr State N Cape	Mpumal. Fr State N Cape
2C3	...experiencing negative barriers inhibiting performance as constructor entrepreneurs...	Gauteng Limpopo Mpumal. Fr State N Cape	Gauteng Limpopo KZN Mpumal. E Cape Fr State N Cape W Cape N West	Mpumal. Fr State N Cape
2C4	...experiencing positive motivational, planning and process success factors...	Gauteng Limpopo KZN Mpumal. Fr State N Cape W Cape	KZN Mpumal. Fr State W Cape	Gauteng Limpopo KZN Mpumal. Fr State N Cape W Cape

Table 8.3: Proposition summary of SA USA combined on the constructs regarding Yourself, Men, and Women in general

Proposition	There is not a significant difference in the opinions of SA & USA construction entrepreneurs combined on their respective sectors regardingYourself, Men & Women. Direction:
3C1	...the positive pull factors why entrepreneurs are involved in construction...	3C1 Rejected MF1 < WF1 < YF1
3C2	...the negative push factors why entrepreneurs are involved in construction...	3C2 Rejected YF2 < WF2 < MF2
3C3	...experiencing negative barriers Inhibiting performance as construction entrepreneurs...	3C3 Rejected MF3 < YF3 < WF3
3C4	...experiencing positive motivational, planning and process success factors...	3C4 Rejected MF4 < WF4 < YF4

8.3 Other important findings:

- There is an overwhelming agreement in SA and USA that both organisations SAWiC and NAWiC are instrumental in the success of other women;
- In both countries the respondents regarded themselves mainly as successful;
- in terms of profitability there were significant differences between SA (17,5%) and USA respondents (5,9%) who felt that they were unprofitable;

- The USA was more modest about their clients being “highly satisfied” (2%) than the SA group with 28%;
- USA firms took much longer than SA firms to show a profit;
- SA women entrepreneurs in construction who attended the SAWiC survey, start their careers at an earlier age than their American counterparts contrary to the findings of the GEM 2004 Report on Women and Entrepreneurship (Arenius, Langowitz & Minniti 2005) and the Hisrich & Peters (1998) model in Chapter 2, table 2.3 on page 36.
- A relatively high percentage of the women that took part in the survey is single both in the USA and SA;
- There is a significant difference in the 0-10 year experience category with most SA women entrepreneurs falling into this category. This is due to the affirmative action campaigns of government of the previous 10 years that allocated more construction contracts to women entrepreneurs;
- There is an imperative difference between the capacity of involvement of respondents in SA and USA where SA has more entrepreneurs (business owners) than the USA and where the USA NAWIC members are mainly corporate entrepreneurs;
- This finding is confirming the fact that in SA they are entrepreneurs owning small businesses (SMME’s) and that they are relatively new in construction and that firms in SA still have to go a long way in terms of growth to reach enterprise sizes of the USA magnitude, especially regarding USA corporate entrepreneurship.

8.4 Conclusions

Women entrepreneurs in construction in SA to a greater and USA to a marginally lesser extent entered their entrepreneurial ventures mainly because of positive pull factors, therefore the construction industry and opportunity providers should take note of this. It is a myth that women are involved in mainly non-traditional business opportunities only because of negative push factors such as poverty and survival. They are serious about the success of their enterprises.

8.5 Recommendations

It is recommended that this thesis forms the basis for SA and USA to develop the entrepreneurial potential of women in construction. The SAWiC and NAWiC organisations can use these findings to devise and meaningfully direct their intervention strategies towards the empowerment of women entrepreneurs in construction in both countries and to enhance their joint initiatives. The author views South Africa as a land of golden entrepreneurial opportunities and the USA as a country with vast expertise and commitment towards empowering women entrepreneurs. If the humane and gentle touch of women, their positive attitude, their enterprising spirit and the fact that women experience things more intensely, are recognised by SA and USA, in joining hands, the edges of those once stormy South African and the USA September 11th clouds will have serene silver linings. There is no place for gender discrimination and oppression as the splendour of opportunities in South Africa and the USA belong to men **and women**.

8.6 Future research

The questionnaire developed for this study, in order to maximise resources, was designed to be more comprehensive than just answering these particular research questions and may be used as a standard questionnaire for future research such as:

- Why there is no significant difference between some SA provinces and the USA on push- and pull factors, barriers and success while in demographic and economic aspects they differ as developing areas in relation to a developed country.
- The role of case studies and role models in attracting more women entrepreneurs to construction.
- How South African women studying for their degrees should be encouraged to conduct research on gender as part of their studies (ILO, 1995:9).
- How some threatened males with new *subtle and sophisticated* discrimination and oppression obstruct women's empowerment and entrepreneurial performance
- The regulatory environment as a barrier and constraint to entrepreneurial business ventures of women entrepreneurs in construction.

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XP URL: <http://www.extremeprogramming.org> (2005/02/27)

Annexure 1

Glossary

AA	Affirmative Action
ANC	African National Congress
ADB	Asian Development Bank
APDF	African Project Development Facility, World Bank
ANOVA	Analysis of Variance
ASAQS	Association of SA Quantity Surveyors
BEE	Black Economic Empowerment
BIFSA	Building Industries Federation South Africa
BMZ	German Ministry for Economic Cooperation and Development
CBO	Community Based Organisations
CDD	Community Driven Development
CETA	Construction Education and Training Authority
CGE	Commission on Gender Equality
CIDB	Construction Industry Development Board
DBSA	Development Bank of Southern Africa
DG	Director General
DPW	Department of Public Works
DFIs	Development Finance Institutions
DTI	Department of Trade and Industry
EDI	Economic Development Institute, World Bank
EU	European Union
FAWE	Federation of African Women Educationists
FESS	Family Economic Self-Sufficiency
GDG	Gender Development Group
GSSP	Gender-mainstreaming Sector Strategy Paper
IDC	Industrial Development Corporation
IFAD	Fund for Agriculture Development
IFC	International Finance Corporation
IICW	Interdisciplinary Congress on Women
ILO	International Labour Organisation
IMF	International Monetary Fund
IPDET	International Program for Development Evaluation Training
ISEEK	Internet System for Education and Employment Knowledge
KM	Knowledge Management
KPI	Key Performance Indicators
LSMS	Living Standards Measurement Survey
MANCOVA	Multivariate analysis of co-variance
MDGs	Millennium Development Goals
nAch	Need for Achievement
NAFCOC	National African Federated chamber of Commerce and Industry
NAWIC	National Association of Women in Construction: United States of America
NEPAD	The New Partnership for Africa's Development
NFWBO	National Association of Women Business Owners
NGO	Non-Government Organisation
NTOs	Non-traditional Occupations
NURCHA	National Urban Reconstruction and Housing Agency
OXO	Observation, Experimentation, Observation

PABHA	Pan African Broadcast and Heritage Achievement Award
PPP	Public Private Partnerships
PPP	People, Planet, Prosperity
PRSPs	Poverty Reduction Strategy Papers
RFIs	Retail Financial Intermediaries
R&D	Research and Development
RHLF	Rural Home Loan Fund
SAFCEC	South African Federation for Civil Engineering Contractors
SAPPI	South African Pulp and Paper Industry
SAS	Statistical Analysis System
SAWEF	South African Women's Empowerment Foundation
SAWEN	South African Women Entrepreneurs Network
SAWiC	South African Women in Construction Association
SBDC	Small Business Development Corporation
SEWA	Self Employed Women's Association
SMMEs	Small Medium and Micro Enterprises
SMMEs	Small Medium and Micro Enterprises
Stats SA	Statistics South Africa
TP	Targeted Procurement
Trac	Trans African Concession
TWIB	Technology for Women in Business
UK	United Kingdom
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDAF	United Nations Development Assistance Framework
USA, US	United States of America
USAID	United States Agency for International Development
vs.	versus
WiC	Women in Construction
WID	Women in Development
WKKF	WK Kellogg Foundation
WNC	Women's National Coalition
WPEF	Women's Private Equity Fund
WSSD	World Summit for Sustainable Development

Annexure 2

Research Questionnaire as finally used

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XP URL: <http://www.extremeprogramming.org> (2005/02/27)

Annexure 1

Glossary

AA	Affirmative Action
ANC	African National Congress
ADB	Asian Development Bank
APDF	African Project Development Facility, World Bank
ANOVA	Analysis of Variance
ASAQS	Association of SA Quantity Surveyors
BEE	Black Economic Empowerment
BIFSA	Building Industries Federation South Africa
BMZ	German Ministry for Economic Cooperation and Development
CBO	Community Based Organisations
CDD	Community Driven Development
CETA	Construction Education and Training Authority
CGE	Commission on Gender Equality
CIDB	Construction Industry Development Board
DBSA	Development Bank of Southern Africa
DG	Director General
DPW	Department of Public Works
DFIs	Development Finance Institutions
DTI	Department of Trade and Industry
EDI	Economic Development Institute, World Bank
EU	European Union
FAWE	Federation of African Women Educationists
FESS	Family Economic Self-Sufficiency
GDG	Gender Development Group
GSSP	Gender-mainstreaming Sector Strategy Paper
IDC	Industrial Development Corporation
IFAD	Fund for Agriculture Development
IFC	International Finance Corporation
IICW	Interdisciplinary Congress on Women
ILO	International Labour Organisation
IMF	International Monetary Fund
IPDET	International Program for Development Evaluation Training
ISEEK	Internet System for Education and Employment Knowledge
KM	Knowledge Management
KPI	Key Performance Indicators
LSMS	Living Standards Measurement Survey
MANCOVA	Multivariate analysis of co-variance
MDGs	Millennium Development Goals
nAch	Need for Achievement
NAFCOC	National African Federated chamber of Commerce and Industry
NAWIC	National Association of Women in Construction: United States of America
NEPAD	The New Partnership for Africa's Development
NFWBO	National Association of Women Business Owners
NGO	Non-Government Organisation
NTOs	Non-traditional Occupations
NURCHA	National Urban Reconstruction and Housing Agency
OXO	Observation, Experimentation, Observation

PABHA	Pan African Broadcast and Heritage Achievement Award
PPP	Public Private Partnerships
PPP	People, Planet, Prosperity
PRSPs	Poverty Reduction Strategy Papers
RFIs	Retail Financial Intermediaries
R&D	Research and Development
RHLF	Rural Home Loan Fund
SAFCEC	South African Federation for Civil Engineering Contractors
SAPPI	South African Pulp and Paper Industry
SAS	Statistical Analysis System
SAWEF	South African Women's Empowerment Foundation
SAWEN	South African Women Entrepreneurs Network
SAWiC	South African Women in Construction Association
SBDC	Small Business Development Corporation
SEWA	Self Employed Women's Association
SMMEs	Small Medium and Micro Enterprises
SMMEs	Small Medium and Micro Enterprises
Stats SA	Statistics South Africa
TP	Targeted Procurement
Trac	Trans African Concession
TWIB	Technology for Women in Business
UK	United Kingdom
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDAF	United Nations Development Assistance Framework
USA, US	United States of America
USAID	United States Agency for International Development
vs.	versus
WiC	Women in Construction
WID	Women in Development
WKKF	WK Kellogg Foundation
WNC	Women's National Coalition
WPEF	Women's Private Equity Fund
WSSD	World Summit for Sustainable Development

Annexure 2

Research Questionnaire as finally used