

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
	Why successful or not?	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

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:

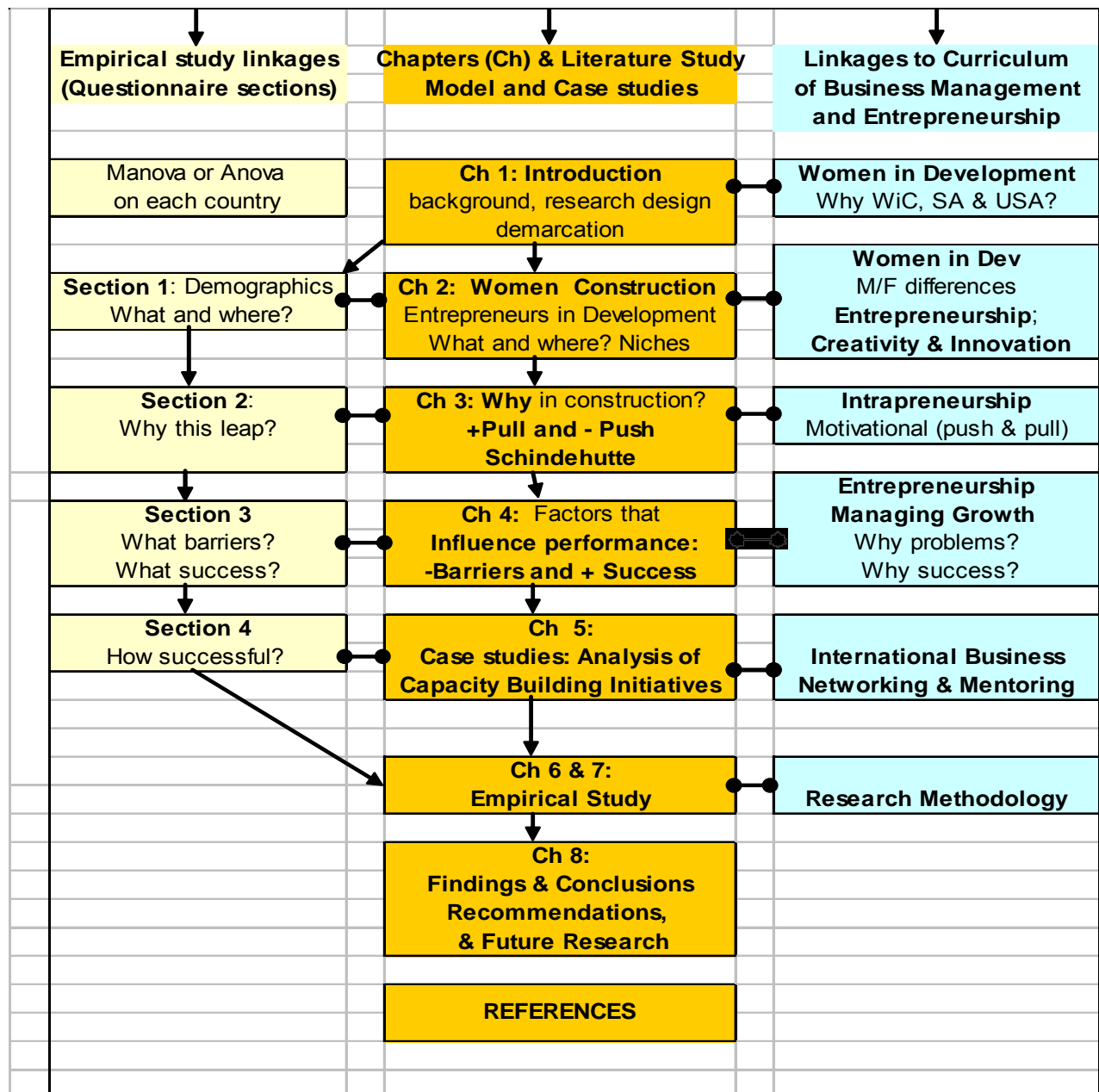
Table 1.3: Proposition summary of SA USA combined on the constructs regarding Yourself, Men, and Women in general

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).