

Chapter 7: Conclusion

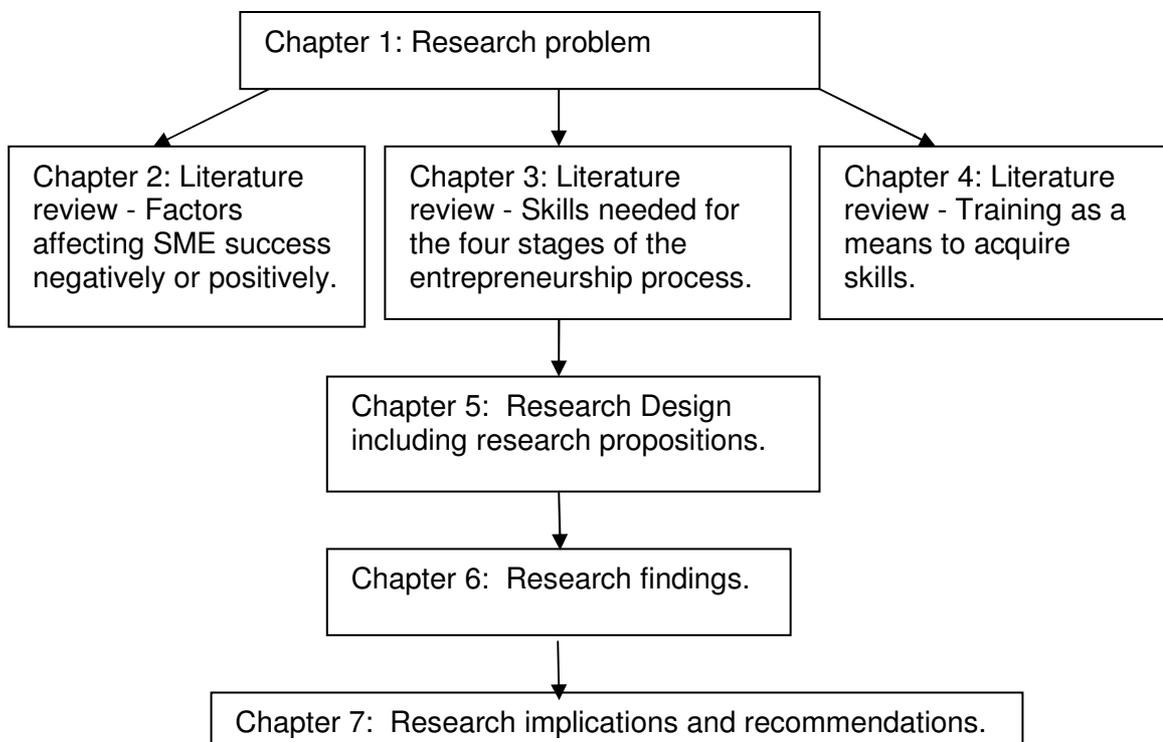
7.1 Introduction

While research in the area of entrepreneurship training is growing, one of the aspects where little research has been conducted in is the area of skills development in the context of SME survival and growth. This study explores this area and presents a framework for future training programmes.

This study was undertaken to investigate the skills (and related training) necessary for the survival and the growth of informal, very small, small, medium and micro businesses (SMEs) in the textile and clothing (T&C) industry in the city of Johannesburg, in the Gauteng Province of South Africa (SA).

This thesis is made up of seven chapters as illustrated in Figure 7.1 below:

Figure 7.1: Research approach



This chapter is made up of three parts. The first part (sections 7.2 and 7.3) provides an overview of the research problem, the research questions, the research objectives and the literature review relevant to the main findings. The second part (section 7.4)

interprets the study propositions and why the propositions were rejected or accepted on the basis of the statistical techniques executed in Chapter 6. This section discusses in brief the implications of the findings of this study as presented in the last chapter. The third part (section 7.5, 7.6, 7.7 and 7.8) discusses the contribution of this study, outlines the limitations of the study and presents the study recommendations (including further research areas).

7.2 Overview of the literature study

The literature review was covered in chapters 1, 2, 3 and 4. The following is a short overview of these chapters. Explanatory theories were also obtained from the literature review which then provided indications of what to expect logically in terms of the research propositions. The questions asked in the research instrument were grounded on the literature on the topic.

The literature study began in chapter 1 with a discussion highlighting the importance of SMEs in the development and growth of a healthy economy (Miller et al, 2003:217; Rwigema & Venter, 2004:315; Tustin 2001:5). SMEs are said to contribute towards wealth creation, job creation, economic flexibility, innovation, technology transfer, use of local resources, development of skills, socio-economic transformation and mechanisms for coping with national crisis (Rogerson, 2001:267; Honig, 1998:371; Robertson et al, 2003:308; Lange et al, 2000:7; Luiz, 2001:53).

It was noted that South Africa still suffers from the turbulence of the socio-economic conditions brought about by apartheid and the country's re-entry into the global economy (Berry et al, 2002:1). Among other factors, the lack of global competitiveness of South Africa firms has reduced employment opportunities (Nasser, du Preez & Herrmann, 2003:393). The South African government has prioritized the development and support of SMEs to redress the inequalities of apartheid and to provide an alternative employment source (Morris & Zahra, 2000:92).

It is clear that there is no scarcity of nascent entrepreneurs as new enterprises are being established at a rapid rate, with many younger members of the population now considering self-employment as a career option (GEM, 2006:27). The problem is the alarmingly high rate of SMEs closure, implying that SMEs are limited in their ability to

create long-term sustainable employment. One theme expounded in chapter 1 was that to sustain jobs, the SMEs should grow (Kangasharju, 2000:37; Clover & Darroch, 2005:238). Therefore any method that can aid in the successful growth of SMEs is important not only to these SMEs but also to the entire economy of the country (Pretorius et al, 2005b:414; Way, 2002:766).

It became clear that critical to aiding SME growth is understanding the factors which determine success or failure (Dockel & Ligthelm, 2005:57). By relying on the literature reviews, it was thus possible to get a good indication of what to expect the outcome of this research to be. The propositions derived from the literature reviewed enabled the author to gather information to empirically determine the validity of the proposed relationships identified.

In chapter 2, the literature identified various internal and external factors. The study focused on identifying “capabilities, abilities and skills” as significant internal growth factors for SMEs. Chapter 2 also reviewed entrepreneurial performance models that listed the skills necessary for SMEs to be able to perform effectively.

The bases of the models were linked to the van Vuuren and Nieman’s (1999) model, where entrepreneurial performance (E/P), motivation (M), entrepreneurial skills (E/S) and business skills (B/S) are linked as $\uparrow E/P = a + bM.[c.E/S \times d.B/S]$. Through integration with seven other entrepreneurial performance models from authors namely Glancey, (1998), van Vuuren & Nieman (1999), Erikson (2002), Wickham (1998), Man et al (2002), Ucbasaran et al (2004), Darroch & Clover (2005) and Perks & Struwig (2005); the study detailed individual skills within each construct.

The identified skills are divided into three business areas, namely:

- Key product development and service differentiation abilities. This includes the ability to ensure the product and or service is produced at acceptable quality and depends entirely on technical skills.
- Key enterprising competencies. These abilities are responsible for the booster/energizer/entrepreneurial functions that assist with business development and depend on entrepreneurial competencies and personal skills.

- Key functional capabilities. These abilities include all the business management skills that assist the entrepreneur to run the company efficiently and balance opportunity, resources and the entrepreneurial team.

Based on this integrated entrepreneurship performance model, several propositions aimed at investigating how SMEs view the importance and their competence in the enterprising, product development and functional skills categories.

The chapter concludes by simplifying the detailed integrated model was simplified into the simplified integrated model $\uparrow E/P = f(\text{key skills}) \times [1 + h.(\text{supporting skills})]$. Key skills were represented by multiplicative functions, signifying that the absence or very low levels of skills like motivation, opportunity, ability to gather resources, financial management, human resource management, marketing and technical skills would lead to zero performance, while weakness in a particular element would decrease effectiveness in the overall performance of the venture. This thus means that the increase in the capacity of any of these skills can lead to an increase in the entrepreneurial performance of the entrepreneur.

On the other hand supporting skills were represented by additive functions, signifying that the absence of any of these skills would reduce performance, yet not completely destroy the business. When all the supportive skills are absent $\uparrow E/P = \text{function of the key skills}$. This also means that an increase in the capacity of any of these supporting skills will also assist with SME performance.

Chapter 3 checked the model in all the stages in the entrepreneurship process, which proved that the model was robust and applicable to all the four steps. It was found that in the first stage the key skills needed were the enterprising and technical skills; the second and third stages needed mostly functional and technical skills, and finally the fourth stage needed enterprising skills most. This chapter concluded by formulating propositions around identifying key and supportive skills.

Chapter 4 investigated the means of acquiring essential skills. This chapter reviewed three entrepreneurial training models namely a) the entrepreneurial performance education model (E/P model), b) the entrepreneurial education model (E/E model) and c) the education for improved entrepreneurial performance model (E for E/P model). The

last section formulated more propositions linking the identified skills (in the model) and training. The propositions posited that successful SMEs were more likely to be trained in key skills than less successful SMEs. This completed the exploratory study and finalised the model (propositions) that was being prepared for empirical testing.

While it is widely accepted that management ability plays a significant role in developing a business, the question remains whether the crucial set of competencies is a universal one or whether it differs between different economies or industrial sectors (Way, 2002:767). Thus the specific purpose of this study was to identify those skills factors which are key to setting up, running and growing SMEs in the textile and clothing industry in the city of Johannesburg.

As one of the oldest sectors in the history of industrial development, the textile and clothing industry is often referred to as a traditional industry and is considered to have a great potential to generate employment opportunities and enhance national economic growth. However, in South Africa major problems exist in this sector, by 2001 the sector was referred to as the “shrinking manufacturing sector”, characterized by retrenchments. However as there were some SMEs in this sector that were successful in spite of the unfavourable business environment and market conditions, this study was aimed at highlighting the skills that assisted the more successful SMEs in their success.

7.3 Research objectives revisited

The study sought to answer the following research questions:

1. Which skills factors are associated with successful SMEs/entrepreneurs?
2. How important are these skills as perceived by SMEs owners in the textile and clothing industry in Johannesburg?
3. How competent do these SME owners view themselves and their teams to be in these skills?
4. In which of the skills has training been received?

The primary aim of this study was to establish which set of competencies (or skills) as identified in theory are perceived as affecting (negatively or positively) the success of textile and clothing SMEs in the South African context. This was achieved as highlighted in the discussions below.

The study had undertaken the following objectives:

1. To review literature to determine whether there are any common management competences that contribute to the success of SMEs. This objective was achieved through an extensive literature review and through the development of a detailed model that integrated eight models by Glancey (1998), van Vuuren & Nieman (1999), Erikson (2002), Wickham (1998), Man et al (2002), Ucbasaran et al (2004), Darroch & Clover (2005) and Perks & Struwig (2005).
2. To investigate the importance of these skills as perceived by SMEs in the textile and clothing industry in the city of Johannesburg. This objective was achieved. The empirical study first asked the SMEs in the textile and clothing industry how they viewed the importance of these sets of skills for their business.
3. To investigate whether this set of competencies applies to successful and less successful SMEs in the textile and clothing industry in the city of Johannesburg. This objective was achieved. The empirical study asked the SMEs in the textile and clothing industry how they rated their competence in these sets of skills.
4. To analyze entrepreneurship and business training of SMEs in the textile and clothing industry in Johannesburg in terms of the identified key skills, and if the said SME training has any impact on the success of SMEs. This objective was achieved firstly through the findings of the literature review, which identified training models, and secondly through empirical testing, which asked if the SMEs had received any training in that skills category and if that specific training had any impact on success indicators.
5. To suggest areas of improvement in the supporting of SMEs and in the research needed to help bridge the information gap in addressing problems relating to entrepreneurship and SME development in Africa. This objective will be addressed in the recommendations section below.

7.4 Results revisited

The cross-sectional, ex post facto, formal empirical study involved interviewing 570 manufacturing SMEs (197 successful and 373 less successful SMEs). The instrument used was a structured questionnaire. The statistical analyses included descriptive statistics, frequencies, factor analysis, Cronbach alpha coefficient, chi-square, t-test and one-way ANOVA tests. The analysis was concluded by conducting a Scheffe's multiple comparison procedure.

A successful SME was defined as a business that had been in operation for more than three years and generated more than R150,000 annually and employed more than 5 people. A less successful SME was defined as a business that had been in operation for less than three years or generated less than R150,000 annually or employed less than 5 people.

Demographic profile

The personal demographics profile of the sample showed that there were more female respondents than male respondents, but the successful group had more males than the less successful group. The average age of the respondents from the successful group was above 40 while the less successful group was under 40 years. The respondents of the successful group were mainly whites whose home language was mainly English; while those of the less successful were mainly black whose home language was mainly Zulu. The majority of the successful group on average had received education above matric, while the majority of the less successful group had only matric and below. More of the successful group had on average worked more than 6 years prior to starting their own businesses, as compared with the less successful group, most of whom had had two or less years of experience.

In terms of business demographics, the majority of the SME respondents indicated that their businesses were in the clothing or apparel sub-sector. Within the apparel sector the successful SMEs focused more on niche products, while the less successful group traded in market-flooded products. More than a third of the SMEs respondents were trading from the Johannesburg city centre. The majority of the less successful SMEs were operating in the downtown regions of Johannesburg, while the more successful SMEs operated in up-town regions. All successful SMEs had formally registered their businesses, while the majority of the less successful group was not registered formally.

Factor analysis

A factor analysis was conducted. The three variables marketing, risk taking and research were omitted, as they had high double loadings and thus were not included in the statistical tests to analyse the factors. Four factors were identified, two focusing on the importance of skills and two focusing on the competence in skills.

Since the technical skills were included as part of the functional skills constructs, it was acceptable that there were only two factors that covered the three business area constructs identified in the literature review.

On the question of importance, the two factors were named functional skills factor and enterprising skills factor. Factor 1 labelled “functional skills” included business systems, business linkages, communication, computer literacy; financial management; human resource, legal, life skills, literacy and numeracy, operations, securing resources, strategy and planning, value chain skills and technical/vocational ability. Factor 2 labelled “enterprising skills” included creativity, innovation, opportunity identification, role models, and self motivation. The functional skills factor was acceptable with eigenvalue large than 1 and the Cronbach alpha larger than 0.6. Although the eigenvalue was > 1 for factor 2, it was not so strong as the Cronbach alphas < 0.6 . However the researcher decided to go ahead with the analysis since the factor items were the same as those identified in the literature review as enterprising skills.

On the question of competence, the two factors were also named functional skills factor and enterprising skills factor. Factor 1 labelled “functional skills” included business systems, business linkages, communication, computer literacy, financial management, human resource management, legal, life skills, literacy and numeracy, operations, strategy development and planning, value chain skills and technical/vocational ability. Factor 2 labelled “enterprising skills”, includes creativity, innovation, opportunity identification, role models, self motivation and securing resources. Both functional skills and enterprising skills factors were acceptable as they had eigenvalues large than 1 and Cronbach alphas larger than 0.6.

Using Chi-square, t-tests, ANOVA and Scheffe multiple procedures, the study tested and accepted or rejected the following propositions:

Importance of skills

Using Chi-square the study rejected propositions 3.1, 4.1, 4.2, 4.3, 4.4, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11, 10.1, 10.2, 10.3 and 10.4 that checked how successful SMEs viewed the importance of the each of the 20 skill categories as compared with less successful SMEs. This result implies that more successful SMEs are likely to consider skills more important than the less successful SMEs consider them.

Yet there were significant differences, with some more significantly different than others in terms of the smallest p values. So further t -tests were conducted to further probe the rejection of the propositions. It must be mentioned those three skills marketing (7.7), research (7.9) and risk taking (10.2), were omitted from the factors, so chi-squared tests are the only ones used for these three variables.

The t -test examined the significant difference between how the successful SMEs viewed the importance of the factors as compared with how less successful SMEs viewed the importance of the factors. This resulted in the following propositions (3.1, 4.2, 4.3, 4.4, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.10, 7.11, 10.4) being confirmed as rejected, as there were significant differences between the two groups in terms of how they viewed the importance of factor 1 - functional skills. Furthermore, the ANOVA outputs and significance of source tested for factor 1, comparing the successful and less successful SMEs in terms of how important they thought the skills in the two factors were. The ANOVA results showed that the successful group of SMEs considered functional skills to be much more important did the less successful group.

From the t -tests the following propositions were accepted (4.1, 10.1, 10.3), as there were no significant differences between how the two groups viewed the importance of factor 2, “enterprising” skills. Also the ANOVA tests results indicated that both groups were very close in terms of how they viewed the importance of enterprising skills factor.

Competence in skills

Using Chi-square tests results, the study rejected proposition 2, which that stated that successful SMEs are not likely to be more competent in skills than less successful SMEs. This rejection was valid for 19 categories of skills except risk management. There were significant differences ($p < 0.0001$) between how the successful SMEs and those that are less successful rated themselves in terms of competence in all 19 categories of skills. Thus all the related sub-propositions were rejected (3.2; 5.1, 5.2, 5.3, 5.4, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.11, 11.1, 11.3, 11.4). This implies that more successful SMEs considered themselves to be more competent in most skills categories than the less successful SMEs did.

In the risk management category, however, the p -value was greater than the alpha value, suggesting no significant differences between how the successful SMEs and

those that are less successful rated themselves in terms of competence in risk management. Both groups indicated that they felt not competent in this skill category. Thus 11.2 was accepted.

t-tests were conducted to confirm these results. There was a significant difference in the way the successful group perceived themselves to be competent in factor 1 and factor 2 (functional and enterprising skills). The successful group considered themselves very competent in both the functional and enterprising skills. The less successful group considered themselves not very competent in both skills categories. Thus the rejection of propositions 3.2, 5.1, 5.2, 5.3, 5.4, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.8, 8.10, 8.11, 11.1, 11.3 and 11.4) were confirmed.

The ANOVA results showed that the successful group of SMEs considered themselves to be more competent in functional skills than the less successful group. Although the ANOVA results showed that both groups were close in terms of how they rated their competence in the enterprising skills factor, the successful group of SMEs considered themselves to be more competent in enterprising skills than did the less successful group. This confirmed the t-test results.

Key and supportive skills

From the chi square test results the study can deduce what these SMEs viewpoints were in terms of what skills can be considered key skills and what could be considered to be supportive skills. It was also noted that the majority of both successful SMEs and less successful SMEs considered the following skills to be very important: motivation, securing resources, operations, financial management, legal and marketing.

It was also noted that using the chi-square test, the majority of the successful SMEs considered themselves extremely competent in five skills, namely financial management, legal, marketing; operations and self motivation skills. In terms of importance, four (finance, marketing, self motivation and securing resources) of the seven propositions skills were indicated as key. In terms of competence three skills (finance, marketing and self motivation) of the seven proposed key skills were identified.

This implies that while human resources, opportunity identification and technical skills were important, they were not considered as extremely important and could therefore be

said to be just important supporting skills. This finding also implies that operations and legal skills were wrongly identified as supporting but should be categorized as key or extremely important. Interestingly, only a few of the successful SMEs considered themselves to be extremely competent in the resource gathering skill category that was considered by both groups as extremely important.

This can be translated into the acceptance of propositions 1.1.3, 1.1.6 and 1.1.7 on key skills. Propositions 1.1.1, 1.1.2, 1.1.4 and 1.1.5 were rejected. In terms of supportive skills, sub-propositions 2.1.7 and 2.1.8 were accepted, while all the others (2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.9, 2.1.11, 2.1.12 and 2.1.13) were rejected.

Training

Using chi-square tests results, the study rejected proposition 3, which stated that successful SMEs are not more likely to have been trained in skills than less successful SMEs. Consequently all sub-propositions (3.3, 6.1, 6.2, 6.3, 6.4, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 9.11, 12.1, 12.2, 12.3, 12.4) that stated whether successful SMEs received more training compared to less successful SMEs were also rejected.

T-tests were conducted to confirm these results. On average the successful group were trained in at least 16 courses of the identified 20 skill categories. The less successful group had been trained in less than 8 of the identified 20 skills categories. This was confirmed by the initial frequencies test and by another t-test investigating the differences in training based on the two factors in the two questions. This seems to imply that the more successful SMEs were trained more than the less successful SMEs.

Variances between demographics

ANOVA tests were conducted to investigate whether there were significant differences between demographic variables in terms of how these SMEs viewed the importance and rated their competence in these two factors. The results showed that there were statistically significant differences in the group's demographics in terms of the importance/competence of functional/enterprising skills, as illustrated in the table 7.1 below:

Table 7.1: Variance between demographics - comparing the two samples

Factor	Successful group variables with variance	Less successful group variables with variance
Importance of factor 1- functional skills	<ul style="list-style-type: none"> • Age • Education • Form of business Propositions 13.1; 13.2, 13.8 rejected. Propositions 13.3; 13.4, 13.5, 13.6, 13.7, 13.9 accepted.	<ul style="list-style-type: none"> • Form of business • location • Region Propositions 14.6; 14.8; 14.9 rejected. Propositions 14.1, 14.2, 14.4, 14.5, 14.7 accepted.
Importance of factor 2 - enterprising skills	<ul style="list-style-type: none"> • Education • Work experience Propositions 15.2, 15.5 rejected. Propositions 15.1, 15.3, 15.4, 15.6, 15.7, 15.8, 15.9 accepted.	<ul style="list-style-type: none"> • Education • Location • Region Propositions 16.2, 16.6, 16.9 rejected. Propositions 16.1, 16.3, 16.4, 16.5, 16.7, 16.8 accepted.
Competence in factor 1 - functional skills	<ul style="list-style-type: none"> • Age • Form of business Proposition 17.1, 17.8 rejected. Proposition 17.2, 17.3, 17.4, 17.5, 17.6, 17.7, 17.9 accepted.	<ul style="list-style-type: none"> • Form of business • location • Region Proposition 18.6, 18.8, 18.9 rejected. Proposition 18.1, 18.2, 18.3, 18.4, 18.5, 18.7 accepted.
Competence in factor 2 - enterprising skills	<ul style="list-style-type: none"> • Age • Education • Region • Work experience Propositions 19.1, 19.2, 19.5, 19.6 rejected. Propositions 19.3, 19.4, 19.7, 19.8, 19.9 accepted.	<ul style="list-style-type: none"> • Age • Education • location • Region Propositions 20.1, 20.2, 20.6, 20.9 rejected. Propositions 20.3, 20.4, 20.5, 20.7, 20.8 accepted.

The variance analysis showed that the demographics variables of age, education, work experience, forms of business, location and region have a significant effect on how SMEs view the importance of the two factors and how they rate their competence in the said factors. Successful SMEs are more affected by age, work experience and

education, while the less successful SMEs are more affected by location, region and form of business. There were no significant differences in both groups of SMEs in terms of the following demographics: ethnic groups, language, gender, subsector and product focus.

7.5 Contribution of the study

The contributions of this study, being a critical analysis of skills essential for SME and entrepreneurship development, may be assessed in terms of the following:

1. This study makes a distinct contribution to the field of entrepreneurship theory related to manpower requirements for successful SMEs. The study incorporated eight models from authors namely Glancey (1998), Vuuren & Nieman (1999), Erikson (2002), Wickham (1998), Man et al (2002), Ucbasaran et al (2004), Darroch & Clover (2005) and Perks & Struwig (2005) into an integrated and more versatile model. This facilitates the synthesis of existing research and helps to address the gaps existing in theories. This could have significant benefits for entrepreneurship education, entrepreneurial learning, entrepreneurial support, public policy and the entrepreneurship practice itself.
2. This study generated two factors, namely functional and enterprising skills, which encompassed most of the business skills and entrepreneurship skills constructs of the eight models. This integrated model offers concrete guidance on the combination of skill factors that make some people more successful as SME owners and entrepreneurs than others in the same sector. The study presents these factors as important and should be taken seriously in terms of policy formulation and training planning and implementation.
3. This study conducted an industry/geography validation of the integrated model. This study investigated whether the set of assignable competencies as identified by the eight models reviewed (as presented in the detailed model) can be applied to a specific industry (the textile and clothing industry) at a specific geographic location (Johannesburg). The study showed that in the textile and clothing industry, successful SMEs were more competent in these skills than less competent SMEs, implying that skill acquisition does contribute towards SME success. This research contributes towards answering the question of whether this crucial skill set is universal or whether it differs in different economies or industrial sectors.

4. In terms of value judgements, this study demonstrates that the perception of the importance of skills impacted on the actions of SMEs. The more successful group of SMEs had indicated that they considered skills more important than the indication given by less successful SMEs. This translated to the more successful SMEs being trained in more skill than less successful SMEs.
5. This study investigated whether competence in the said skills is associated with specific prior training in that industry. This implies that training has got a big role to play in the development of SMEs. This can assist facilitate the construction of a relevant skills development plan for these SMEs and the provision of more appropriate training programmes.
6. This study contributes to the body of knowledge in the field and adds to the massive and ongoing research gathering of reliable and accurate information about SMEs in South Africa.
7. To the international community the results of this research can be used as a case study upon which various measures could be taken. The results serve as a lesson for other counties embarking on SME development.

7.6 Limitations of the study

This study has devoted considerable attention to explaining the relationship between perception, a certain set of competencies, its training and SME success. However as it is widely accepted that all forms of research have certain limitations (Cooper & Schindler, 2001:616; Dahlgvist et al, 2000:17); the reader should therefore be aware of the following limitations of this study:

- This study developed a model based on reviewing literature that was mainly focusing on USA and European contexts, which made it difficult to apply the theory to non-USA contexts.
- Based on the stochastic nature of business venturing, there are views that reject the notion that business success can be equated with entrepreneurial competence. If these views are valid then the fundamental assumptions underlying this PhD study are null and void (Watson et al, 1998:217; Botha, 2006:291).
- It must be noted that skill development is only a part of the complex set of variables needed for success in SMEs. This study only focuses on investigating one variable (skills competence) as contributing to SMEs success. However in reality it is not possible to separate factors that influence the entrepreneurial process.

- The study focuses only on SMEs as interviewed in 2006. The cross-sectional survey methodology has inherent weaknesses as the relationship is only correlational (Gurol & Atsan, 2006:35; Kodithuwakhu & Rosa, 2002:437). As the entrepreneurial process occurs over time, it is difficult to research this process using conventional cross-sectional methodologies which capture respondents in various stages of their firm's life cycle (Gundry & Welsch, 2001:457; Rogerson 2001a:117). It has been argued that the dynamics of SME development can only be fully understood only in the light of longitudinal studies that seek to monitor the condition of the SME economy over a period of time (MacMahon & Murphy, 1999:27; Erikson, 2002:277).
- This study's research design relies on the perspective of the individuals who are respondents. There are potential validity problems with a perceptual measure of competence as the self-evaluation is regarded as inherently biased. Furthermore many businesses are not willing to supply researchers with the information needed for objective measures because of to their suspicion of academic research and its motives (Lange et al, 2000:7; Miller et al, 2003:215; Rauch & Frese, 2000:15; Delmar et al, 2003:190).
- Another limitation is the categorizing of the skills where the boundaries between skill categories are not distinct and occasionally overlapped with other categories. Some skills categories included variables that use basically diverse skills; for example, competitor analysis was in the marketing category; cash flow management in financial skills and creativity / innovation in the opportunity alertness category. This may have caused varying understanding of the skills category construct from the researcher to respondent to analyst, creating conceptual confusion. This might also mean that the study did not distinguish sufficiently between the variations in the definition of the skill/competency within each category. This reduces the possibility of direct comparison with other studies and hence the possibility of drawing far-reaching conclusions on the basis of similarities and differences compared with their results (Baron 2003:253). Future studies should separate these variables further.
- It must never be assumed that what holds true for entrepreneurs in one part of the world can therefore form a legitimate basis for studies elsewhere (Renolds & White, 1997; Gadenne, 1998:37; Drakopoulou & Patra, 2002:117); thus one of the limitations of this study is that its generalization is limited to South Africa.

In spite of all the limitations, entrepreneurship research has been instrumental in clarifying and articulating many of the key internal factors necessary to encourage entrepreneurial activity (Mueller & Thomas, 2000:53).

7.7 Recommendations

This research has attempted to break new grounds on relations between skills competence, the training and SME success. In so doing section the study has unveiled various skills issues that need to be address and incorporated key training implications for South Africa. This subsection outlines the following recommendations that were identified during the course of the study.

Firstly, the study recommends that the training of SMEs should focus on the development of those skills identified as key success factors for SMEs. Based on the model developed and tested, the study recommends that SME skills development and training programmes should apply the model as described by equations 7.1, 7.2 and 7.3:

$$\text{Training for } \uparrow E/P = \text{training in key skills} \times [1 + \text{training in supporting skills}]. \quad (7.1)$$

$$\text{Key skills} = [a.PM \times q.EG \times (s.BF \times t.BM \times y.BL \times \alpha.BO)] \quad (7.2)$$

$$\text{Supportive skills} = [(1 + e.PLS + j.PN + f.PC) \times (m.EO + n.EC + o.El)] \times (1 + p.EM) \times r.(1/(1-ER)) \times ((1 + v.BB + w.BG + x.BI + z.BN + u.BH + \beta.BP + \chi.BR + \delta.BV) \times d.T/S] \quad (7.3)$$

Where:

- PM = Motivation (need for achievement)
- PLS = Life skills including problem solving, adaptability to change, decision making, negotiating, learning abilities and time management
- PN = Numeracy and literacy
- PC = Communication
- BB = Business systems management
- BG = General management
- BF = Financial management

- BH = Human resources
- BI = ICT skills
- BL = Legal
- BM = Marketing
- BN = Networking
- BO = Operational
- BP = Planning
- BR = Research and development
- BV = Value chain management
- EC = Creativity
- EI = Innovation
- EO = Opportunity recognition
- EM = Role model interpretation
- EG = Ability to gather and control resources
- ER = Calculated risk taking – unit is percentage
- a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z α , β , χ and δ are constant coefficients.

These equations imply that the training programmes must have a content that covers functional and enterprising skills as outlined in table 7.2 below:

Table 7.2: List of functional and enterprising skills required by SMEs

FUNCTIONAL SKILLS		ENTREPRISING SKILLS	
Key skills		Key skills	
BM	Marketing management	EG	Ability to Gather & control resources
BF	Financial management	PM	Motivation (need for achievement)
BO	Operational		
BL	Legal		
Supportive skills		Supportive skills	
BG	General management	EC	Creativity
BI	ICT skills	EI	Innovation
BH	Human resources management	EM	Role Model interpretation
BN	Networking	EO	Opportunity recognition
BP	Planning	ER	Calculated Risk taking

BR	Research and development		
BS	Business Systems management		
BV	Value chain management		
T/S	Technical Skills		
PN	Numeracy and literacy		
PC	Communication		
PLS - Personal life skills including adaptability to change, decision making, negotiating skill learning abilities, problem solving, time management skills			

From the table 7.1 as well as equations 7.1, 7.2 and 7.3 above the following are recommended:

1. Key functional skills (namely finance, marketing, operations and legal skills) should be integrated into all training programmes of SMEs in all the stages of the entrepreneurial process.
2. Key enterprising skills (motivation and the securing/controlling of resources skills) should be integrated into all training programmes of SMEs in all the stages of the entrepreneurial process.
3. Training should also incorporate all the identified supporting skills. Supporting skills must be analysed into those that are important for the stage that the SME is at in terms of the entrepreneurship process and the training incorporate the relevant supporting skill with the SME training. The training of supportive skills must be aimed at giving the SME basic comprehension and practical application of that skill in business usage. It can also help the SME know where to source the skill.
4. Emerging entrepreneurs and school leavers who intend to undertake entrepreneurship should ensure they know about the skills that are important for business success. They should also test themselves to check their level of ability in all the identified skill areas and from there should seek assistance to formulate skill development plans that will ensure that they have a plan that will get them the required skills as they prepare to enter into entrepreneurship.
5. Existing SMEs should analyse their strengths and weaknesses in each of the skills categories. They should also enrol themselves in outcome based skills development programmes (training or mentorship) that furnish them with competence in the identified key skill areas needed for SMEs' success and then strive to acquire all the

relevant support skills according to the requirements for each of the entrepreneurship process stage.

6. Private training consultancies, mentors, tertiary institutions; non government organisations, community-based organizations and industry training organizations who focus on entrepreneurship development should be able to determine the level of competence for each trainee in each area, be able to deliver a basic course focusing on transferring the basic comprehension level and be able to give customized focal area for all the key skills categories.
7. Local Business Service Centres (LBSCs), government agencies, government-sponsored organizations and foreign donor agencies that support small business and youth development should ensure that the programmes they support include training of the key skills and the supporting skills specified by this study.
8. Policy makers should reflect whether the target groups are aware of the skills needed and if they are being equipped with the skills that will enable them to engage in entrepreneurial action.

The field of entrepreneurship is young with the number of people teaching and / or researching in the field not being many (Markman & Baron 2003:287; Man et al 2002:139). It is hoped that the findings of this study will spur further research in this area.

Further research that could come out of this study includes:

- Studies that will extend or replicate these results through statistical validation of the integrated model as presented by equations 7.1, 7.2 and 7.3. Such studies can compare different industries and different areas (inter-industry, cross-cultural or cross-city comparisons).
- Studies that further break down competence area constructs into individual skill factors.
- Studies that will investigate additional factors related to the success and failure of SMEs would be a vital next step in the research agenda and ultimately essential to assisting SMEs in the textile and clothing sector in, for instance, rural and poor urban communities.
- Empirical studies investigating key/supporting skills in the various stages of the entrepreneurial process.
- Longitudinal studies which will indicate changes in skill acquisition process over designated periods to verify the findings/recommendations of this study.

- Mathematical models which will quantify the importance of each skill and qualify the relationship between skill acquisitions and the productivity of the SMEs. This would give guidelines on the intensity of training and the combination of functional and enterprising skills that should be targeted to SMEs for optimum impact.

7.8 Conclusion

Researchers in South Africa have undertaken a number of studies on the impact of skills training on SME success and failures. These occasional appraisals are necessary to enable South Africans to monitor programs in the development of the SMEs. This study has attempted to make a contribution to this research and has come out with interesting findings and recommendations.

The literature review introduced various important elements within the field of SME development, especially in the skills development programmes. During this chapter the objectives were revisited and it was indicated that all objectives had been met. Furthermore the propositions were revisited and explained as accepted or rejected.

The main findings of this study are summarized as:

1. Key skills that enhance SME success include the ability to gather resources, marketing, motivation, legal, financial and operational management skills.
2. Successful SMEs considered key skills to be more important and rated themselves more competent in most of the identified skills than did less successful SMEs.
3. Successful SMEs had been trained in more skills categories than less successful SMEs, with most of the successful SMEs having received training in all the key skills identified.

The findings from the empirical part of this study have helped to highlight the key role played by skills in business success. One dominant theme in this research is that skills training can make a difference to the way the SMEs operate and their chances of survival and success. The study has shown that entrepreneurship programmes aimed at increasing capacity/competencies relevant to setting up and running and growing a business can help create and sustain jobs.

This research has been informed by the cardinal development principle that skills' training empowers people to mobilise resources to produce change in their communities. Skills' training then constitutes one important vehicle underlying the development and transformation in specific regions. This study recommends that the less successful SMEs in Johannesburg be exposed to outcome based training aimed at developing key skills and accessing supporting skills.

It is hoped that the findings of this study could make an important contribution in the areas of theory, the development appropriate training programmes and methodology as well as policy formulation in the various departments connected with the promotion of the SME sector. Hopefully future research would endeavour to open new avenues in this important area.

Unless the categorising of skills is taken seriously by researchers in the SME development field, the products of research may not be that illuminating. Skill analysis seeks to provide answers to questions related to empowering the business owners. By linking skills analysis to the empowerment imperative it would be possible to produce a report which is perception and theoretically informed, as well as development sensitive. The various acts of skill development are locally sensitive and therefore, by implication, critical in addressing the SME development issues in Johannesburg.