MEASURING THE EFFECTIVENESS OF THE WOMEN ENTREPRENEURSHIP PROGRAMME, AS A TRAINING INTERVENTION, ON POTENTIAL, START-UP AND ESTABLISHED WOMEN ENTREPRENEURS IN SOUTH AFRICA

BY

MELODI BOTHA

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SUMMARY

MEASURING THE EFFECTIVENESS OF THE WOMEN ENTREPRENEURSHIP PROGRAMME, AS A TRAINING INTERVENTION, ON POTENTIAL, START-UP AND ESTABLISHED WOMEN ENTREPRENEURS IN SOUTH AFRICA

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MELODI BOTHA

Supervisors: *Proff. G.H. Nieman and J.J. Van Vuuren*
Department: *Business Management*
Degree: *Doctor Commercii*

Everywhere in the world, entrepreneurship is seen as one of the most important solution to unemployment, poverty and low economic growth. The creation of new ventures and growth of existing businesses are vital contributing factors to any economy. The lack of training, however, is seen as entrepreneurs' most frequently mentioned weakness. Therefore, this study addresses the training of entrepreneurs and reveals that education and training are crucial for the development and creation of entrepreneurs in South Africa. While research in the area of entrepreneurship education and training is growing, one aspect into which little research has been conducted is that of assessing the effectiveness of educational and training programmes.

The purpose of this study is to measure the effectiveness of the Women Entrepreneurship Programme (WEP), which was introduced to promote and encourage women entrepreneurs in South Africa, and to address their main barrier: the lack of entrepreneurial training and education. Furthermore, the study will provide a framework for and discuss content of future entrepreneurship training

programmes. The literature revealed the need for an entrepreneurship training programme that focuses specifically on the training needs of women. The WEP focuses on areas that are normally neglected in other entrepreneurship programmes and includes topics such as networking and support, the use of role models, confidence-building, and post-care training in the form of mentors and counsellors. It places more emphasis on the marketing and financial aspects of a business, as these aspects are seen as the two topics with which women entrepreneurs struggle the most when operating a business.

The extension of the experimental design by using a control group allowed the effects and benefits of the training intervention (WEP) on the participants to be measured against the control group, hence widening the debate surrounding the rationale for interventions of this nature. The Chi-square test, *t*-test for independent samples, *t*-test for paired samples, Mann-Whitney test, and Wilcoxon matched-pairs test were executed to present the statistically significant differences between the experimental and control groups. The Kruskal-Wallis One-Way ANOVA test was also executed to illustrate statistical differences between various groups within the experimental group. The findings of this empirical study have helped to highlight the benefits derived by the WEP delegates and the new entrepreneurial, as well as business skills, and knowledge which they gained. This study has shown that entrepreneurship programmes can help create new businesses, grow existing ones and generate new jobs.

The contribution of this study to the science, as well as its possible limitations, are discussed. Areas for future research are outlined and various recommendations made to guide current and prospective entrepreneurship training programme developers, providers, funders and sponsors. This study demonstrates that the WEP delegates in the study gained new skills and knowledge relevant to running a business; increased their confidence in their entrepreneurial abilities, and improved their employability, turnover, productivity and profit. Furthermore it should be emphasised that it was statistically proven that the WEP, as a training intervention, is effective in training potential, start-up and established women entrepreneurs in South Africa.

TABLE OF CONTENTS

LIST OF FIGURES

Page no.

LIST OF TABLES

Page no.

Chapter 1: Introduction and background to the study

"The 30-year journey just travelled provides impressive evidence that the entrepreneurial revolution is for real. When I completed my doctoral program about 30 years ago, entrepreneurship research, curricula, and programs were basically nonexistent. My dissertation was to the best of my knowledge, the first one at Harvard Business School to have the word 'Entrepreneurial' in the title. One could count on one hand that the number of universities where such a course was taught, and these were a few elite graduate schools. The 'revolution' in higher education has changed all that. Today almost every university and college offers some form of entrepreneurial program."

- Timmons (1999: 13)

1.1 Introduction

Although South Africa has shown positive economic growth since 1994, it is evident that certain critical economic and social aspects and indicators have not been addressed to the full (Antonites, 2003: 1). Unemployment in particular still seems to be one of the major concerns with regard to economic growth. According to Van Tonder (2003: 8), the current unemployment rate implies that only approximately 13.5 million individuals are part of the economically active population in South Africa. It is imperative to create high levels of entrepreneurial activity within the country in order to reduce the unemployment figure. Timmons and Spinelli (2004: 37) agree, pointing out that entrepreneurial activity is a prerequisite for the success of economic growth, development, social well-being and political stability.

Entrepreneurship throughout the world is stirring a revolution that is reforming and revitalising economies; this is due to the establishment of new businesses and the growth of existing ones (Visser, 2002: 1). In Africa one can see a sluggish growth in large private sector enterprises and the strong need for retrenchment in the public sector. This has led to the acknowledgement that small-scale businesses are of particular importance for the economy (Friedrich, Glaub, Gramber & Frese, 2003: 2). The South African government has to a certain degree recognised the importance of developing a strong small, medium and micro enterprise (SMME) sector that could lead to promoting and achieving economic growth as well as the creation of wealth

and employment. The government's focus, over the past few years, on the training of entrepreneurs has to a certain extent been on the development of previously disadvantaged individuals, specifically women entrepreneurs (Van der Merwe, 2002: 48). Individuals who fall into this category are seen as being latecomers to the "game" of entrepreneurship and therefore do not have the adequate skills and knowledge to start and grow a business. According to Timmons and Spinelli (2004: 256), one significant difference between men and women is the under-representation of women pursuing higher education in business, engineering and science. Although education is not mandatory for new venture creation, it does provide one with the skills, contacts and opportunities vital for most successful businesses.

Orford, Wood, Fischer, Herrington and Segal (2003: 17) interviewed several South African entrepreneurs to obtain information on the main obstacles they face. The results of their study, as well as the entrepreneurial activity of South Africa compared with other countries, are captured in the Global Entrepreneurship Monitor (GEM) report. The results indicate that the lack of education and training is South African entrepreneurs' most frequently mentioned weakness; financial support is the second most frequently mentioned weakness. The interviewees thirdly mentioned cultural and social norms. These findings contribute to the restriction of entrepreneurship development in the country.

The purpose of this study is to address the frequently mentioned barrier, namely the lack of entrepreneurial training and education, by introducing the Women Entrepreneurship Programme (WEP). Furthermore, it will explain how the effectiveness of this training programme is measured. The WEP was developed specifically to promote and encourage women entrepreneurs in South Africa.

This chapter provides the background and literature review of the study. It sets out the problem statement, objectives, methodology and design of the study and the outline of Chapters 2 to 8. This is done to guide the flow of this study.

1.2 Background and importance of a study on women entrepreneurs

This study focuses on the training of women entrepreneurs in South Africa; it is therefore necessary to explain why such a study is undertaken. One reason for the interest in women entrepreneurship in South Africa could be the revitalising effect entrepreneurship has had on such a depressed economy in the past and may also have in the 21st century (Erwee, 1987: 153). This view is supported by Blignaut (2000: 37), who points out that the "new" economy also provides women who may have been out of the workplace for a while with a chance to step in and take advantage of exciting opportunities. Although women are making their mark as entrepreneurs in South Africa, they still seem to be under-represented in the formal sector.

According to Foxcroft, Wood, Kew, Herrington and Segal (2002: 9), there are still twice as many male entrepreneurs as female entrepreneurs. The findings of Orford *et al.* (2003: 11), in their GEM report of 2003, support these results, indicating that men are on average 2.3 times more likely to be involved in entrepreneurial activity in developing countries than women are. In South Africa in 2002 men were twice as likely as women to be involved in entrepreneurial activity, whereas in 2003 men were 1.9 times more likely than women to be involved in entrepreneurial activity. In 2004 men were 1.4 times more likely to be self-employed than women (Orford, Herrington & Wood, 2004: 16). The difference in the female and male rates was statistically significant in 2002 but not in 2003 and 2004. The overall difference between entrepreneurial activity rates of men and women in South Africa is largely due to the much higher opportunity entrepreneurial activity amongst men. Reasons for this could be barriers that women entrepreneurs face. On top of that, there are mutually reinforcing factors such as crime, low visibility and absence of business organisations which raise the barriers to entry and growth for businesses even more.

The last three decades have seen a remarkable increase in the number of studies of women entrepreneurs (Loscocco & Robinson, 1991; Moore & Buttner, 1997). Some of these studies compare men and women business owners (Evans, Leighton & Wharton, 1989), focusing on such topics as the different industrial and occupational concentrations of male and female entrepreneurs. Carter (2000: 328) agrees and

stresses that the aim of the majority of the studies was: "mainly to make comparisons with male entrepreneurs and to make women entrepreneurs visible." Other studies of women entrepreneurship focus exclusively on women, analysing, among other things the reasons why women leave the mainstream labour market to pursue business ownership (Moore & Buttner, 1997; Tang, 1995; Shabbir & Di Gregorio, 1996). According to Smith-Hunter and Boyd (2004: 19), many studies focus on the barriers that women entrepreneurs face. Carter (2000: 328) suggests that in comparison with men, when women enter self-employment they do so with fewer financial assets, less experience in management and are under-resourced in terms of their human and social capital. Moreover, relatively few studies have focused on solutions that could address these barriers, such as provision of training and education. There is an urgent need to examine the training needs of women entrepreneurs and whether current service providers are looking after these needs.

Adhikary and Rai (1999: 29) point out that the informal sector in South Africa has grown enormously over the past ten years, illustrating why entrepreneurship is seen as an important career option for women as well as their male counterparts. The Ntsika Enterprise Promotion Agency (which is now known as the Small Enterprise Development Agency, SEDA) was established through the Department of Trade and Industry. The main function of SEDA is to expand, coordinate and monitor the provision of training, advice, counselling and any other non-financial services to small business in accordance with the National Small Business Support Strategy (Department of Trade and Industry, 2005). Workshops held by Ntsika Enterprise Promotion Agency in the late 1990s highlighted the most common barriers perceived by women entrepreneurs in South Africa (Adhikary & Rai, 1999: 30):

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

Mallane (2001: 11) agrees with the above-mentioned barriers and stresses that it is important to do something about the challenges that have been carried into the new millennium in the area of gender and women entrepreneurship. These include research and policy issues, support structures and information provision:

- There is a need to establish business and support networks to ensure co-ordination and integration of services. There is a need to work on the gender sensitisation of public policy to ensure that its translation into action is done through building of skills and the empowerment of women. Perhaps the largest disparity between men- and women-owned enterprises is illustrated in the lack of gender desegregated government procurement data.
- There is a lack of a forum to address women entrepreneurs' problems and the initiative of Ms Lindiwe Hendricks, then Deputy Minister, on Women in Business must be applauded. Ms Lindiwe Hendricks established the South African Women Entrepreneurship Network (SAWEN) in June 2002.
- There is no journal on women entrepreneurship in South Africa, which could serve as the documentation of best practice and role-model promotion.
- There are very few support bases for aspiring women entrepreneurs and there have been limited studies on South African women in business.
- Prospective women entrepreneurs have often been humiliated when seeking business loans, as they are often not accepted without a co-signature because the husband has to co-sign the loan (Valla, 2001: 36).

In 2003 the Chair in Entrepreneurship at the University of Pretoria conducted a study on 174 women entrepreneurs in South Africa for a major bank. This was done to address some of women entrepreneurs' most severe barriers. This study consisted of a literature review, qualitative research in the form of focus groups and quantitative research in the form of a structured research questionnaire. The study focused on perceptions that women entrepreneurs had about financial institutions and the lack of access to financial assistance. One of the most important research findings was that 68 % of the women entrepreneurs stated that they would like to receive some form of entrepreneurial training and education from commercial banks (Van der Merwe & Nieman, 2003: 35).

Commercial banks, however do not believe that it is their responsibility to train and educate entrepreneurs in business, management and entrepreneurial skills. Therefore a Women Entrepreneurship Programme (WEP) was developed to cater for the above needs. Carter (2000: 331) suggests that the only way to encourage larger numbers of women into self-employment is to recognise that there is a clear need to widen access to business start-up and growth training and advice. Little emphasis is currently placed on the provision of after-care training and advisory service for the ongoing firms. Arguably, as many women lack the management experience and access to networks, they have a greater need for ongoing support.

1.3 Literature review

Defining entrepreneurship seems to remain a difficult task, as academics and researchers worldwide have not yet agreed on a definition. Several authors have contributed to the definition of entrepreneurship, including McClelland (1961), Gartner (1990), Bygrave and Hofer (1991), Timmons and Spinelli (2004) and Hisrich, Peters and Shepherd (2005). For the purpose of this dissertation two definitions of an entrepreneur will be used. The first definition, as used by the Chair in Entrepreneurship at the University of Pretoria (Nieman, 2000: 5), is:

"A person who sees an opportunity in the market, gathers resources and starts and grows a business venture to satisfy these needs. He or she takes the risk of the venture and is rewarded with profit if it succeeds".

The second definition, as accepted in this study, is:

An entrepreneur is an individual with the ability to realise a specific vision of virtually anything – a definite human creative action. A differentiating factor defining the true entrepreneur is the entrepreneurial skills of creativity and innovation. The fundamental skill to "create", thus generating an idea, and the action of transforming it into a viable growth-orientated business, forms an unconditional and integrated prerequisite for entrepreneurship training programmes (Antonites, 2003: 3). The definitions of entrepreneur include the promise of growth and expansion and therefore it is essential that the owner of the entrepreneurial venture obtain the adequate skills and knowledge to ensure long-term success.

One can now ask how entrepreneurial South Africa is? Table 1.1 highlights the entrepreneurial activity rates in South Africa from 2002 to 2004. The GEM report of 2004 indicates the Total Entrepreneurial Activity (TEA) by measuring the proportion of a country's adults (aged 18 – 64 years) who are involved in starting or running new businesses. In 2004 the TEA index in South Africa was 5.4 % (4.3 % in 2003 and 6.3 % in 2002) compared with an average of 9.4 % in all 34 countries included in the 2004 survey, and 21 % in the developing countries included in the 2004 survey (Orford *et al.*, 2004: 3). This indicates that South Africa has a relatively low TEA rate compared with the other countries included in the above survey. Table 1.2 illustrates the most important factors that can be seen as contributors towards the country's low entrepreneurial activity.

Table 1.1: Entrepreneurial activity rates in South Africa (2002 – 2004)

Activity rate	2002	2003	2004
Total entrepreneurial activity rate	6.3	4.3	5.4
Necessity firm activity rate	2.3	1.5	2.4
Opportunity firm activity rate	3.2	2.9	2.8
Start-up activity rate	4.5	2.7	3.9
Established firm activity rate	1.1	1.1	1.4

Source: Orford *et al.* (2004: 13)

Table 1.2 is presented on the next page.

Table 1.2: Key factors associated with entrepreneurial activity

Demographic factors	Environmental factors
Age - People between the ages of 25 and 44 are more likely to be entrepreneurs than people younger than 25 and older than 44	Human capital - Lack of entrepreneurial capacity due to weaknesses in the education and training system to develop the skills and mindsets needed for entrepreneurship and the potential of the population for entrepreneurship
Race - White people are also more likely to be entrepreneurs than black Africans (However, the differences between white and black Africans largely reflect lower levels of education and a higher probability of being located in a rural area for black Africans compared with white Africans).	Government policies - the national legislative and policy environment Government programmes – Specific programmes, structures and institutions set up to support entrepreneurial businesses
Gender - Men are 1.4 times more likely to be self-employed than women	Financial support - Inadequate access to early stage finance, how well the financial community understands entrepreneurship and the entrepreneurs' capacity for financial management

Source: Own compilation as adapted from Orford *et al.* (2004: 3)

The most significant observations to be drawn from the table above are:

- The key to raising entrepreneurial activity rates lies in increasing the proportion of South Africans engaged in it, especially black people and women. Orford *et al.* (2004: 3) further advocate increasing the proportion of people who complete secondary school and continue to higher education and who believe that they have the skills, knowledge and experience to start a business. These two go

hand in hand, since higher levels of education are associated with significant increases in entrepreneurial self-confidence.

- According to the World Competitive Yearbook (2004), South Africa ranks 49th out of 60 countries on the human capital development factor. However, on the sub-index for education, South Africa ranks 55th.
- While there may be a range of contributing reasons for the low levels of entrepreneurial confidence in South Africa, the legacy of apartheid education does appear to be a prime candidate. It is also one area where the government could have a significant impact on the development of people with the skills and confidence to become entrepreneurs (Orford *et al.*, 2004: 28).

A further distinction must be made between entrepreneurs who are taking advantage of business opportunities and therefore start a business due to a gap that was seen it the market (these are normally pulled towards entrepreneurship - opportunity entrepreneurs), and people who start businesses because they do not have any other employment options (these are pushed towards entrepreneurship - necessity entrepreneurs). This will be further explained in Chapter 4 of this study. According to the GEM report, Orford *et al.* (2004: 12) found that in South Africa necessity entrepreneurial activity accounted for about 45 % of total entrepreneurial activity, which is higher than in previous years and is relatively high compared with other countries. Out of the 34 countries, South Africa ranked ninth (9th) in the necessity entrepreneurial activity index and 29th in the opportunity entrepreneurial activity index. Among the developing countries which are included in the GEM report in 2003, South Africa has the weakest performance when it comes to entrepreneurship and business start-ups.

The number of entrepreneurs per 100 adults in South Africa amounts to about a third of the number in Thailand, the leading country in the GEM index. The low degree of entrepreneurship applies both to opportunity- and to necessity-driven entrepreneurship, though the lag behind other countries is much higher when it comes to opportunity-driven entrepreneurship. Foxcroft *et al.* (2002: 6) connect the weak entrepreneurship performance to four factors:

- The high transaction cost of tax compliance, in particular for young firms;

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

These observations are supported by the evidence presented by Djankov, La Porta, Lopez-de-Silanes and Shleifer (2000: 7), who indicate that the cost of registering a formal business in South Africa is comparatively high. It amounts to 0.366 % of annual Gross Domestic Product (GDP) per capita. In Canada, it is 0.014 %, in New Zealand 0.004 % and in Chile 0.116 %. These indicators suggest that government in South Africa is creating more obstacles to entrepreneurship than governments in other countries. More emphasis should be placed on effectively setting up support structures for entrepreneurship. Meyer-Stamer (2003: 7) agrees that these problems are compounded by a confused concept of entrepreneurship and entrepreneurship promotion. This author has worked with local communities since the year 2000, and observed four approaches to entrepreneurship, three of them obviously wrong:

- Purchase a business plan, submit it for funding, obtain funding and spend the funds for a BMW or bakkie, but have no products or customers.
- Purchase a business plan, submit it for funding, obtain funding, use that money just like a wage, and the "business" collapses once the funds are used up.
- Go through a skills course, use the skills to produce something, try to find customers for the product, but cannot find customers.
- The only promising approach is the fourth one: Understand the behaviour and the problems of people, identify the market opportunity, match it with your skills and the skills obtained in a training programme and then write your own business plan and come up with a product or service for which there is a real demand.

One can now ask the question: "Why are some entrepreneurs so much more successful than others in starting and growing ventures?" According to Baron and Markman (2000: 106), previous efforts to answer this question have generally focused either on the personality traits or susceptibility to various cognitive errors of individual entrepreneurs, or on such external factors as the number of competing

businesses. It is suggested that skills needed to start and grow a venture can readily be enhanced through appropriate training and that entrepreneurs who take advantage of such opportunities may reap important benefits.

When focusing on the South African situation, the evidence from the GEM report suggests that two factors explain the relatively low levels of entrepreneurial self-confidence in South Africa. Firstly, South Africans are less likely to know an entrepreneur who can serve as a role model or example. Secondly, problems in South Africa's educational system are widely recognised. Entrepreneurs should be taught the business and management skills involved in starting and running a business; for example they should be taught how to write their own business plans and identify their own opportunities. Since the early 1980s, evaluation studies on entrepreneurship education and training have received increased attention in the literature (Friedrich *et al.*, 2003: 2). These authors quoted several researchers, such as Gibb (1993: 9), who states that the lack of clear consensus on the definition of entrepreneurship and small business contributes to the confusion in the existing research on training. Nieman (2001: 2) states that entrepreneurship education should be directed at the preparation of individuals who can be change agents for the next decade, simultaneously providing the much-needed entrepreneurs required in South Africa.

1.4 Defining constructs in the study

It is necessary to define certain constructs used in the title as well as throughout the chapters of this study. The title of this study is: Measuring the effectiveness of the Women Entrepreneurship Programme (WEP), as a training intervention, on potential, start-up and established women entrepreneurs in South Africa. In the title, the constructs that must be defined are: potential women entrepreneurs, start-up women entrepreneurs and established women entrepreneurs. In the GEM report of 2003, Orford *et al.* (2003: 9) distinguishes these entrepreneurial firms by age. Potential entrepreneurs are those who are making a leap towards entrepreneurship by gathering information and obtaining resources to start a business in the near future. Start-up entrepreneurs are firms that have not yet paid wages and salaries for more than three months. Firms older than 42 months (3.5 years) are regarded as

established entrepreneurs. It is also significant to note that the word "women" was used rather than "female" due to the fact that all the latest academic journals and publications refer to women entrepreneurs.

The word "effectiveness" is used throughout this study. The reason why effectiveness is used and the word "impact" to a lesser extent is the definition of effectiveness. The Oxford dictionary (2005) defines effectiveness as causing a performance, change or result, and this is in actual fact what is measured in this study.

1.5 The research problem

From the background of the study, it is clear that women entrepreneurs encounter problems, barriers and constraints. The literature study deals with the lack of training and education as a barrier to women entrepreneurs and how a training programme can solve these problems. The research problem deals with the Women Entrepreneurship Programme (WEP) and whether this programme will be effective in assisting women entrepreneurs to start and grow their own businesses. While the research problem is discussed in more detail in Chapter 6, the study sought to address the following research questions:

- Is the WEP effective in assisting start-up and already established women entrepreneurs to grow their businesses by means of improving their business performance?
- Is the WEP effective in assisting potential women entrepreneurs to start their own businesses?
- Is the WEP effective in assisting start-up and already established women entrepreneurs to start multiple businesses?
- Is the WEP effective in training potential, start-up and established women entrepreneurs?
- Will skills transfer take place after the completion of the WEP?
- Are there significant differences regarding the business performance between the women entrepreneurs who attended and completed the WEP (experimental

group) and the women entrepreneurs who did not take part in the WEP (control group)?

- Are there significant differences regarding skills transfer between potential, start-up and established women entrepreneurs?
- Are there significant differences regarding business performance between women entrepreneurs in different provinces in South Africa?
- Does the WEP satisfy the training needs of the experimental group?
- Does the WEP meet the expectations of the experimental group?

1.6 Purpose of the study

The purpose of the study is to measure the effectiveness of the WEP on women entrepreneurs and whether it can equip them with the knowledge and skills to start and grow their own businesses. This study will also make agencies, government, financial institutions and other role players aware of the WEP. The main purpose, however, will be to inform other women entrepreneurs about the programme and provide them with training; more specifically, to investigate and explore the following:

- Literature on existing entrepreneurial training and education;
- Literature on the objectives, content, design and duration of existing entrepreneurship training programmes;
- Literature on women entrepreneurs in South Africa;
- The design, content and structure of the WEP; and
- Measuring the effectiveness of the WEP on potential, start-up and established women entrepreneurs.

The purpose of the WEP is furthermore to provide technical, business management and entrepreneurial training to women entrepreneurs. Two training models are examined and integrated to form a new model in Chapter 3. This model will then serve as the platform used to develop the WEP. The first model is the Entrepreneurial Performance Education Model (E/P model) as developed by the Chair in Entrepreneurship, at the Department of Business Management, at the University of Pretoria (Van Vuuren & Nieman, 1999: 6). This model was actually tested and validated for the first time in 1997 (Van Vuuren, 1997: 593). It is

concerned with the elements that drive entrepreneurial performance and was developed to guide syllabi and curriculum development. The four elements evident in the E/P Model are:

- Entrepreneurial performance;
- Performance motivation;
- Entrepreneurial skills; and
- Business skills.

These elements will be presented and examined further in Chapter 3. Antonites (2000: 21) elaborated on the E/P Model to develop the Entrepreneurship training model (Table 1.3) which forms the framework of WEP and focuses on the acquisition of entrepreneurial and business skills.

Table 1.3: The Entrepreneurship training model

Entrepreneurial Performance (E/P)	Performance motivation (M)	Entrepreneurial Skills (E/S)	Business Skills (B/S)
Establishment of own business	Motivation	Risk propensity	General management skills
Growth in net value of business	Role models	Creativity and Innovation	Marketing skills
Recruitment of employees		Opportunity identification	Legal skills
Increasing productivity levels		Role model analysis	Operational skills
Increasing profitability		Networking	Human resource management skills
			Communication skills
			Business plan compilation
			Financial management
			Cash flow management

Source: Adapted from Antonites (2000: 21)

The second model was developed by Pretorius (2001: 131) and is known as the Entrepreneurial Education model (E/E model). This model considers not only the content of entrepreneurial education programmes but also the context in which such programmes are operated by the facilitators and the approaches that they use. The model identifies five constructs relevant to entrepreneurial education aimed at increasing start-ups and also indicates the relevance of the programme context. The E/E Model was validated in 2001 and the constructs include (Pretorius, 2001: 132):

- Entrepreneurial success themes;
- Business knowledge and skills;
- Business plan utilisation;
- Learning approaches; and
- The facilitator and the programme context.

Pretorius, Van Vuuren and Nieman (2005: 422) integrated the two models (Van Vuuren & Nieman, 1999 and Pretorius, 2001) to introduce the newly developed model: Educate for Entrepreneurial Performance (E for E/P). The Entrepreneurial Training Model (Antonites, 2001) and the E for E/P model (Pretorius, Van Vuuren & Nieman, 2005) are explained further in the literature review in Chapter 3.

1.7 Effects of training

To measure the effectiveness and impact of a training programme, Kirkpatrick (1967: 98) suggests measurements on four different levels: Reaction measures (do they like it?); learning measures (do they understand it?); behaviour measures (can they do it?); and results/success measures (does it make a difference?). In this study, assessing training effectiveness of the WEP will be done in line with these suggestions:

- Reaction measures will be used to find out trainees' satisfaction with the training programme. This evaluation will be done at the completion of the training programme and will consist of a number of questions about the course that participants will rate according to their level of satisfaction.

- Learning measures and behaviour measures will assess the effect of the training on the entrepreneurial factors. Learning measures will also be used to assess the gain in training specific skills, increasing knowledge and changing attitudes.
- Behaviour measures will be conducted to find out whether the participants were able to apply these skills to job situations.
- Post-training success measures will be used to measure training outcomes in terms of economic factors such as profits, costs, productivity and quality.

According to May, Moore and Zammit (1990: 172), this type of evaluation, although potentially useful, has not been conducted frequently. The apparent problem with results evaluation is the large number of variables that the researcher must identify and isolate in order to establish that a given result was indeed attributable to the training programme, as opposed to other corporate activities. Donkin (2004: 18) mentions that attempting to calculate return on investment is a step beyond the Kirkpatrick model and usually involves some hard measuring. The author suggests that the first step is to work out the desired results, such as increased output, more sales or reduced staff turnover or increased turnover. The next step is to quantify the costs associated with these issues.

Therefore, to measure the effectiveness of the WEP even further, this study will also make use of the key performance measures that were adopted from a study conducted by Kalleberg and Leicht (1991: 148) on 400 entrepreneurs; these are:

- Primary performance measures (number of employees, growth in employees, number of customers, sales/turnover and value of capital assets);
- Proxy performance measures (geographical range of markets – national versus international markets, formal business and VAT registration);
- Subjective measures (including the ability of the business to meet business and domestic needs – confidence in running a business); and
- Entrepreneurial performance measures (the desire to start a business or the desire for growth and the ownership of multiple businesses).

The determining and measurement of the effectiveness of the WEP will be discussed further in Chapters 6 and 7. The reason why the measurement levels of Kirkpatrick (1967) and Kalleberg and Leicht (1991) are used in this study is due to the literature

study revealing that other authors in studies of effectiveness most frequently used these levels. Some of these authors include, Carter (2000: 330), Friedrich *et al.* (2003: 4) and Henry, Hill and Leitch (2003: 98).

The WEP provides post-care training to the participants after their completion of the programme, in the form of business mentors and advisors. Carter (2000: 331) states that the continuation of self-help groups, or peer mentoring, after formal programmes have finished, is an innovative and low-cost means of providing ongoing support to new firms. Van Auken (1999: 30) stresses that training programmes which aim to assist in successful business formation and warn potential business owners of the obstacles to launching a business can lead to better launch strategies that may improve post-launch performance.

1.8 Research objectives

The primary and secondary objectives of the study are presented below.

1.8.1 Primary objective

The primary objective of the study is to:
Measure the effectiveness of the WEP, as a training intervention, on potential, start-up and established women entrepreneurs in South Africa.

1.8.2 Secondary objectives

The secondary objectives of the study are to:

- Determine whether the training content of the WEP has an effect on women starting their own businesses;
- Determine whether the training content of the WEP has an effect on women entrepreneurs growing their businesses;
- Determine which entrepreneurial, as well as business, skills and knowledge the experimental group learned and gained after they completed the WEP;
- Compare the experimental and control groups approximately six months after the intervention has taken place;

- Determine whether there are significant differences regarding skills transfer between women who already have businesses and those who recently started businesses and those who are potential business owners;
- Determine whether the WEP satisfied the training needs of the experimental group;
- Determine whether the WEP met the expectations of the experimental group;
- Determine whether there are significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

1.9 Hypotheses

The following hypotheses were formulated out of the research objectives:

Null hypothesis (H1o): The WEP, as a training intervention, is not effective in assisting start-up and established women entrepreneurs to grow their own businesses.

Alternative hypothesis (H1a): The WEP, as a training intervention, is effective in assisting start-up and established women entrepreneurs to grow their own businesses.

The following secondary hypotheses are stated for the study:

H2o: The WEP, as a training intervention, is not effective in assisting women entrepreneurs to start their own businesses.

H2a: The WEP, as a training intervention, is effective in assisting women entrepreneurs to start their own businesses.

H3o: There are no significant differences regarding business performance between the experimental and control groups six months after the experimental group completed the WEP.

H3a: There are significant differences regarding business performance between the experimental and control groups six months after the experimental group completed the WEP.

H4o: The experimental group has not gained entrepreneurial, as well as business, skills and knowledge after the completion of the WEP.

H4a: The experimental group has gained entrepreneurial, as well as business, skills and knowledge after the completion of the WEP.

H5o: There are no significant differences regarding skills transfer between potential, start-up and already established women entrepreneurs.

H5a: There are significant differences regarding skills transfer between potential, start-up and already established women entrepreneurs.

H6o: The WEP did not satisfy the training needs of the experimental group.

H6a: The WEP satisfied the training needs of the experimental group.

H7o: The WEP did not meet the expectations of the experimental group.

H7a: The WEP met the expectations of the experimental group.

H8o: There are no significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

H8a: There are significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

1.10 Research methodology

The study consists of a literature review and an empirical study. The literature review aims to survey the background of entrepreneurial education and training and the range of current training programmes, as well as the effect of training on women entrepreneurs. It will provide an insight and understanding into the research problem as well as the necessary background to guide the empirical part of the study.

The empirical part of the study will focus on the WEP and specifically on how to measure the effectiveness of the training intervention. The WEP focuses on the most important needs identified by the respondents in the 2003 study already mentioned in the background to this study. The empirical method is embedded in an experimental design. Zikmund (1997: 307) defines the experimental design as one

that exists as a method based on the manipulation of a variable with the sequential testing of causal relationships among variables.

The experimental design of the study involves the treatment of the independent variable as the WEP with an experimental group (WEP delegates) and a control group (women entrepreneurs not participating in WEP). The treatment (independent variable) was conducted in a controlled research environment (non-laboratory), thus striving towards a consistent environment.

1.10.1 Sample selection and size

For the selection of the target group out of the population it is important to describe the deciding elements that determined the profile of the selected target group. The determining factors that were taken into consideration when the sample was selected are known as the sampling frame and include the following:
Determinant 1 – Already established, start-up or potential women entrepreneurs;
Determinant 2 – Women entrepreneurs with high-growth or potential high-growth ventures;
Determinant 3 – Women whose training needs matched the training content of the WEP.

The sample of the study consists of 180 women entrepreneurs. The sample includes respondents from seven different provinces and every ethnic group in South Africa. This is done by running the WEP with six different groups (±20 trainees per group) in the various provinces. One part of the total group consists of an experimental group (116 respondents), while the other part is the control group (64 respondents). After six months the results of the experimental group will be compared with those of the control group. The control group are as far as possible similar to the experimental group in terms of age, experience, skills level and business owners, to name but a few factors. The ultimate desired outcome of this programme is for each participant to successfully establish and grow her business by means of preparing a business plan for the future.

1.10.2 Design of the study

As already indicated, this study will be based on an experimental design but will also focus on a survey design. The empirical study will consist of quantitative research, in which three different research questionnaires will be used to obtain information from respondents. The first questionnaire will be given to respondents before the actual training takes place to measure the respondents' level of knowledge and skills as well as training expectations and needs (this will be referred to as O_1). The second questionnaire will be given to respondents to measure their behaviours and attitudes directly after they have completed the programme (this will be referred to as O_2), and the third questionnaire, will measure the respondents' business performance six months after they have completed the programme (this will be referred to as O_3). The control group will only receive the first questionnaire (O_1) and the third questionnaire (O_3).

1.11 Importance and benefits of the study

The study presented explores entrepreneurship from an intervention perspective; essentially, this study is an exploration into the nature and effectiveness of the WEP and will also investigate other entrepreneurship education and training programmes. However, the main contribution of this study to effectiveness is represented by a focused longitudinal study in which both the tangible and intangible outcomes of the particular WEP cohort are examined. An aspect which enhances the findings of this study is the use of control and experimental groups which, given the nature of the field, are becoming more and more difficult to find. In 2001, Friedrich *et al.* (2003: 4) conducted a study by selecting 84 entrepreneurs; one part formed the experimental group, while the other part were the control group. After six months these authors compared the results of the experimental group with the control group and found that the experimental group had developed better in their business performance than the control group. These authors further report that as far as they have researched, no other entrepreneurial training in South Africa has been evaluated with a control group and an experimental group six months after the respondents were measured the first time. Therefore, the principal aim of the study is to make a valuable contribution in the area of entrepreneurship education and training. Finally, the ultimate benefit of

this study is to highlight key considerations for programme design and delivery and to offer some practical suggestions for improving overall programme effectiveness. In this respect, this study is expected to be of interest to both a national and an international audience which includes academic researchers, lecturers and fellow scholars in the field of entrepreneurship. In addition, the implications of the empirical work will be of particular interest to policy makers, sponsors and those involved in entrepreneurship education and training design, provision and funding.

1.12 Outline of the study

The study will be done in such a way that it follows a logical progression to build up to the specific research problem and objectives. The investigation starts with a thorough and broad literature review based on entrepreneurial education and training in general. It is further broken down into specific topics such as different training programmes, women entrepreneurs and their barriers with reference to education and training and lastly the WEP is discussed. The final section of this study refers to the measurement of the WEP and the research methodology and findings. A final conclusion and recommendations complete the study.

Chapter 1: Introduction and background to the study

This chapter comprises the introduction and background to the study. It discusses the importance and purpose of the study and defines the research problem. The objectives and hypotheses are clearly stated to guide the flow of the research. The chapter presents the research design, indicating how the experimental group and control group are tested. Finally, it outlines the classification of the experimental design and describes the benefits that this study will have for the reader and for South Africa as a whole.

Chapter 2: Entrepreneurial education and training

This chapter focuses on the literature review on entrepreneurial training and education. It starts by defining the terms education, training and learning as used in the study. It outlines the field of entrepreneurship and highlights important research

trends. It examines further the important relationship between entrepreneurship and economic development and growth, as well as the relationship between employment and entrepreneurial education and training. The next section deals with the differences between entrepreneurial ventures and small businesses. Entrepreneurial education and training are defined and explained, and the ongoing debate of whether entrepreneurship can be taught is dealt with and a point of view defended. Finally the chapter highlights the difficulties encountered in entrepreneurship education and the factors that enhance and constrain entrepreneurial training.

Chapter 3: Entrepreneurship training models and programmes

The main two focus areas of Chapter 3 are two entrepreneurship training models and various training programmes. The two entrepreneurship training models are compared, and then integrated to form the improved training model as used in the chapters that follow. The next section explains the objectives of entrepreneurship training programmes and discusses their design, content and duration. It investigates the range of other South African and international entrepreneurship programmes, their content and outcomes. The literature on how to measure the effectiveness of training programmes is examined. The final section of this chapter examines training programmes for women entrepreneurs and why there should be such programmes.

Chapter 4: Women entrepreneurs in South Africa

Chapter 4 focuses on the literature on women entrepreneurs in South Africa, and specifically the barriers that they face. The next section focuses on the most important reasons why women start their own businesses and their motivations, and presents a model of women entrepreneurship motivation. The following section discusses differences between male and female entrepreneurs as regards characteristics and needs. Barriers women face and previous analyses on the training needs of women entrepreneurs are explored, and an elaboration on the need for women entrepreneurship training programmes concludes the chapter.

Chapter 5: Women Entrepreneurship Programme (WEP)

Chapter 5 discusses the WEP in detail. The discussion consists of an overview and background to why this programme was developed for women in particular. It presents evidence and suggestions from a pilot programme which was carried out in 2003, and outlines the objectives, outcomes and contributions of the WEP. A figure illustrates the WEP design and content, showing all of the stages and steps that respondents go through in the programme. The section discusses the current strengths and weaknesses of the WEP and introduces the sponsors and partners of the programme, indicating each partner/sponsor's roles and responsibilities. The chapter finally focuses on measuring the WEP against the improved training model as developed in Chapter 3 of this study.

Chapter 6: Research design and methodology of the study

In this chapter the research problem, objectives and hypotheses are presented, as well as means of testing the hypotheses. The chapter discusses the research design and methodology in more detail, outlining the specific methods used to gather the empirical information. This chapter also looks at the reliability and validity of the study, and the design of the three questionnaires used to collect data. This chapter highlights previous measurements used and describes certain key performance measures used to measure the effectiveness of the WEP. Finally, the data processing and analysis are explained by means of the statistical techniques used. These tests include factor analysis, chi-square test, *t*-test, Wilcoxon matched-pairs test and Kruskal-Wallis One-Way ANOVA.

Chapter 7: Research findings

This chapter highlights the personal demographic data, followed by the business demographics as well as other descriptive statistics. The chapter then presents all the research findings obtained by means of descriptive research, reliability tests, factor analysis, chi-square tests, *t*-tests, Wilcoxon matched-pairs tests and the Kruskal-Wallis One-Way ANOVA. The results of this empirical study are provided in tabular format.

Chapter 8: Conclusion and recommendations

Chapter 8 summarises the study and its findings. This final chapter presents the WEP framework, conclusion and recommendations of this research study. The research objectives, hypotheses and WEP targets are revisited and the limitations of the study, contributions to the science and areas for further research are presented.

1.13 Abbreviations

The following abbreviations are used in this study:

A:	Approaches used by facilitator/s
ABSA bank:	Amalgamated Banks of South Africa
APDF:	Africa Project Development Facility
AWCA:	African Women Chartered Accountants
BEE:	Black Economic Empowerment
BMDP:	Business Development Management Programme
B/P:	Business Plan
B/S:	Business Skills
BSSA:	Business Skills South Africa
BWASA:	Business Women's Association of South Africa
CIPRO:	Companies and Intellectual Property Registration Office
CITY:	Community Improvement Through Youth Programme
DTI:	Department of Trade and Industry
EDII:	Entrepreneurship Development Institute of India
EMS:	Economic and Management Sciences
ESDP:	Entrepreneurial Skills Development Programmes
EU:	European Union
E for E/P:	Education for improved Entrepreneurial Performance
E/E:	Entrepreneurial Education
E/P:	Entrepreneurial Performance
E/S:	Entrepreneurial Skills
F:	Facilitator knowledge and motivation
GDP:	Gross Domestic Product
GEM:	Global Entrepreneurship Monitor

M:	Motivation
NAWA:	The National African Women's Alliance
NAWACO:	National Women in Agribusiness Cooperative
PEP Africa:	Private Enterprise Partnership for Africa
RDP:	Reconstruction and Development Programme
SA:	South Africa
SAIBL:	South African and International Business Linkages
SAWEN:	South African Women Entrepreneurs Network
SAWIC:	South African Women in Construction
SA-WISE:	Association of South African Women In Science and Engineering
SAWIMA:	South African Women In Mining Association
SEDA:	Small Enterprise Development Agency
SERDEF:	Small Enterprise Research and Development Foundation
SMMEs:	Small, Medium and Micro Enterprises
SWOT:	Strengths, Weaknesses, Opportunities and Threats
TEA:	Total Entrepreneurial Activity
UCT:	University of Cape Town
UK:	United Kingdom
UNIDO:	United National Industrial Development Organisation
UP:	University of Pretoria
USA:	United States of America
WEP:	Women Entrepreneurship Programme
WICT:	Women in Information Communication and Technology
WIN:	Women In Nuclear
WOESA:	Women in Oil and Energy of South Africa

1.14 Referencing technique

The Harvard Referencing technique is used in this study.

Chapter 2: Entrepreneurial education and training

"Entrepreneurship education seems to be one of the most important fields of development for the fact that entrepreneurs are seen as the people who are driving the economies of countries and entrepreneurship is seen as the engine of growing economy in the millennium we are in."
– Welsh (1993: 9)

2.1 Introduction

This chapter presents a review of existing research on entrepreneurial education and training with special reference to the current South African situation. One of the biggest challenges facing South Africa is the development and improvement of the knowledge and skills of its people, particularly amongst disadvantaged sectors of the population. Rwigema and Venter (2004: 522) point out that racially segregated education and training was a cornerstone of apartheid policy. Disproportionately low spending on education, coupled with a lack of adequate facilities and resources, has ensured that previously disadvantaged South Africans, including women, have not received proper education and training. The authors further stress that massive inequalities continue to plague education in South Africa and that some 30 % of the adult population is considered to be functionally illiterate (Rwigema & Venter, 2004: 522). A low skills base further compounds levels of illiteracy. The ratio of skilled workers to unskilled workers is 1:5, compared with 1:2 in most developed nations. South Africa's crisis in education and training has implications for the country's social growth, economic progress and global competitiveness.

The GEM report of 2001 showed that the higher the level of education of an individual, the greater the tendency to pursue entrepreneurial activities and the greater the probability of starting a new venture that progresses past the start-up stage (Driver, Wood, Segal & Herrington, 2001: 8). The results of the GEM report of 2002 are similar. Foxcroft *et al.* (2002: 6) emphasise that the long-term priority for increasing entrepreneurial activity is to improve access to and success in education.

The biggest concern is the lack of core skills among entrepreneurs, for example financial literacy, record-keeping and marketing.

The GEM report of 2003 indicates that the educational system could play a powerful role in helping to bring about an increase in entrepreneurial involvement of young adults, not only through formal teaching but also through the introduction of learners to positive role models with an entrepreneurial background (Orford *et al.*, 2003: 4). According to Van Vuuren, as interviewed and quoted by Ueckermann (2004: 1), South African entrepreneurs with some form of formal entrepreneurial education will be more likely to be successful than entrepreneurs who have had no education. This statement is supported by research that showed that seven out of 100 entrepreneurs without entrepreneurial education were successful, whereas, in the same study, 67 % of the 72% of participants who had completed some form of university certificate/diploma were successful in starting and running a business.

In this chapter a thorough investigation will be done on the different constructs of entrepreneurial education, training and learning. This chapter considers the importance of education and training to the economy and focuses on the particular value of entrepreneurship education and training. Some of the fundamental themes in the literature are reviewed, including the difficulties involved in categorising entrepreneurship education and training; the issue of whether or not entrepreneurship can be taught; the differences between entrepreneurial ventures and small business ventures; and the problems and difficulties of educating and training entrepreneurs. The final section of this chapter focuses on enhancing and constraining factors on entrepreneurial education and training as well as different types of interventions. This chapter emphasises the necessity for entrepreneurship training programmes for potential, start-up and already established entrepreneurs.

2.2 The constructs of education, training and learning

Young (1997: 67) questions the relevance and value of a theoretical approach to a subject which deals almost exclusively with activity. He suggests that the experience and practical skills used by entrepreneurs are possibly not something that can be acquired through conventional teaching methods. Cooper, Bottomley and Gordon

(2004: 13) agree, stating that a skills-based programme requires a teaching and learning philosophy that encourages the development and practice of entrepreneurial skills. While different authors use the concepts of education, training and learning interchangeably, it is necessary to make some distinctions for the purposes of this study.

2.2.1 Education

The Oxford Dictionary (2005) defines education as the theory and practice of teaching or information about or training in a particular subject. Van Heerden (1994: 5) states that education is the act or process whereby knowledge is provided, especially through formal teaching and instruction of mainly the theory of a specific concept. The education approach mostly involves the cognitive domain, which refers to the mental process of learning. This definition of education by Van Heerden is seen as the one that provides the most appropriate distinction between training and education. According to Bruner (1996: 20), the term education is used in three main senses: to indicate a process, a system and a goal. This process is often carried on within a system, and many people speak of education as if it were that system, for example, when saying that the government spends money on education. The system itself is not education: it is a system designed to promote the process of education, or an educational system.

2.2.2 Training

According to the Oxford Dictionary (2005), training is defined as teaching (a person or animal) a particular skill or type of behaviour through regular practice and instruction. To train is to coach in or accustom to some mode of behaviour or performance (Bruner, 1996:20). It also means to make proficient through specialised instruction and practice to execute successfully. A training approach is, therefore, the more appropriate option for business, as it involves aspects such as to coaching or accustoming to some mode of behaviour or performance, or making proficient through specialised instruction and practice to execute successfully. For the purpose of this chapter, Stanger's (2004: 465) definition of training is presented and used throughout the study. The author states that entrepreneurial training is assumed to

mean an educational class or course imparting business or vocational (trade) knowledge and skills to entrepreneurs in any stage of the business life cycle.

2.2.3 Learning

A learning approach, on the other hand, seems to be the highest level of knowledge transfer as it includes components of education and training. It is therefore necessary to elaborate on learning within the entrepreneurial training programme context. Learning can be defined as a process undergone to gain and acquire knowledge, comprehension, skill and mastery of execution and training through experience that leads to relatively permanent changes in behaviour (Bruner, 1996: 20).

Action learning is another concept that needs further explanation. McGill and Beaty (1992) in Antonites (2003: 135) define action learning as a process in which learners learn through experience by thinking through past events, seeking ideas that make sense of the event and could help them to find new ways of behaving in similar situations in future. Howell (1994: 15) defines the role of action learning in creating an "interrelationship" between the learner and his/her environment in order to become "active partners" in producing their reality. Action learning can only take place in an environment where not only teaching takes place but also learning. Leitch and Harrison (1999: 95) acknowledge the effectiveness of management and entrepreneurial training, in the action learning context, by referring to Porter and McKibben (1988), Limerick and Moore (1991) and Leitch and Harrison (1999). Howell (1994: 17) likewise provides empirical evidence in terms of actual and significant increases in work performance after the completion of an action learning process.

The above statements lead us to another construct that needs further explanation. This construct is known as outcome-based learning. According to Pretorius (2001: 126), outcome-based learning changes the learning culture by radically changing the ways in which knowledge, skills and values are mastered, and how learning processes are adapted and adjusted to achieve the chosen end product. Shepherd and Douglas (1996: 1) point out that many entrepreneurship educators are teaching

logical thinking when they should, in fact, be teaching entrepreneurial thinking, and argue that logical thinking can lead to incorrect and unworkable answers. They call for a shift in emphasis from teaching to learning, suggesting that an individual can really only learn when he or she performs the particular skill in an environment as close to real life as possible.

Deakins (1996: 21) states that:

> *"We do not understand how entrepreneurs learn, yet it is accepted that there is a learning experience from merely establishing a new enterprise. The learning process that is involved in business and enterprise development is poorly understood, yet programmes have been devised and interventions are made in business development…There is now a need for re-focusing research away from the emphasis on picking successful entrepreneurs or picking winners, to identifying key issues in the learning and developmental processes of entrepreneurship."*

Cooper *et al.* (2004: 13) argue that the introduction of various teaching and learning techniques to facilitate entrepreneurial learning has helped to create bridges between theoretical knowledge and experience generated through practice. It is clear from the literature that the learning methods employed in entrepreneurship education and training programmes vary considerably from lectures, presentations and handouts to video and case-study based learning with group discussion and role-plays (Henry, *et al*., 2003: 98). An experiential learning continuum is postulated in Table 2.1. At one extreme is the traditional low-involvement lecture, at which the student is passive and the transfer of knowledge is one way. Attempts to engage students in more active participation/learning through case studies mark a position further along the scale, while in-company projects are at the high-involvement end of the spectrum. The challenge for entrepreneurship teachers and trainers, therefore, is to find innovative learning methods that coincide with the requirements of potential entrepreneurs.

Table 2.1: The experiential learning continuum in entrepreneurship education

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

Source: Adapted from Cooper *et al.* (2004: 14)

The major challenge in relation to education and training is the appropriateness of curricula and training programmes as preparation for entrepreneurship in the outside world. Table 2.2 presents a grid of learning styles and pedagogical techniques that can be applied to prepare participants and students for learning in the outside world. In the active experimentation/reflective observation dimension, our understanding of entrepreneurial behaviour indicates a primary preference for action (Garavan & O'Cinneide, 1994a: 9). Opportunities and creative ideas must be followed through to activate entrepreneurship. Thus, an entrepreneur would be expected to favour active experimentation rather than reflective observation. It should be noted, however, that

action in the absence of reflection precludes learning (Kolb, Rabin & McIntyre, 1974: 24). In the abstract conceptualisation/concrete experience dimension, the ideal preference of the entrepreneur is not so distinct. In fact, the conflict between concrete experience and abstract conceptualisation leads to what Kolb *et al.* (1974) refer to as "creative tension". To be creative, one must be free of the constraining focus of abstract concepts in order to experience anew. A creative person is able to coordinate each of the two models of learning. Thus, both abilities are important for entrepreneurs, with the balance between them dependent on whether problem finding or problem solving is more important for innovation. Garavan and O'Cinneide (1994a: 10) conclude by stating that the pedagogical methods which are best suited to an entrepreneurial learning style are those presented in quadrants three and four of the learning grid.

Table 2.2: Conceptual grid of learning styles and pedagogical techniques

Concrete experience	
Quadrant 3: Active-applied	*Quadrant 2: Reflective-applied*
Changes in skills and attitude	Changes in application
Role-plays	Motives
Management simulation	Applied lectures
Processing discussion	Limited discussion
T-group/encounter groups	Cases
Learning diaries	Role-plays
Field projects	Problem-orientated exams
Management of learning groups	Programmed instruction with emphasis on skills
Counselling	
Active experimentation	**Reflective observation**
Quadrant 4: Active-theoretical	*Quadrant 1: Reflective-theoretical*
Changes in understanding	Change in knowledge
Focused learning groups	Theory lectures
Argumentative discussions	Required readings and handouts
Experiments/research	Programmed instruction with emphasis on
Suggested readings	concepts
Analysis papers	Theory papers
Workshops, monitoring and coaching	Content-orientated exams
Abstract conceptualisation	

Source: Adapted from Randolph and Posner (1979: 463)

Volery (2004: 2) conducted research on universities and training institutions and found that a central premise of these programmes is that entrepreneurship is a learned phenomenon. That is, entrepreneurs are created by their experience as they grow and learn, being influenced by lecturers, parents, family, mentors and role models during their growth. He further argues that evidence shows that "practice by doing" induces the highest retention rates. Participants who actually write a business plan, take part in a game where they have to make some decisions or even set up a real business venture will learn much more than those attending traditional classroom lectures. Before this phenomenon is explained further, one should look at the field of entrepreneurship and the existing research within this field.

2.3 The field of entrepreneurship

The field of entrepreneurship has a recognised scientific community that expresses itself through large numbers of conferences and scientific journals (Bruyat & Julien, 2000: 165). However, the question raised by Sexton (1988: 4) nearly 18 years ago is still relevant: "Is the field of entrepreneurship growing, or just getting bigger?" As Gartner (1990: 16) asks: "Is entrepreneurship just a buzzword, or does it have particular characteristics that can be identified and studied?" Although it was possible in the 1980s to say the priority was to accumulate empirical data, it is now believed, by many others (Vesper, 1982; Brockhaus & Horwitz, 1986; Bruyat & Julien, 2000) that it is high time to develop theoretical tools to enable the field to progress. Bygrave and Hofer (1991: 15) rightly point out that good science has to begin with good definitions. Bruyat and Julien (2000: 166) have observed, "even though the field of entrepreneurship is to a large extent, formed… the problem of defining the word 'entrepreneur' and establishing the boundaries of the field have still not been solved". A research field can only be built and win legitimacy if it is differentiated from neighbouring fields, as discussed in section 2.6 of this chapter.

At first there was limited research on this aspect of entrepreneurship, but since 1985 there has been an increased interest in entrepreneurial careers and education (Hisrich *et al.*, 2005: 17). This increased interest has been fostered by such factors as the recognition that small firms play a major role in job creation and innovation; an increase in media coverage of entrepreneurs; and the awareness that there are more

entrepreneurs than those heralded in the media. A further factor is the shift in employment as women become increasingly more active in the workforce, the number of families earning two incomes grows and the formation of new ventures by women entrepreneurs takes place at three times the rate of their male counterparts in the United States of America (USA).

In the 1980s the field of entrepreneurship exploded and spilled over into almost all the soft sciences and management sciences. According to Kent (1982) in Nieman, Hough and Nieuwenhuizen (2003: 7), the transition was marked by two events: the publication of the first-ever encyclopaedia outlining the state of the art in the field and the first major annual conference (The Babson Conference) dedicated to research in the new field. The authors add that it is interesting to note that the development of entrepreneurship as a discipline did not follow the same pattern as that of other disciplines. In fact, large numbers of researchers, each using a culture, logic and methodology established to varying degrees in their own field, began to take an interest in the field of entrepreneurship.

Progress in research, as in the understanding of entrepreneurs, can be divided into five periods, as shown in Table 2.3. It is appropriate to consider the link between research and teaching within the field of entrepreneurship, as there would appear to be a correlation between the theoretical rigour of research conducted and the theoretical rigour of courses designed (Henry *et al.*, 2003: 88). If theoretically rigorous research is not conducted, then the content of entrepreneurship courses may suffer. Boshoff and Van Vuuren (1992: 372) divide entrepreneurial theory and research into three main categories: firstly the entrepreneur and his/her actions and qualities; secondly, the entrepreneurial process; and thirdly the factors involved in increasing the development of entrepreneurs and entrepreneurial activity.

This study focuses on the third factor and aims to undertake the challenging issue of entrepreneurial development by focusing on an entrepreneurial training programme.

Table 2.3: Research trends in entrepreneurship

Period and topics	Perspective	Authors and researchers
1. What entrepreneurs do 1700 – (1950)	From an economic perspective	Cantillon; Say and Schumpeter
2. Who entrepreneurs are 1960 – (1980)	From a behaviourist perspective	Weber; McClelland; Rotter and De Vries
3. What entrepreneurs do and the trainability of entrepreneurs 1980-	From a management science perspective (finance, marketing, operations, human resources) and from an education perspective	Drucker; Mintzberg; McClelland; Gibb; Hisrich and Peters; Kuratko and Hodgetts
4. What support is needed by entrepreneurs 1985-	From a social perspective, including economists, geographers and sociologists	Gartner; Welsh; Bygrave and Reynold
5. What entrepreneurial activities are, and what competencies are required to perform them 1990-	From an entrepreneurship perspective	Timmons; Vesper and Brockhaus
6. Entrepreneurial cognition, heuristics, biases and risk propensity. Opportunity recognition and the decision to start new ventures 1995-	From a psychological perspective (How/what entrepreneurs think)	Baron; Mitchell; Haley; Krueger; Simon and Shepherd

Source: Own compilation as adapted from Fillion (1991: 7)

The field of entrepreneurship has developed to such an extent that it is necessary to take note of the growing value of entrepreneurship as a subject of study.

This is predicated on the following key factors:

- The challenge to higher education to meet the demands of economic and social change through relevant, professionally-orientated, new academic provision at the postgraduate level. The need for greater attention to entrepreneurship in university business education was cited by Mitra (2002: 192);
- The increased quantity of academic research, suggesting that new knowledge, based on empirical evidence, has been developed to demonstrate the differences between start-up ventures and mature organisations; that a common core of knowledge is being established through an accumulation of studies; and that the quality of writing and research has legitimised the subject within academia (Hills & Morris, 1998: 43);
- The need for graduates, mature students, working professionals, managers and other employees to acquire and develop a wide array of up-to-date entrepreneurial skills, competencies, and a knowledge base; to be entrepreneurial in both business and non-business settings; to take advantage of 'downshifting' and 'spin-off' opportunities and to consider non-traditional career alternatives in a rapidly changing economic and social environment (Garavan & O'Cinneide, 1994a: 13).

The field of entrepreneurship, and in particular the study of its archetype (the entrepreneurial venture), is undoubtedly one of the most complex in the social sciences. It therefore offers a considerable challenge to researchers in the 21st century. Bruyat and Julien (2000: 177) state that: *"If we are to take up this challenge, we will have to borrow methods and tools from other disciplines and fields, and we will undoubtedly have to invent new ones. At the same time, we must be careful not to dissipate our efforts."* The next section deals with the reasons why this challenge must be taken up and how entrepreneurship can contribute to economic growth.

2.4 Entrepreneurship and economic development

While the relationship between entrepreneurship and economic growth is multi-faceted and complex, entrepreneurial capability is a necessary ingredient in a country's capacity to sustain economic growth (Driver *et al.*, 2001:6). Hisrich and

O'Cinneide (1985: 1) clearly indicate that, while entrepreneurship is essential in any country for birthing new ideas, creating new enterprises and nurturing the economy, it is particularly important in areas where there is high unemployment. Indeed, academics, politicians and policy markers now accept the potential contribution that entrepreneurship can make to an economy (Bruyat & Julien, 2000: 166). Dana (2001: 405) agrees that entrepreneurs contribute to industrialisation as well as to economic growth; they improve living standards, while tax revenues from their enterprises contribute to a nation's treasury. De Faoite, Henry, Johnston and Van der Sijde (2003: 431) further note that skills and knowledge, as developed through training and education, are one of the few areas in which a country can engineer a competitive advantage. This view is supported by Ulrich (1997: 1), who suggests that the importance of entrepreneurial education is derived from the importance of the entrepreneur throughout the economic system.

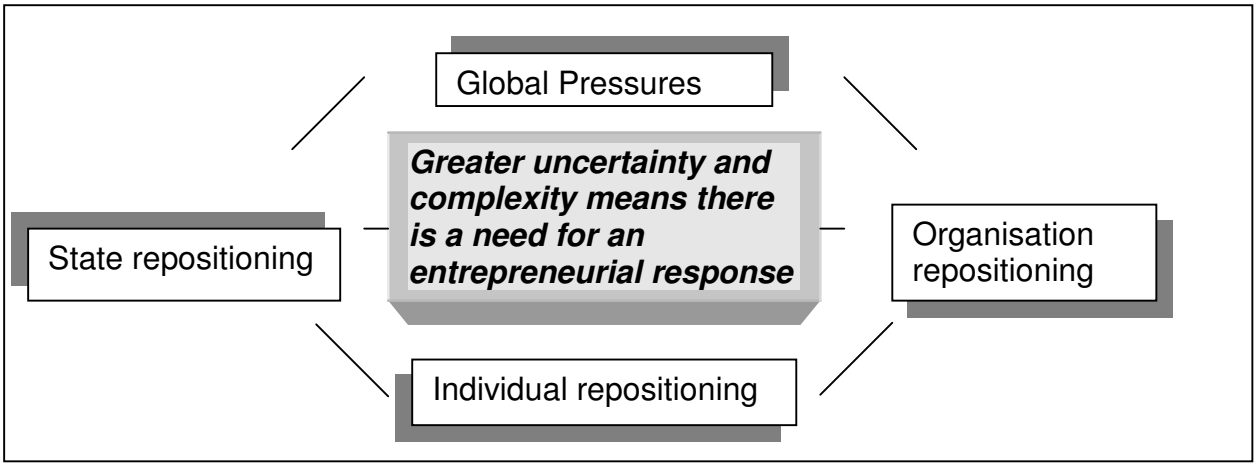
Henry *et al.* (2003: 3) agree with the following authors that, historically, economists have associated entrepreneurship with profit orientation, capital investment and risk (Cantillon, 1755; Say, 1803; Schumpeter, 1934), supporting the view that it is responsible for economic expansion (Weber, 1930; Schumpeter, 1965; Cole, 1965). According to Schumpeter (1961: 23), nearly all supporters of the capitalistic system would agree that the encouragement of successful innovation and entrepreneurship is beneficial for the continued health and long-term growth of a nation's economy. Schumpeter (1947; 1949) in Dana (2001: 405) perceived economic development as the basis for reinterpreting a vital process that had been crowded out of neo-classical economic analysis by the static general equilibrium theory. As he saw it, the function of the entrepreneur was to revolutionise patterns of production by exploiting an invention or innovation.

How easy can it be to teach an individual to invent a creation that will bring about economic equilibrium? In contrast to the innovator described by Schumpeter, Kirzner (1973; 1982) in Dana (2001: 405) argues that an entrepreneur might simply identify an opportunity for profit, rather than create one. The Kirznerian entrepreneur, therefore, could benefit from education in general and managerial training in particular, without necessarily requiring the skills to be innovative. Reynolds, Bygrave, Autio, Cox and Hay (2002: 40), however, suggest that education is a key

element (prerequisite) in the framework conditions that enhance economic growth through entrepreneurship. According to Ahwireng-Obeng (2003: 3), entrepreneurship development is compatible with the concept of economic development – fundamental changes in the economic, social and cultural fabric of the individual and society. It extends beyond the narrow focus on providing economic, financial and physical resources necessary for enterprise development and encompasses the development of human capital, social capital and cultural capital in addition to financial and physical capital – the basic human assets and resources required for sustainable economic empowerment, wealth creation and national progress.

In the watershed work of McClelland (1961) entitled *The Achieving Society,* the hypothesis was that achievement motivation is partly responsible for economic growth and the need to achieve. His aim was not to prove that the need to achieve is the only determinant of economic growth, but that the appearance or the high presence of it plays a role in economic growth. Entrepreneurship is seen to bring benefits at both the macro and micro levels of economic development. Gibb and Cotton (1998: 8) support the idea of a macro-micro spectrum of benefits which can be gained from entrepreneurship and illustrate these in terms of the various changes and pressures at the global, societal, organisational and individual levels (graphically illustrated in Figure 2.1).

Figure 2.1: Entrepreneurship education and the changing world



Source: Adapted from Gibb and Cotton (1998: 8)

At the global level, the reduction of trade barriers, together with the advancements in telecommunication, technology and transportation, all combine to provide more opportunities as well as more uncertainties in the world. Timmons and Spinelli (2004: 82) support the latter by pointing out that in a free enterprise system, changing circumstances, chaos, confusion, inconsistencies, lags or leads, knowledge and information gaps and a variety of other vacuums in an industry or market spawn opportunities. These authors add opportunities are situational, which means that some conditions under which opportunities are spawned are idiosyncratic, while at other times they are generalisable and can be applied to other industries, products or services.

According to Gibb and Cotton (1998:8), at the societal level, privatisation, deregulation, new forms of governance, mounting environmental concern and the growing rights of minority groups are all presenting society with greater complexity and uncertainty. At the organisational level, decentralisation, downsizing, re-engineering, strategic alliances, mergers and the growing demand for flexibility in the workforce all contribute to an uncertain climate. Finally, at the individual level the individual is now faced with a wider variety of employment options, the probability of ending up with a portfolio of jobs, more responsibility at work and more stress. In addition, on a personal level, today's individual may be a single parent with more responsibility for managing credit and securing finances for their future (Gibb & Cotton, 1998: 8-9). Given the above, it is apparent that, at all levels, there will be a greater need for people to have entrepreneurial skills and abilities to enable them to deal with life's current challenges and an uncertain future.

Although South Africa still offers certain positive conditions (lowest living cost for employees, lowest electricity costs for businesses and relatively low income tax levels), it ranks lowest in terms of the employment rate, life expectancy, the level of economic literacy, the general skills level of employees, foreign direct investment, infrastructure and foreign exchange reserves (World Competitiveness Yearbook, 2003). Pahn (1993: 8) suggests that in South Africa there are too few people with entrepreneurial qualities, leading to a situation where the South African economy performs poorly because only a very limited number of people succeed as entrepreneurs.

According to Sarasvathy (2003: 2), entrepreneurship creates value in society that is disproportionate to its role within the economy, and that persists over longer periods of history than any other functional area in business. In other words, entrepreneurship creates positive externalities in benefits that accrue beyond the spatial, temporal and popular contexts in which it occurs. Scase (2000: 12) found that there is a very positive impact that new business creation can have on employment levels. Small firms can also have a competitive advantage over large firms. Sunter (1998: 2) calls for entrepreneurial development and highlights its importance: *"It is only through the creation of millions of enterprises that millions of jobs will be created".*

2.5 The relationship between employment and entrepreneurship education and training

De Faoite *et al.* (2003: 431) emphasise the importance of education and training within economic development, and state that it is well documented in the literature. For example, education has been identified as a critical factor in preventing future high levels of long-term unemployment, and there is evidence of a strong correlation between education level achieved and high income over a lifetime. There is also evidence of a positive relationship between education and training programmes and the number of venture start-ups (Garavan & O'Cinneide, 1994b: 17). Research undertaken by Webb at Babson College in the USA demonstrated that students who participate in such programmes are more likely to start their own business. Webb used an experimental design with control groups. Of those who took an entrepreneurship education training programme, 21 % had started a business as full-time employment compared with 14 % of the control group members who did not take such a programme (Garavan & O'Cinneide, 1994b: 17).

According to Foxcroft *et al.* (2002: 5) the key factor which influences whether or not an entrepreneur progresses beyond the start-up phase is education. These authors add that the entrepreneur's level of education also seems to have an impact on the average number of jobs she/he creates. Entrepreneurs without a matric employ on average 0.7 people, compared with three people for entrepreneurs with matric and 2.9 people for entrepreneurs with tertiary education. Entrepreneurs with matric

therefore have more than four times the number of employees employed by those without a matric, suggesting that matric education has a significant impact on an entrepreneur's ability to grow the business and to create jobs.

Driver *et al.* (2001: 12) report an overall lack of entrepreneurial elements in the education system in South Africa. Negative attitudes towards entrepreneurship; entrepreneurial role models; confidence, initiative and creativity; entrepreneurship as a career choice; and a negative attitude towards failure all contribute towards the lack of a South African entrepreneurial culture. Many of these elements could be impacted upon by education, but are absent from the general education systems. These authors also confirm the general low levels of business skills and the absence of entrepreneurial education in general. There exists some confusion between entrepreneurship and small business management, which will be dealt with in the next section of this chapter.

2.6 Entrepreneurship versus small business management training and education

Hazeltine and Falk (1999: 5) postulate that, while there is an overlap between entrepreneurship and small business management, there are enough differences to justify studying these two phenomena separately. Solomon, Winslow and Tarabishy (1998: 3) agree, stating that entrepreneurship and small business management constitute two different educational subjects. These authors suggest that education in small business management traditionally has to do with providing the student with management know-how relating to the setting of goals, leading, planning, organising and controlling from a small business perspective. Entrepreneurial education, on the other hand, focuses on action orientation, primarily embodied in teaching students how to develop a business plan (Pretorius, 2001: 22).

Laukkanen (2000:27) stresses that the field itself customarily differentiates entrepreneurship and small business ownership: the former stressing new business and wealth creation, the latter being more occupied with management and business function know-how in a small-firm context. Colton (1990) in Falkäng and Alberti

(2000: 104), distinguishes between enterprise education and small business and entrepreneurship education and training:

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

As seen in Chapter 1, it is extremely difficult to find a single definition for the construct of entrepreneurship. Mill (1848: 4) provided one of the earliest definitions of entrepreneurship and suggested that risk bearing was the major feature that separated entrepreneurs from managers. The Hunter Centre for Entrepreneurship at the University of Strathclyde in Glasgow follows the Harvard Business School and Howard Stevenson definition. According to that definition the following elements must be included in the definition of entrepreneurship (Cooper *et al.*, 2004: 12):

- Opportunity recognition in pursuit of wealth creation;
- An ability to identify, access and harness resources that facilitate wealth creation;
- An ability to assess and take appropriate and acceptable risk; and
- The persistence to see things through to completion.

Such a definition would readily apply to the starting up, running and growing of a new business.

Kaufmann and Dant (1998: 7) categorise entrepreneurship on the basis of different contemporary representative definitions found in the literature. These authors indicated that three perspectives could be determined:

- Definitions stressing the characteristic traits or qualities supposedly possessed by entrepreneurs, including risk taking, leadership, motivation, ability to resolve crises, creativity, low level of risk aversion, decision-making ability and more.
- Definitions stressing the process of entrepreneurship and its result, including the creation of new enterprise, introduction of new combinations of production factors and new, unique and valuable combinations of resources in an uncertain and ambiguous environment.

- Definitions focusing on the activities entrepreneurs perform, including connecting to new markets, overcoming market deficiencies, creating and managing contractual arrangements and input transforming structures, supplying resources lacking in the marketplace, and activities to initiate, maintain and develop profit-orientated business, to fill currently unsatisfied needs and to take operational control of the organisation.

It is therefore concluded that a broad definition of entrepreneurship exists and that it cannot be limited to the discipline of starting a business only.

A small business, on the other hand, can be defined as a distinct business whose size lies below specified thresholds – the National Small Business Act (1996) specifies that the number of employees determines whether the business is micro, very small or small (Rwigema & Karungu, 1999: 107):

- A small business can employ up to fifty people.
- A very small business employs no more than ten.
- Micro or survivalist businesses are usually one-person operations, though they could employ up to five persons.
- The total annual turnover, as well as the total gross asset value, also determines whether the business is micro, very small or small.

According to Rwigema and Venter (2004: 6), not all small businesses are entrepreneurial, as many are started with limited growth ambitions. By contrast, entrepreneurs usually aim for high-potential ventures. Nieman *et al.* (2003: 10) agree indicating that small business owners are individuals who establish and manage their businesses for the principal purpose of furthering personal goals and ensuring security. Wickham (2001: 24) and Nieman *et al.* (2003: 10) indicate that there are three characteristics that distinguish the entrepreneurial venture from the small business:

- Innovation: Entrepreneurial ventures thrive on innovation, be it a technological innovation, a new product or a new way of producing, offering a service, marketing or distributing, or even the way in which an organisation is structured or managed.

- Potential for growth: Owners of small businesses are not necessarily interested in growth as an objective. They see themselves as successful when their businesses are profitable, whereas entrepreneurial ventures, however small they start, revel in parenting rapidly growing, innovative businesses.
- Strategic objectives or a broad vision: The entrepreneurial venture will usually set itself strategic objectives in relation to: market targets, market development, market share and market position.

Baum, Locke and Smith (2000: 293) argue that founders and managers of small businesses may face different levels of ambiguity and thus require different competencies. For example, founders may need higher opportunity skills, whereas individuals who assume the top role of an existing small company may need more leadership and managerial skills.

Entrepreneurship and small-enterprise training can be approached from different angles. For the purpose of this study it is, however, accepted that a difference exists between entrepreneurship and small business management with regard to the emphasis on the training of entrepreneurs. At this stage it is necessary to plough deeper into the two constructs: entrepreneurial education and entrepreneurial training.

2.7 Entrepreneurial education

In the earlier periods of the development of the field of entrepreneurship, many authors used the constructs “entrepreneurship education” and “enterprise education” interchangeably (Henry *et al.*, 2003: 15). Garavan and O’Cinneide (1994a: 4) point out that the term “entrepreneurship education” is commonly used in Canada and the USA but is much less commonly used in Europe. The preferred term in the United Kingdom (UK) and Irish context is “enterprise education”. The authors add that the major objectives of enterprise education are to develop enterprising people and inculcate an attitude of self-reliance using appropriate learning processes. Timmons (1999: 32) argues that entrepreneurship education, on the other hand, should convince students to become actively involved in entrepreneurship, help them to

understand the dynamic nature of the world of entrepreneurship and should slow down reality shock by means of formal and informal tuition.

Dainow (1986: 110) conducted a survey of the entrepreneurship education literature for a ten-year period, from 1974 to 1984, in order to assess the state of the art. He identified a need for more systematic collection and analysis of data, and more varied methodologies to build a stronger empirical base. Gorman, Hanlon and King (1997: 61) conducted a survey of the literature from 1985 to 1994, assessing progress over that period and offering inputs for future research.

A three-stage model of the evolution of entrepreneurship education is suggested by Leitch and Harrison (1999: 83). The first, and earliest, approach characterised entrepreneurship education as simply a sub-set of general management education; the second approach reacted to this as entrepreneurship grew in importance as a focus for academic debate, and was based on the argument that entrepreneurship education must be qualitatively different from conventional large company-based management. The third stage in the evolution of approaches to entrepreneurship education is an emerging reconceptualisation of the field, based in part on a renewed interest in the nature and role of leadership in changing organisational structures, which provides the basis for the reintegration of management education and entrepreneurship education.

Jamieson (1984: 9) has suggested a three-category framework by which to organise entrepreneurship education. He distinguishes between education *about* enterprise (awareness raising of entrepreneurship); education *for* enterprise (preparing for business start-up); and education *in* enterprise (growth and development training), and in so doing recognises the roles different types of education have to play:

- The first category, education about enterprise, deals mostly with awareness creation and has the specific objective of educating students on the various aspects of setting up and running a business, mostly from a theoretical perspective. Indeed, enterprise modules within business and other courses at undergraduate or postgraduate level which seek to foster skills, attitudes and values appropriate to starting, owning, managing or working in a successful business enterprise would be included in this category.

- The second category, education for enterprise, deals more with the preparation of aspiring entrepreneurs for a career in self-employment, with the specific objective of encouraging participants to set up and run their own business. Participants are taught the practical skills required for small business set-up and management and the courses are often geared towards the preparation of a business plan. Business start-up schemes and start-your-own-business programmes would be examples of this type of entrepreneurship training.
- The third category, education in enterprise, deals mainly with management training for established entrepreneurs and focuses on ensuring the growth and future development of the business. Management development and growth training programmes, as well as specific product development and marketing courses, might fit into this category.

De Faoite *et al.* (2003: 432) state in summary that entrepreneurship education provision has been categorised as:

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

In the USA, entrepreneurship education has been pursued extensively for several decades, extending through a wide variety of different models inside and outside of education (Le Roux, 2003: 10). In Canada, interest and activity in this area has also expanded in recent years, while in Asia major experiments are taking place in several countries including India, Malaysia and the Philippines (Gibb, 1993: 12).

Van Aardt, Van Aardt and Bezuidenhout (2000: 3) believe that South Africans in general are not educated for becoming entrepreneurs but for entering the labour market as employees: consumers of existing jobs instead of creators of new jobs. The GEM report of 2004 provides strong evidence of the importance of education to entrepreneurial activity. Over three-quarters of black Africans and coloured people have not completed secondary school and fewer than 5 % of black Africans and coloured people have higher education. In contrast, 50 % of Indians and 71 % of

whites have a matric and 30 % of whites have higher education (Orford *et al.*, 2004; 20). Highly skewed access to education and continued differences in the quality of education depending on schools' pre-1994 status (black African, coloured, Indian and white) are therefore likely to be part of the explanation for the fact that previously disadvantaged groups lack confidence and skills to start businesses. Le Roux (2003: 1) supports this statement and suggests that the earlier one starts with entrepreneurship education the better the result will be.

Many researchers in South Africa are placing more emphasis on the fact that entrepreneurship education should be included in all the school systems. According to Orford *et al.* (2004: 4), the curriculum in private schools does include entrepreneurship, but it does not appear to be widely taught across government schools. Preliminary research suggests that entrepreneurship education can have a significant positive influence on four areas crucial to entrepreneurship:

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

2.7.1 Can entrepreneurship be taught?

Despite a considerable range in the quality of previous studies, it is clear that the empirical research on entrepreneurship education seems still to be in an exploratory stage (Falkäng & Alberti, 2000: 102). The debate has been going on for a long time, but the fact remains that the success of an entrepreneur has been directly linked to education. Timmons and Spinelli (2004: 67) identify a myth about entrepreneurs that has persisted over time. This myth suggests that entrepreneurs are born, not made. Timmons and Spinelli (2004: 67), together with Orford *et al.* (2004: 19), suggest that the reality is rather that entrepreneurs can be created. This is done by developing entrepreneurial self-confidence, developing the ability to identify entrepreneurial opportunities and increasing personal knowledge of running and managing a business. According to Nieman *et al.* (2003: 12), these findings indicate that entrepreneurship can be developed by education and can be learned. In addition, a

focus on teaching learners to become employers rather than employees will contribute to increased levels of entrepreneurship in a society.

Jack and Anderson (1998: 17) have suggested that teaching of entrepreneurship is a bit of an enigma, since the actual entrepreneurial process involves both art and science. The "science" part, which involves the business and management functional skills, appears to be teachable using a conventional pedagogical approach. However, the "art" part, which relates to the creative and innovative attributes of entrepreneurship, does not appear to be as easily teachable as the "science" part, and cannot be taught in the same way. Shepherd and Douglas (1996: 1) argue that there is a need to teach both the art and the science elements. These authors conclude that since the spirit of entrepreneurship may not be innate in every person, or may require awakening and enhancing, business education should teach not only the various business disciplines but also the essence of entrepreneurship. However, for them the gap between what is art and what is science is much wider. They depict science as something that is selective, analytical, sequential and fixed, while they describe art as generative, provocative, impulsive and without constraint. While they do not suggest that the essence or art of entrepreneurship is completely unteachable, they suggest that those involved in delivering entrepreneurship and business courses have largely neglected this area.

Garavan and O'Cinneide (1994a: 3) state that while many of the aspects of entrepreneurship can be taught, it also requires a certain flair or attitude towards taking risks. There is, and always will be, a role for the gut feeling in entrepreneurship, and indeed that is what may distinguish the successful entrepreneur from the unsuccessful one. That said, however, there is clearly a major role and need for entrepreneurship education.

The next logical question could be: "How can entrepreneurship courses be taught and delivered for a wide range of learners with disparate profiles and needs?" Hills and Morris (1998: 31) identify three conceptual models for entrepreneurship programmes – the business plan, the business life cycle and the business functions models. Each is distinctive, in that the business plan model attempts to create and realise specific business objectives in particular contexts; the business life cycle

model emphasises different stages of business activity; and the business functions model extends the scope of management studies. In essence these models can be said to relate entrepreneurial behaviour – and associated skills and attributes – to the distinctive organisational characteristics and task environment of the small firm, as well as to personal attributes.

McClelland (1961: 12) was convinced that entrepreneurial skills can be taught, and developed training programmes for business people that were designed to increase their achievement motivation. Cooper, Hornaday and Vesper (1997: 13) agree and point out that from a historical perspective the first entrepreneurial programme was taught at the Harvard Business School as early as 1947. Vesper's (1982: 326) USA based study of university professors demonstrated an overwhelming consensus that entrepreneurship can be taught. Supporting this view, Kantor (1988: 13) claims that, in his study of 408 entrepreneurship students in Ontario, most students believed that the majority of entrepreneurial traits and abilities could be taught, with abilities perceived as being more teachable than traits.

Most of the empirical studies conducted indicate that entrepreneurship can be taught and that education can enhance entrepreneurship. Therefore one must agree with Timmons and Spinelli (2004: 67) that the belief that entrepreneurs are born, not made, is a myth. Extrapolating this to entrepreneurial skills, this study implies that entrepreneurial performance can be enhanced through learning and experience, as indicated in Chapter 3.

2.7.2 Difficulties in entrepreneurship education

Accommodating diversity, disparity and stakeholding requires a holistic approach to the study of entrepreneurship and the delivery of entrepreneurship programmes. In developing an entrepreneurial, holistic management approach, the basic task is to encourage managers and other students to learn in a variety of ways and from different sources. Entrepreneurs who may need to be taught pose a different challenge. Style, content and form all require a different, creative and adaptive approach from the traditional reductionist and analytical one espoused by management studies (Mitra, 2002: 197). Table 2.4 illustrates that entrepreneurial

education is unique and sometimes difficult to execute. Pretorius (2001: 65), identifies some difficulties and stresses that do not depend on how knowledgeable one is on completion of the programme, but rather on what will be achieved with that knowledge.

Table 2.4: General difficulties associated with entrepreneurship education

Difficulty	Description
Public image of entrepreneurship	Entrepreneurship has not been promoted as a career option as have other occupations, especially in some cultures. Many people do not want to establish their own businesses.
Definition of entrepreneurship	The concept of what entrepreneurship really entails and the relevant attributes are still vague and inadequately defined.
Teachable nature of some aspects of entrepreneurship	Some aspects of entrepreneurship are more difficult than other aspects to teach, such as perseverance and risk tolerance.
Duration	Entrepreneurship programmes are often of very short duration.
Mental aspects and ability of facilitator	Facilitator and trainer commitment and mental preparation are often not sufficient to transfer competencies to learners.
Odds perception of survival	The failure rate of start-up businesses is a reality that every upcoming entrepreneur must face.
Complexity of the entrepreneurial process	The process that a start-up business follows is complex and not necessarily comprehensively understood.
Inappropriate learning methodologies	Theoretical training may be insufficient
Skills based	Entrepreneurship is skill and competency based, while most programmes give this aspect insufficient attention.

Table 2.4 continued…

Difficulty	Description
Environmental perspective and context	There is a mistaken perception that all people exhibit entrepreneurial tendencies but at a different intensity, and their choice to become entrepreneurs is rather a function of their environment.

Source: Adapted from Pretorius (2001: 56)

Cooper *et al.* (2004: 12) mention that some academic faculties give little credibility to entrepreneurship as an appropriate area of study. Many elite business schools remain steeped in the teaching of business and management in the context of large, national and international businesses. A focus on entrepreneurial behaviour and the development of newer and smaller businesses is less readily accepted. The major problem in treating entrepreneurship education as synonymous with management education has been the transfer of traditional pedagogical approaches which, while relevant in the large-firm context, risk leaving students ill-prepared for employment in a more entrepreneurial environment. When entrepreneurship is offered as a core elective subject, it is often delivered in an "about" entrepreneurship mode as opposed to a "for" entrepreneurship mode. The focus is on information giving, and teaching concentrates on the economic contribution of entrepreneurship and aspects of government policy. This is less likely to prepare students for the world of work and render them more employable than the "for" entrepreneurship approach, with its emphasis on developing practical skills.

2.8 Entrepreneurial training

According to Antonites (2003: 31), entrepreneurial training acts as a facilitator for entrepreneurial activities, with the main focus being on stimulating entrepreneurial activity and performance. For the purposes of this study, the training programmes for entrepreneurs can be referred to as interventions. The trainability of entrepreneurs is accepted and supported by McClelland (1969: 1), Gibb (1993: 3), Welsch (1993: 14), Van Vuuren (1997: 1), Hisrich and Peters (1998: 19), Kuratko and Hodgetts (1998: 10), Nieman (2001: 1), Pretorius and Van Vuuren (2003: 515), Van der Merwe and Nieman (2002: 35), as well as Antonites (2003: 31).

Foxcroft *et al.* (2002: 48) conducted a study on the education and training of entrepreneurs in South Africa and summarised it as follows:

- Informal training: Many people were prevented from acquiring skills by discrimination in the past; basic literacy and numeracy are often low; and there is a lack of business training material specific to South Africa and in any case most is directed at the highly literate.
- Formal training: general shortage of business skills such as how to keep records, budget, manage cash flow, maximise trade credit and write a business plan. Training is too generic, there is seldom any follow-up and it is not sufficiently practical.

According to Nieman (2001: 445), the main areas of concentration in entrepreneurial training should be business skills, technical skills and entrepreneurial skills:

- Business skills training covers all the conventional management training areas in a business.
- Technical skills training should address the ability to use knowledge or techniques of a particular discipline to attain certain ends.
- Entrepreneurial training involves the birth and growth of a business enterprise and should foster, among other entrepreneurial traits, creativity and innovation, risk propensity and need for achievement. Entrepreneurial skills are defined by Wickham (1998: 41) as the skills which enhance entrepreneurial performance. He adds that a skill is simply knowledge which is demonstrated by action.

These skills are further explained in Chapter 3.

It is therefore at this stage important to refer to the entrepreneurial process and to indicate which business, technical and entrepreneurial skills are needed to prepare participants or students to go through the stages of this process when starting their own business. The process has four distinct phases:

a) Identification and evaluation of the opportunity;
b) Development of the business plan;
c) Determination of the required resources; and
d) Management of the resulting enterprise. Table 2.5 highlights the aspects of the entrepreneurial process as seen by Hisrich *et al.* (2005: 38).

Table 2.5: Aspects of the entrepreneurial process

Identify and evaluate the opportunity (Entrepreneurial skills)	**Develop a feasibility study and business plan (Timmons & Spinelli, 2004: 403) (Entrepreneurial and business skills)**	**Resources required (People - Team) (Technical skills)**	**Manage the enterprise (Business skills)**
Opportunity assessment	Cover page	Determine resources needed	Develop management style
Creation and length of opportunity	Executive summary	Business plan	Understand key variables for success
Real and perceived value of opportunity	Industry analysis – describe products/services and growth plan	People (Team)	Identify problems and potential problems
Risk and returns of opportunity	Market research	Capital	Implement control systems
Opportunity versus personal skills and goals	Economics of the business	Other stakeholders	Develop growth strategy
Competitive environment	Marketing plan	Determine existing resources	Planning, organising, and leading
	Design and developmental plan	Identify available suppliers	
	Manufacturing and operational plan	Develop access to needed resources	
	Management plan		
	Financial plan		
	Action plan		
	The offering		
	Addendum		

Source: Adapted from Hisrich *et al.* (2005: 38)

Although these phases proceed progressively, no one stage is dealt with in isolation or is totally completed before work on another phase occurs. For example, to successfully identify and evaluate an opportunity (phase 1), an entrepreneur must have in mind the type of business desired (phase 4). The entrepreneurial process, as indicated by Wickham (2001: 37), consists of four elements: the entrepreneur; opportunity; resources; and organisation. The entrepreneur forms the hub and core element in any entrepreneurial process. Baron and Shane (2005: 9) state that there is a growing consensus in the field that viewing entrepreneurship as a process that unfolds over time and moves through distinct but closely interrelated phases is both useful and accurate. They identify the key phases in the process to be: recognition of an opportunity; deciding to proceed and assembling the essential resources; launching a new venture; building success; and harvesting the rewards.

2.8.1 Enhancing and restraining factors of entrepreneurial training

There are always factors that will influence the outcome of training, whatever the subject may be (Pretorius, 2001: 44). Timmons and Spinelli (2004: 259) refer to some attributes that would be hazardous to the success of entrepreneurs. The factors listed in Table 2.6 may act to either enhance or hinder the success of the entrepreneur. Pretorius (2001: 44) continues by stating that the aim of any training programme should thus be to focus on the factors that may enhance the chances of success, while eliminating factors that may hinder success.

Table 2.6 is presented on the next page.

Table 2.6: Eight areas of attitudes and behaviours that threaten the success of entrepreneurs

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

Source: Adapted from Timmons and Spinelli (2004: 259)

The need for entrepreneurial training in South Africa is a given, as elucidated in Chapters 1 and 2, but there still seem to be problems relating to entrepreneurial training programmes. Carrier (1999: 4) summarises the problematic situation and suggests that the following need to be transformed:

- Courses offered by training institutions that focus on training the traditional manager and not the entrepreneur;
- Lack of skills training for growth-oriented (thus primarily opportunity-driven) business;
- The lack of models directly addressing creativity, innovation and opportunity-finding issues;
- Failure to differentiate between a business idea and an opportunity in a training context;
- Over-emphasis on the pre-entrepreneurial phase of actively seeking business opportunities (an accentuation of feasibility and realistic market-related opportunities is rather needed);
- Lecturing as a teaching method; this is an approach that often reveals more about the teacher than about the subject taught.

In general most programmes pay sufficient attention to the knowledge aspects but are weak on the skills and attitudinal aspects that are crucial to the success of any potential or start-up entrepreneur. Training programmes will be examined in detail in Chapter 3.

2.8.2 Types of intervention

Deakins (1999: 181) notes that there are considerable differences in the ways in which intervention can occur. To begin with, he suggests that businesses, whether new or established, can be supported through either part-funded consultancy or through longer-term relationships. With part-funded consultancy, businesses can avail themselves of general or expert advice and support at various stages of their development, the costs of which are subsidised by public funds. In the longer-term type of support identified by Deakins (1999: 182), businesses can avail themselves of a range of support, from mentoring and training at the start-up stage to more in-depth diagnostic services as the business develops. The Women Entrepreneurship

Programme, as explained in Chapter 5, is supported through a long-term relationship.

Adopting a more comprehensive perspective, Bridge, O'Neill and Cromie (1998: 241) identify the various types of intervention in terms of the particular policies and stage of business development to which they are related. There is clearly a wide range of interventions that can be used to support the creation and development of new business, from inception right through to growth and eventual decline (highlighted in Table 2.7). Gorman *et al.* (1997: 56) conducted a survey on entrepreneurship education literature and found that certain categories had to be adopted. One of the categories adopted was that of the target market of each course or programme. The authors point out that their underlying assumption when using audience segmentation was that educational objective, subject matter and pedagogical approach might be expected to vary, depending on the nature of the target audience. In their survey the authors differentiate between education and training targeted at the pre-startup, which appears to involve the aspiring entrepreneur, and the post-startup phase, consisting of the established entrepreneur or small-business owner. Many others agree with Bridge *et al.* (1998) on the statement that there are different types of interventions depending on the stage of the business life cycle. These authors, including McMullan and Long (1987); Monroy (1995); O'Gorman and Cunningham (1997) and Van der Sijde, Van Tilburg, Henry, Sygne and Asplund (1997) in Henry *et al.* (2003: 92), identify more specifically how the training needs of an individual will vary according to a particular stage of development, such as awareness, pre-startup, start-up, growth and maturity.

Table 2.7 is presented on the next page.

Table 2.7: Intervention types

Stage of Business	Policy Field or Need	Intervention/Instrument
Pre-start	Ideas	Spin-off ideas, technology transfer, ideas generation workshops
	Small-business know-how	Small-business skills training
	Know-who networks	Networking, access points
	Counselling	Pre-start counselling
Start-up (external)	Customers	Purchasing initiatives
	Suppliers	Sourcing initiatives and directories
	Advice/consultancy	Business expertise provision, training, counselling, research
		Databases/business planning
	Business plan information	Incubators, science parks
	Premises	
Start-up (internal)	Finance	Grants, loans, business partners, business angels
	Market/administration expertise	Training services
	Financial management	Advice/counselling, mentoring
Established	New ideas	Ideas generation workshops, spin-off ideas, technology transfer
	Specialist guidance and investments	Guidance services, including banks, venture capitalists, accountants

Table 2.7 continued…

Stage of Business	Policy Field or Need	Intervention/Instrument
Growth	Market opportunities/exports Product development Strategic approach Management skills and finance	Trade missions, export advisers Market/technical information Development courses Salary support, subsidies, grants
Decline	Confidence, customers, money Strategic review and planning	Mentors Advice and guidance
Termination	Legal/other advice	Advice and counselling
Other dimensions	Business sector Business support environment	Sectoral initiatives/training Information and education
All of the above stages	Information on small business needs	Research coordination, research databases

Source: Adapted from Bridge *et al.* (1998: 242)

2.9 Conclusion

The development and growth of entrepreneurs is recognised as a source of major future employment. The government is keen to encourage educational programmes that focus on raising awareness and understanding of the entrepreneurial sector and that help individuals to identify employment opportunities in SMMEs. Though a good deal of recent research has tended to focus on the characteristics of the business and industry environment or the characteristics of the entrepreneurial opportunity itself, our understanding of entrepreneurship will not be complete unless we understand the motivation of the individuals (Collins, Hanges & Locke, 2004: 96).

Henry *et al.* (2003: 12) are of the opinion that entrepreneurship training can complement the early stage awareness-raising function of entrepreneurship education, as it provides the more practical skills that entrepreneurs require when they are ready to set up their business. Pretorius (2001: 223) maintains that much more can be gained through training than by way of support in the form of financial assistance, technical assistance and consulting support services. Ladzani and Van Vuuren (2002: 156) agree to a certain extent, stating that organisations wishing to develop entrepreneurship by education presuppose that the lack of training of entrepreneurs is the main reason for SMME failure. Hisrich and Peters (1995), in Ladzani and Van Vuuren (2002: 158), believe that training plays a pivotal role in supporting emerging entrepreneurs. For example, although a business may have the needed finance, its failure is probable without financial controls. In the same manner, a business may have access to the markets, but ignorance about how to market products and services poses a serious obstacle to success. Pretorius *et al.* (2005: 424) argue that the transfer of the requisite knowledge and skills is, therefore, the easiest part of training and is incorporated in most training programmes. Changing the behaviour to engage in the start-up process is what really matters and is what is lacking as a pronounced outcome of most programmes. While there has been much debate in the literature as to whether entrepreneurship can be taught, most commentators believe that at least some elements associated with the subject can be developed and enhanced via education and training (Henry *et al.*, 2003: 107).

This chapter described the constructs of training, education and learning and why they are important for entrepreneurship development. The field of entrepreneurship, economic development and creating employment in South Africa was explored. A distinction was made between entrepreneurial education and entrepreneurial training, and this forms the theoretical framework of this study. The next chapter focuses on entrepreneurship training models and programmes.

The primary focus of this study, however, is specifically on entrepreneurial training for women entrepreneurs. Chapters 4 and 5 investigate this topic further, providing a thorough literature review on women entrepreneurs and their training needs.

Chapter 3: Entrepreneurship training models and programmes

"We cannot ensure that entrepreneurship training programmes would create a Bill Gates or any other successful entrepreneur that you know of, as a physics professor would not be able to guarantee you an Albert Einstein, but give us a student or course attendant with a orientation towards business and we can improve the performance of such an individual."

- Bygrave and Hofer (1991: 16)

3.1 Introduction

Despite the increase in the amount of research conducted into the area of entrepreneurship training and education, Jennings and Hawley (1996: 1305) suggest that many entrepreneurship training initiatives do not actually address the real needs of entrepreneurs. They feel that there is often a significant gap between the perceptions of the training providers and those of the entrepreneurs in terms of training needs, for what sometimes appear as key problem areas to the trainer may have little importance for the entrepreneur. This may be because many providers have limited managerial or vocational experience of small firms and fail to understand the practical problems facing entrepreneurs.

Timmons and Spinelli (2004: 66) mention that there is a limit to what can be taught in entrepreneurship training programmes and that the only way to learn is through one's own personal experience. With this in mind, they see the quality of the resulting business plan as a key measure of effective experiential learning. In the various surveys reported on by Dunsby (1996: 53), financial management and marketing have also been highlighted as critical areas in which entrepreneurs require assistance.

This chapter investigates entrepreneurship education and training further by focusing on entrepreneurial training models. Two training models are discussed to serve as a basis for the chapters that follow. Various training programmes in different countries including South Africa, the rest of Africa, the USA, Europe and Asia are examined. A content analysis is done on various entrepreneurship programmes to investigate the

main areas of training that trainers and facilitators need to focus on. Chapter 2 highlighted the fact that the main areas of concentration in this study of entrepreneurial training programmes are business skills training, technical skills training and entrepreneurial skills training. This chapter explores these skills further by means of models. The objectives, design, content and duration of entrepreneurship training programmes are described, as well as how to measure the effectiveness of such programmes.

3.2 Entrepreneurship training models

An entrepreneurship training model can be defined as a structure or layout of constructs that form the framework of an entrepreneurship training intervention. A model includes all of the training elements that are presented when the training is carried out. Pretorius *et al.* (2005: 420) define such a model as a structure that is used as the guideline for the compilation of entrepreneurship training programmes. Two existing models were independently developed for entrepreneurship programmes in South Africa. Several other entrepreneurship training models exist worldwide, but for the purpose of this study these two models only will be discussed. Each model was developed for its own and different contextual outcomes. The first model that will be discussed is the Entrepreneurial Performance Education Model.

3.2.1 Entrepreneurial Performance Education Model (E/P model)

The formula for the E/P model is illustrated as:

E/P = *f* [aM (bE/S x cB/S)]

Where,

E/P = Entrepreneurial Performance

M = Motivation

E/S = Entrepreneurial Skills

B/S = Business Skills

a to c = Constants

The model, as developed by Van Vuuren and Nieman (1999: 6), is concerned with the elements that drive entrepreneurial performance and was developed to guide syllabi and curriculum development. The four elements (E/P, M, E/S and B/S) that are evident in this model are described in detail.

3.2.1.1 Entrepreneurial Performance (E/P)

According to Ladzani and Van Vuuren (2002: 156), entrepreneurial performance is based on the starting of a business/utilising of an opportunity, and growth of the business idea. Holland (1985: 20) states, in his theory of vocational choice, that the interaction of work environment and personality may affect performance in a career. Specifically, he argues that higher levels of fit between the personality and work environment characteristics will result in higher performance in that role. Van Vuuren (1997:3) agrees that entrepreneurial performance goes hand in hand with entrepreneurial achievement or results with regard to the realising of set entrepreneurial goals. This construct can be presented as: firstly, an increase in productivity; secondly, the increase in the number of employees employed, which implies the expansion of the business; thirdly, the net value of the business; fourthly, a core aspect in entrepreneurship, namely the increase in profitability; and finally, the completion of the first market-related transactions.

McClelland (1961: 40) similarly argues that need for achievement will be related to successful performance in an entrepreneurial role. Entrepreneurs who are high in achievement motivation are more likely to overcome obstacles, utilise resources for help, compete and improve their skills. Therefore, one would expect to find differences in achievement motivation in high-performance entrepreneurs versus low-performance entrepreneurs. Friedrich *et al.* (2003: 3) report on the findings of McClelland's Achievement Motivation training of small business conducted in India and in the USA in 1969. The results showed evidence that Achievement Motivation training significantly improves small business performance, provided that there is some minimum support from the economic infrastructure in the form of available loans, market opportunities and the labour force.

3.2.1.2 Motivation (M)

Buelens, Kreitner and Kinicki (1999: 189) conceptualise motivation per se as those psychological processes where consciousness, direction and perseverance of purposeful voluntary actions are created. Herron and Sapienza (1992: 49) state: "Because motivation plays an important part in the creation of new organisations,

theories of organisational creation that fail to address this notion are incomplete". What motivates a person to start his/her own business? The development of performance motivation of the entrepreneur should be incorporated in all programmes. Pretorius *et al.* (2005: 416) suggest that it contributes towards qualities like inner control, persistence, leadership, decisiveness, determination and sheer guts. From the above statements, it is evident that another important aspect that can be associated with motivation is a need for achievement. The concept of need for achievement (nAch) was formulated in the 1950s (McClelland, Clark, Roby & Arkinson, 1958: 11). McClelland and his colleagues argued that high-nAch people are more likely than low-nAch people to engage in energetic and innovative activities that require planning for the future and entail an individual's responsibility for task outcomes. McClelland (1961: 35) argued that high-nAch people should also prefer tasks that involve skill and effort, provide clear performance feedback and hold moderate challenge or risk. The author based his hypothesis on individual observation, and proposed the following logical psychological supposition: The more an individual achieves, the more he/she would like to achieve. This achievement is tied to specific action behaviour. The author therefore argues that the motives are rational or can be rationally deduced from the completion of certain actions.

Collins *et al.* (2004: 95) conducted an investigation of 47 different achievement motivation studies, 21 of which used the "Thematic Apperception Test" - TAT (McClelland), six used the Miner Sentence Completion Scale and 20 used various types of questionnaire-based method. Overall, their results supported McClelland's theory that achievement motivation is significantly related to both occupational choice and performance in an entrepreneurial role. The results were further consistent with McClelland's prediction that individuals high in achievement motivation are more likely to be attracted to occupations that offer high degrees of control. Therefore, as suggested by McClelland (1961: 36), it seems likely that individuals high in nAch should be attracted to and perform well in entrepreneurial jobs. Mahadea (1988) in Antonites (2003: 53) mentions that the need to achieve can be fostered through a training intervention. He quotes the following authors who proved this statement empirically: McClelland and Winter (1969; 1987); Timmons (1971); Durand (1975); Boshoff (1987) and Van Vuuren (1997).

It is important to note that training in achievement motivation within the entrepreneurial context is fundamentally aimed at emphasising rivalry and competition in order to set very high standards for achievement. Antonites (2003: 54) therefore believes that motivation on the one hand and achievement motivation on the other play a vital role throughout the training aimed at providing entrepreneurial as well as business skills. McClelland and Winter (1971) in Henry *et al.* (2003: 35) point out that training courses designed to develop achievement motivation have significantly improved small business performance.

3.2.1.3 Entrepreneurial Skills (E/S)

Individuals' belief in their own ability to start a business plays an important role in their decision to start a business. People who believe that they have the ability to start a business are five times more likely than others to actually attempt to start a business (Orford *et al.*, 2004: 34).

Carney and Turner (1987), in Henry *et al.* (2003: 96), based on the work carried out on the CITY project (Community Improvement through Youth Programme) in Adelaide, South Australia, identify a set of twelve core enterprise skills that are essential for successful entrepreneurship. These include the ability to assess and appreciate one's strengths and weaknesses and evaluate one's performance; to communicate with other people; to negotiate; to deal with people in power and authority; to resolve conflict; and to cope with stress and tension. In addition, making decisions, planning one's responsibilities and solving problems were highlighted.

Hisrich *et al.* (2005: 21) stress that the development of particular skills, namely inner control, risk taking, innovativeness, being change oriented, persistence and visionary leadership differentiates an entrepreneur from a manager. Herron and Robinson (1995: 75) refer to entrepreneurial skills as the ability to discover opportunities for profitable reallocation of resources to new endeavours. For the purpose of this study risk propensity, creativity and innovation, opportunity identification, following of role models and networking are all categorised under the E/S construct. Hisrich *et al.* (2005: 20) and Nieman (2001: 445) argue that the skills required by entrepreneurs can be classified into three main areas: technical skills, business management skills

(which will be discussed under the B/S construct) and personal entrepreneurial skills (refer to Table 3.1).

Table 3.1: Classification of entrepreneurial skills

Classification	Description
Technical skills	• Written and oral communication • Monitoring of environment • Taking advantage of technology • Interpersonal relationships • Ability to organise • Management style
Business management skills	• Decision making • Planning and strategising • Human relations • Marketing • Finance • Accounting • General Management • Negotiation skills • Business planning • Communication • Managing growth
Personal entrepreneurial skills	• Inner control • Risk propensity • Innovativeness • Creativity • Opportunity identification • Change orientation • Persistence • Visionary leadership

Source: Adapted from Hisrich *et al.* (2005: 20)

For the purpose of this study only a few skills will briefly be discussed:

- *Risk propensity*: Readiness to take risks involves a preparedness to make use of opportunities that are identified, even if there is a possibility of financial loss. Henry *et al.* (2003: 38) defines risk-taking as the ability to deal with incomplete information and act on a risky option that requires skill to actualise challenging but realistic goals. A number of authors have disaggregated risk into different elements. For example, McCarthy (2000: 53) identifies three components of risk, namely conceptual, administrative and environmental risk. Conceptual risk is the risk of imperfect formulation of an issue or problem; for instance, using an incorrect mode, making false assumptions, choosing incorrect decision criteria and so on. Common examples are over-estimating the size of the market or growth rates. Administrative risk concerns the fact that even a well-thought-out issue or plan may not be implemented appropriately, an example being poor management of cash flow. Environmental risk emanates from unanticipated change in the external environment, primarily in the form of changes in demand, competition and technological development. Casson (1990: 11) describes entrepreneurial risk as the result of insecurity due to the fact that the success or failure of market penetration can never really be determined beforehand. To conclude, entrepreneurial risk can include:
  - Financial risk (cost of establishment of a new venture, product development cost and the costs of running the business on a daily basis);
  - Personal risk (the energy and effort that the entrepreneur puts into the business and the fear of failure);
  - Time risk (the time it takes for a new idea to be developed into an opportunity and then into a final product/service to be considered right for the market);
  - Social risks (being socially accepted or rejected in the community with reference to starting an own business).

- *Creativity and innovation*: The two constructs creativity and innovation must be distinguished. Creativity is the thought process that leads to the development and generation of ideas. Innovation is the practical implementation of the idea concept to ensure that the set aims on a commercial, profitable basis are met, in line with a specific opportunity in the market environment (Antonites, 2003: 109). De Bono (1996: 3) defines creativity as the formulation or creation of something

that was not previously available in its present state. Csikszentmihalyi (1996), in Antonites (2003: 79), states that no clear-cut characteristics can be allocated to the individual to declare him or her as someone who is able to create a novelty or new product/service. Gilmartin (1999: 34) locates innovation between creativity and opportunity identification and regards creativity as the foundation for innovative behaviour. Drucker (1994: 20) suggests that innovation is an entrepreneurial instrument, one which is used to develop a differentiated undertaking or service. It is evident that creativity, innovation and opportunity finding as entrepreneurial skills are necessary in the field of entrepreneurship training and development.

- *Opportunity identification*: The continuous identification of opportunities throughout the life cycle of the business is a differentiating characteristic of the true entrepreneur. Timmons and Spinelli (2004: 82) point out that not all ideas are opportunities. They distinguish the two by indicating that opportunities must be:
  - Durable (long-lasting in the market and industry);
  - Timely (during the period when the window of opportunity stays open);
  - Attractive (there must be a demand in the market for the product/service); and
  - Able to add value (add benefits, convenience to customers' lives).

- *Use of role models*: The use of role models could be a direct guideline for the entrepreneur in terms of certain role expectations that need to be present per definition (Buelens *et al.*, 1999: 292). Within the training context the use of successful entrepreneurs as examples could act as a strong motivational technique.

- *Networking*: Herron and Robinson (1995: 75) state that networking skills involve the ability to create and effectively use human networks in obtaining information. Nieman *et al.* (2003: 168) define entrepreneurial networking as the active process of setting up and maintaining mutually rewarding and cooperative relationships with other persons or businesses that can offer critical support for the development and growth of a business. Prabhu (1999:144) states that networking with other organisations within the geographical operating area, as

well as with similar organisations operating elsewhere, is crucial for any entrepreneur for receiving relevant information, mutual learning, getting appropriate personnel and for joining together for common causes. Dana (2001: 406) mentions that a network can teach individuals a great deal about sourcing, regulation, production, marketing, distribution logistics, customer service and even taxation. Dubini and Aldrich (1991: 305) stress that networks must be central to the training of entrepreneurs.

Antonites and Van Vuuren conducted a study in 2002 in which 70 different global entrepreneurial training programmes were evaluated and the content of these programmes was assessed. The results, as shown in Antonites (2003: 62), indicate which of the training programmes listed the entrepreneurial skills as presented in this study. The following table indicates the extent of use of different entrepreneurial skills included in the 70 entrepreneurship training programmes.

Table 3.2: Entrepreneurship training programmes: Entrepreneurial skills

Entrepreneurial skills	Frequency	Percentage (%)
Risk propensity	5	0.7
Creativity and innovation	52	74
Opportunity identification	28	40
Role models	37	53
All entrepreneurial skills	23	33
N = 70		**X = 50**

Source: Antonites (2003: 62)

Please note that networking was not included as an entrepreneurial skill in Table 3.2.

3.2.1.4 Business Skills (B/S)

Business skills are required to run the business on a daily basis. Nieman and Bennet (2006: 4) mention that there are certain functional areas in a business which are essential for any entrepreneur. These areas include: general management, marketing management, financial management, human resource management,

production and operations management, corporate communications management, information management and e-business, and purchasing and materials management. For the purpose of this study the most significant business skills are summarised in Table 3.3.

Table 3.3: Business skills required by entrepreneurs

Business skills	Description
General management	How a business works and how it must be managed. Planning, organising, leading, motivating and control also form part of general management. Proper planning for the future, the investigation of all production factors, leading the operation and the control of all staff activities will ensure that the performance of the entrepreneur is greatly enhanced.
Marketing management	Conducting market research, selecting a target market and how to sell to it and positioning the business in the market. Identifying the marketing mix (price, product, place, promotion, physical evidence, people and process) within the business as well as managing consumer behaviour.
Legal skills	Business forms, contractual law, understanding the necessity for ethical behaviour within a business as well as registering trademarks, logos and designs.
Operational management	Manufacturing the finished product and service, identifying raw materials and suppliers, identifying wholesalers and retailers.
Human resource management	Management of people within the business. Recruiting, selecting and training and development of employees on a continuous basis are important.
Communication skills	Internal communication between employees and owner/manager and external communication between the entrepreneur and all other stakeholders such as customers and suppliers.

Table 3.3 continued…

Business skills	Description
Business plan compilation	Before committing time and energy to preparing a business plan, the entrepreneur should do a quick feasibility study of the business concept. The feasibility study - done by the entrepreneur – is in preparation for writing the business plan. The business plan is a comprehensive action plan of how an entrepreneur will achieve his/her business goals.
Financial management	How to do financial planning, how to collect money from customers and pay suppliers, what sources of finance must be used to obtain capital and how to compile financial statements – income, balance and cash flow statements.
Cash flow management	Managing the cash inflow and outflow in a business and solving cash flow problems.

Source: Own compilation

Finally, the entrepreneurial performance education model is summarised by Antonites (2000: 21), who formulated a table to develop the entrepreneurship training model.

Table 3.4: The entrepreneurship training model based on the entrepreneurial performance education model

Entrepreneurial Performance (E/P)	Performance motivation (M)	Entrepreneurial Skills (E/S)	Business Skills (B/S)
Establishment of own business	Motivation	Risk propensity	General management skills
Growth in net value of business	Role models	Creativity and Innovation	Marketing skills
Recruitment of employees		Opportunity identification	Legal skills

Table 3.4 continued…

Entrepreneurial Performance (E/P)	Performance motivation (M)	Entrepreneurial Skills (E/S)	Business Skills (B/S)
Increasing productivity levels		Role model analysis	Operational skills
Increasing profitability		Networking	Human resource management skills
			Communication skills
			Business plan compilation
			Financial management
			Cash flow management

Source: Adapted from Antonites (2000: 21)

3.2.2 Entrepreneurial Education Model (E/E model)

The second model that needs further explanation is the E/E model. The formula for the E/E model is illustrated as:

E/E = f[aF(bA x cB/P) x (dE/S x eB/S)]

Where,

E/E = Entrepreneurial education for start-ups
F = Facilitator skills, knowledge and motivation
A = Approaches used by facilitator(s)
B/P = Business Plan utilisation
E/S = Entrepreneurial success themes and knowledge
B/S = Business Skills and knowledge
a to e = Constants

This model, developed by Pretorius (2001: 122), considers not only the content of entrepreneurial education programmes but also the context within which such programmes are operated by the facilitators and the approaches that they use. The model will also describe the requirements for any learning programme that should enhance the ability of participants to achieve the level of competence needed for micro and small business venture start-ups. The model identifies five constructs relevant to entrepreneurial education, as explained below.

3.2.2.1 Entrepreneurial success themes

The entrepreneurial success themes are similar to the entrepreneurial skills discussed previously in section 3.2.1.3, but include leadership, motivation and issues related to the attitude and character of the person involved. Stumpf and Tymon (2001: 52) agree with Pretorius (2001), and mention that entrepreneurship is fundamentally concerned with vision and action, which indicates that visionary leadership results from systemic analysis, and must be included as an entrepreneurial success theme. These authors continue by explaining that visionary leadership enables the entrepreneur to:

- Share a vision of what the venture could become;
- Overcome setbacks by being resilient;
- Continue to champion innovative ideas when faced with substantial resistance;
- Build and sustain a risk-taking, opportunity-seeking climate; and
- Live in the future and manage the present.

3.2.2.2 Business knowledge and skills

Business skills was identified as a construct when discussing the first model in section 3.2.1.4. The topics and field to be included require the facilitator to fully understand the context and to select from the available fundamental knowledge what is required to achieve the selected outcomes.

3.2.2.3 Business plan utilisation

A proper business plan should show evidence of complete understanding, sufficient homework, proper integration and incisive research, proving that the opportunity, resources and entrepreneurial team can be integrated successfully (Pretorius, 2001: 86). The business plan thus serves as the academic heart of entrepreneurship and business training (Solomon *et al.*, 1998: 3). Pretorius (2001) includes the business plan as a separate construct in his model whereas the model of Van Vuuren and Nieman (1999) includes the business plan as part of the business skills construct. The elements, preparation, presentation and evaluation of a business plan will be discussed in Chapter 5.

3.2.2.4 Learning approaches

Several approaches can be followed in a training programme to ensure that meaningful learning has taken place. They include:

- instructor-centred strategies (the direction of communication is one-way, from instructor to the participants);
- individual learning strategies (participants are permitted to learn at their own pace; an example would be for participants to do homework);
- interactive strategies (there is two-way communication between the instructor and participants; an example would be group discussions); and
- experiential learning strategies (active learning takes place; an example would be doing real-life case studies).

Other approaches to learning include: in-depth company investigations; role-playing; interviewing entrepreneurs; on-site visits; and internships with a venture, as presented in Chapter 2.

3.2.2.5 The facilitator and the programme context

The facilitator is very important; a good facilitator or group of facilitators can achieve more with poor programme content than poor facilitators can with good programme content (Pretorius *et al.*, 2005: 424). Olivier (1999: 70) mentions that the overall role of the facilitator is to ensure that learning takes place through activities such as

creativity, self-learning and critical thinking. If successful in this process, the participant of a programme would:

- Master the critical cross-field outcomes of formulating, identifying, performing, concluding, interacting and assessing.
- Master the required knowledge and values, which become evident through the processes of identification, application and assessment.
- Acquire the necessary skills and values that become evident when the learners first secure the methods to acquire the competencies; then master the competencies; and finally apply the competencies to achieve the outcomes.

The programme context includes the knowledge and past experience level of participants. A needs analysis before the actual training takes place will ensure that the programme context meets the participants' expectations.

The two models of Van Vuuren and Nieman (1999: 6) and Pretorius (2001: 122) are compared in Table 3.5 to show their individual strengths, weaknesses and differences. Pretorius *et al.* (2005: 421) thus found that evaluating the core constructs of each model, makes it clear that motivation is much stronger in the entrepreneurial performance model (Van Vuuren & Nieman), while the facilitator and pedagogical approach constructs are much stronger in the entrepreneurial education model (Pretorius). The comparison therefore identifies weaknesses in each model.

Table 3.5: Comparison of the education models of Van Vuuren and Nieman (1999) and Pretorius (2001)

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

Table 3.5 continued…

Construct element	Entrepreneurial performance model (E/P) according to Van Vuuren and Nieman (1999)	Entrepreneurial education model (E/E) according to Pretorius (2001)
Motivation (M)	Motivation as seen as the level of nAch (need for achievement) of the individual, including: desire to be successful and to do well; urge to improve; motive to achieve excellence for its own sake	Absent as a separate construct but considered partially as an element of E/S under motivation to excel
Entrepreneurial skills (E/S)	Considers: creativity and innovation; identification of opportunities; risk taking; interpretation of role models	Seen as entrepreneurial success theme and considers: commitment; personal leadership; opportunity obsession; tolerance for risk and ambiguity; creativity; motivation to excel
Business skills (B/S)	Covers both skills and knowledge associated with the general functions; life cycle stages of a venture and the business plan	Similar except that the business plan is a separate construct
Approaches used to transfer knowledge and skills (A)	Absent, as it assumes that a motivated person would find a way to master the skills once knowledge has been gained	Considers both: the involvement of the learner in the learning process; and the variety of learning approaches used
Facilitator (F)	Absent	Considers: own practical experience; how reinforced thinking is used; entrepreneurial way of being; use of apprenticeships; multidisciplinary approach and thinking

Table 3.5 continued…

Construct element	Entrepreneurial performance model (E/P) according to Van Vuuren and Nieman (1999)	Entrepreneurial education model (E/E) according to Pretorius (2001)
Business plan utilisation (B/P)	Absent as a separate construct but stated under the B/S construct	Coverage of how the business plan is utilised by: preparation; presentation; defence and execution
Contextual description	Absent but implied	Considers: previous experience; minimum education level; outcomes of the programme; needs analysis of participants

Source: Adapted from Pretorius *et al.* (2005: 417)

Pretorius *et al.* (2005: 421) summarise by drawing the following observations from Table 3.5:

- Compared with the importance that Van Vuuren and Nieman attach to the motivation construct in their E/P model, the E/E model of Pretorius is markedly weak in this construct, despite its being implied within the E/S construct.
- The nature of the E/P model does not require reference to approaches and the facilitator as constructs, as its focus is on the performance of the entrepreneur rather than the success of the training course.
- The business plan construct is implied as part of the business skills required for the E/P model, while in the E/E model it is regarded as an important tool for training, especially to assist in the holistic conceptualisation of the venture and its future operations.
- The business plan can also be regarded as part of the approaches construct as it forms part of the pedagogy used to develop insight into the business as a whole. The value of the business plan itself is probably less than the value of the creation process, and opinions vary widely between academics, financiers and entrepreneurs.

- The E/E model refers to the skills needed by entrepreneurs as the entrepreneurial success themes, whereas the E/P model refers to those skills as entrepreneurial skills.

Once the models have been compared, one can take the next step of integrating the two models. Although motivation to excel is mentioned as part of the entrepreneurial skills (E/S) construct by Pretorius (2001: 122), it is considered as key to the E/P model. Both E/S and B/S are common to both models, and therefore the following integrated model is proposed for education for entrepreneurial performance (Pretorius *et al.*, 2005: 422).

3.2.3 The Education for improved Entrepreneurial Performance Model (E for E/P model)

The integrated model can be formulated as the E for E/P model. The formula for the E for E/P model is illustrated as:

E for E/P = f[aF x bM (cE/S x dB/S) x (eA + fB/P)]

Where:

E for E/P	= Education for improved Entrepreneurial Performance
F	= Facilitator's ability, skills, motivation and experience
M	= Motivation
E/S	= Entrepreneurial Skills
B/S	= Business Skills
A	= Approaches of learning used by facilitator(s)
B/P	= Business Plan utilisation
a to f	= Constants

Education for E/P, therefore, is a linear function of the facilitator's ability and skills (aF) to enhance motivation (bM), entrepreneurial skills (cE/S) and business skills (dB/S) through the creative use of different approaches (values of eA) and specifically the business plan (fB/P). This E for E/P integrated model is in line with the work of Solomon, Winslow and Tarabishy (2002: 6), who suggest that entrepreneurial activities are a function of human, venture and environmental conditions. Typically motivation and entrepreneurial skills would be elements of the

human skills, while business skills and the business plan utilisation are elements of the venture skills. Apart from the normal environmental factors governing strategy and operation of the venture, the approaches used and the facilitator will contribute as elements of the learning environment. WEP will be evaluated, in Chapter 5, based on the new improved entrepreneurship training model that was originally assembled by Antonites (2000). Table 3.6 below illustrates the improved entrepreneurship training model presenting all the constructs that have been taken into account in the integrated model (E for E/P) and also the added constructs that are highlighted in blue. This intergraded model has been validated in 2005 (Pretorius *et al.*, 2005: 420).

Table 3.6 is presented on the next page.

Table 3.6: The improved entrepreneurship training model

Entrepreneurial Performance (E/P)	Performance Motivation (M)	Entrepreneurial Skills (E/S) and entrepreneurial success themes	Business Skills (B/S)	Facilitator and programme context (F)	Approaches to learning (A)	Business Plan utilisation (B/P)
Establishment of own business	Motivation	Risk propensity	General management skills	Previous experience of facilitator and participants	Involvement of participant	Elements
Growth in net value of business	Mentorship	Creativity and Innovation	Marketing skills	Outcomes of the programme	Learning approaches used	Preparation
Recruitment of employees	Role models	Opportunity identification	Legal skills	Needs analysis of participants		Presentation
Increasing productivity levels		Role model analysis (success factor)	Operational skills			Evaluation
Increasing profitability		Networking	Human resource management skills			
		Leadership	Communication skills			
		Motivation	Financial management			
		Attitude of participant	Cash flow management			
		Social skills				
		Start-up skills				

Source: Own compilation as adapted from Antonites (2000: 21)

Mentorship as a sub-element under P/M, and social skills as a sub-element under E/S were also added to Table 3.6 and need further explanation.

Mentorship is another important element that could enhance entrepreneurs' motivation in the long haul. Raffo, Lovatt, Banks and O'Connor (2000: 361) state that entrepreneurs seem to value the opportunity of having someone, a specific expert or mentor figure, to support them in their daily problem-solving needs. It is evident that some form of mentoring appears to have a positive impact on the performance of most, if not all, entrepreneurs (Sullivan, 2000: 169). This view is supported by Churchill and Lewis (1983: 44), who point out that a mentoring programme has had direct or indirect impact on the performance of entrepreneurs. As it appears that mentoring does add value, it is important that it be defined and discussed in order to understand its importance as a learning tool.

The definition of Sullivan (2000: 169) is best suited to mentorship in the context for support to start-up entrepreneurs, being a protected relationship in which learning and experimentation can occur, potential skills can be developed, and in which results can be measured in terms of competencies gained, rather than curricular territory covered. Nieman *et al.* (2003: 168) define business mentoring as an ongoing, long-term business counselling relationship between an experienced business adviser (or corporate executive) and an entrepreneur, which covers a diverse range of topics as a business develops over time towards an agreed set of objectives. Business counselling is further defined by Stone (1999: 7) as a process whereby business problems are diagnosed and resolved in such a way that the clients learn not only how to overcome their current difficulties, or exploit their opportunities, but also how to tackle similar situations in future. Sullivan (2000: 163) mentions that while a mentor cannot effectively "lecture" to an individual entrepreneur's prior experience, he or she may be in a position to give meaning to or aid understanding of that experience. The role of a mentor is to enable the entrepreneur to reflect on actions and, perhaps, to modify future actions as a result; it is about enabling behavioural and attitudinal change. Sullivan (2000: 166) reports on the value placed on different mentor impacts in the First Business Programme, as outlined in Table 3.7. It was found that the significance of intervention is thought by clients to be greatest in terms of achieving objectives, ability to learn and the ability to

cope with problems. It is interesting that the transference of skills or "ability" is rated highly as opposed to the act of "doing for" or of being more directive.

Table 3.7: Mentor programme: significance of intervention (rank order)

Difference to:	Second stage rank order	First stage rank order	Change in rank order	Mentor ranking
Achieving objectives	1	1	0	1
Ability to learn	2	3	+1	7
Ability to cope with problems	3	2	-1	3
Profitability	4	7	+3	5
Ability to manage	5	4	-1	8
Ability to cope with change	6	5	-1	2
Turnover	7	6	-1	6
Employment	8	8	0	4
Number of firms/sample size	27	45		10

Source: Sullivan (2000: 167)

First-stage rank order was derived from research undertaken as entrepreneurs were beginning both their business and their relationship with the mentor. The second-stage research was carried out when the mentoring relationship had matured, between 12 – 18 months into the relationship. In addition a number of interviews were conducted with mentors. It could therefore, be argued that it appears that the First Business mentoring programme is successful in terms of giving new start-up entrepreneurs the "tools" necessary to succeed or to cope and learn from critical incidents during the early phases of development.

The second element that was added to the improved entrepreneurship training model is social skills. Social skills can be defined as the ability to read others accurately, make favourable first impressions, adapt to a wide range of social situations and be persuasive (Baron & Markman, 2000: 106). Training in social skills could help many entrepreneurs succeed. Such training would be especially valuable in cases where entrepreneurs' ideas are sound and where their experience, technical competence and motivation are high, yet they fail in their efforts to start new ventures. According to Baron and Markman (2000: 111), such negative outcomes may stem from a lack of social skills on the part of the entrepreneurs. They are lacking, to some degree, in the skills necessary to negotiate effectively with others, to persuade them, or to induce them to share the entrepreneurs' beliefs about what their new venture can and will become. As a result, entrepreneurs lacking in social skills make poor first impressions, fail to generate enthusiasm for their ideas or business and may even annoy or irritate persons who hold the fate of their new ventures in their hands. Gartner (1990: 299) comments on the findings that entrepreneurs whose companies are successful engage in more communication with others and are more effective in this activity than entrepreneurs whose companies fail.

3.3 Entrepreneurship training programmes

When looking at entrepreneurship training programmes it is helpful to categorise such programmes. Falkäng and Alberti (2000: 101) suggest that entrepreneurship training courses fall into two categories:

- Courses *about* entrepreneurs, entrepreneurship and small business. The content tries to explain entrepreneurship and the importance of small businesses in the economy and society. These courses have an outsider perspective on entrepreneurship, and students/participants remain at a distance from the subjects.
- Courses with the objective of educating and training students/participants in the skills they need to develop their own business. The education emphasises the real world and experience-based learning.

The difference between these two approaches is important to the design of educational programmes about entrepreneurship and consequently in determining how such programmes should be assessed. This is also seen in the development of

the two entrepreneurship training models discussed under section 3.2. Many researchers agree that many training programmes do not address the real needs of entrepreneurs. Garavan and O'Cinneide (1994a: 6) summarise the most significant weaknesses of many entrepreneurial education and training programmes:

- Entrepreneurship education and training programmes are frequently of very short duration compared with other educational programmes concerned with helping people embark on a major career.
- While there is evidence that many of the entrepreneurship education and training programmes are already highly committed to the owner-manager role and that trainers are successful in raising commitment even higher, as well as reducing doubts, there is parallel evidence to suggest that this mental preparation does not go nearly far enough and that, indeed, it represents one of the major weaknesses of many programmes.
- Many entrepreneurs are specialists within a particular field and tend to have a poor grasp of the intricacies of managing across the range of functions. It is in these situations that entrepreneurial skills are demanded: to work across boundaries on complex, interrelated problems requiring the ability to take a holistic view and exercise skills of analysis and synthesis.
- Trainers often try to accommodate too wide a range of start-up businesses within a single programme. It is usual to group together people who are starting a diverse range of small businesses and to offer them a more or less common skills programme.

Sullivan (2000: 172) supports the above statements and stresses that many volume-driven small business training programmes deliver up-front prescriptive training that may not be of immediate relevance to participants, and as such the added-value of such provision could be brought into question. In all, it would be most useful if knowledge, skills and reflective learning could be facilitated as and when required by the entrepreneur. Donkin (2004: 18) agrees, and argues that the best training interventions are those based on an assessment of specific training needs.

Dana (2001: 405) argues that to be truly successful, training programmes must be relevant to the host environment where the programme is taking place. It would be a fallacy to assume that a programme that has been functional in one environment will

necessarily have the same effect elsewhere. A great danger lies in attempting to translocate training programmes. *"It is better to teach a man how to fish, rather than simply to give him some fish."* Dana (2001: 410) uses this statement to conclude that perhaps more relevant is the fact that salmon and lobsters are not harvested in the same way. A training programme should be customised for the specific target group that is going to be trained. Similarly, the results of a study conducted by Lean (1998: 232) suggest the need to avoid a dogmatic approach when it comes to designing support programmes for micro firms; Lean recommends that support packages should take account of the distinct needs of such firms so that the support gaps can be appropriately identified.

Nieman (2001: 451) mentions some of the findings, conclusions and recommendations of research papers on training of SMMEs in the 1990s. Many of these recommendations must be read keeping in mind the diverse nature of the South African population in respect of race, language and religion:

- The training emphasis of most service providers seems to be more on conventional management training than entrepreneurial training.
- Any training programme that addresses the daily running of a business should be adapted for the different cultural groups.
- The training needs of people in the informal business sector are very different from the needs of those in the more sophisticated sectors.
- The training that is available tends to concentrate on commerce and services, with little or no training for market-related production.
- The trainers must ideally have had business experience, be supportive towards the trainees and preferably speak their home language.

3.4 Objectives of entrepreneurship training programmes

Having discussed the background of entrepreneurship training programmes, it is now necessary to look at the objectives of such programmes. Hills (1988: 111) conducted a survey on 15 leading entrepreneurship educators in the USA and identified two important objectives of entrepreneurship education programmes. These were to increase the awareness and understanding of the process involved in initiating and managing a new business; and to increase students' awareness of small business

ownership as a serious career option. Cox (1996: 12) believes that a primary objective of training interventions targeted at the awareness stage of entrepreneurial development is the promotion of self-efficacy with regard to new venture creation. Henry *et al.* (2003: 94) agree and suggest that it is important to provide mastery experiences or opportunities to act entrepreneurially, as well as provide exposure to several real-life entrepreneurs.

Garavan and O'Cinneide (1994b: 14) undertook a European-wide evaluation of six enterprise programmes across five European countries: Ireland, France, Italy, Spain and England. They compared the design features (comprising objectives, content, duration, learning styles and outcomes) of each, as well as the target market. In their review they discovered that there were seven commonly cited aims of entrepreneurship programmes. While broadly similar to those described by Hills (1988: 111), in that the development of new start-ups as well as the acquisition of various skills and abilities believed to be necessary in such courses were highlighted, the objectives identified were more specific. These included recognising the risk-averse bias of many analytical techniques, developing empathy and support for the unique aspects of entrepreneurship and devising attitudes towards change. In addition, emphasis was placed on the acquisition of knowledge germane to entrepreneurship and the development of skills to analyse business situations. According to Garavan and O'Cinneide (1994a: 5), the following are the most commonly cited objectives of entrepreneurship education and training programmes:

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

Although the objectives mentioned above are relevant for a venture start-up programme, they may lack the key element, namely of acting in the process of venture establishment.

Hisrich *et al.* (2005: 32) examined the objectives of entrepreneurship programmes from the participants' perspective. Some of the key learning aims of the entrepreneurship students included developing an understanding of the strengths and weaknesses of different types of enterprises, as well as the opportunity to assess one's own entrepreneurial skill. Knowing the essentials of marketing, finance, operations planning, organisation planning and venture launch planning, together with obtaining resources, were also considered essential. Consideration of the views of participants was a feature of the development of a small business training programme by Le Roux and Nieuwenhuizen (1996: 9). To ascertain those elements deemed to be most important by prospective students, they surveyed 220 aspiring and developing entrepreneurs and discovered that the interests were similar to those cited by Hisrich *et al.* (2005: 32) and included marketing, entrepreneurship, business planning, management and financial management.

While the courses in entrepreneurship vary by university and country, there is a great deal of commonality, particularly in the initial one or two programmes in this field of study. The programmes tend to reflect the overall objectives for a programme in entrepreneurship, as indicated in Table 3.8. These tend to centre around skills identification and assessment, understanding entrepreneurial decision making and the entrepreneurial process, understanding the characteristics of entrepreneurs and their role in economic development on a domestic and, more recently, on an international basis, assessing opportunities and coming up with an idea for a new venture.

Table 3.8: Overall objectives of a course in entrepreneurship

Objectives of entrepreneurship programmes
• Starting an own business
• Understanding the role of new and smaller firms in the economy
• Knowing the general characteristics of an entrepreneurial process
• Understanding the entrepreneurial process and the product planning and development process

Table 3.8 continued…

Objectives of entrepreneurship programmes
• Knowing alternative methods for identifying and evaluating business opportunities and the factors that support and inhibit creativity
• Understanding the aspects of creating and presenting a new venture business plan
• Knowing how to identify, evaluate and obtain resources

• Knowing the essentials of:
  ○ Marketing planning
  ○ Financial planning
  ○ Cash-flow planning
  ○ Operations planning
  ○ Organisation planning
  ○ Venture launch planning

• Knowing how to manage and grow a new venture

Source: Adapted from Hisrich *et al.* (2005: 20)

3.5 Design, content and duration of entrepreneurship training programmes

While access to education is important, limited access is not the only aspect of the educational system that could be contributing to lower levels of entrepreneurship in South Africa. It is also important to consider the content and quality of education. As already stated in section 3.4, Garavan and O'Cinneide (1994b: 14) have summarised the content of five different entrepreneurship programmes and found that the focus of the programmes varied from idea generation and business planning to the identification of products, market research and business formation.

These authors indicate that in terms of the design features of entrepreneurship education and training programmes, the following can be assumed:

- A well-designed entrepreneurship education and training programme will utilise a mixture of didactic, skill-building and indicative learning strategies;
- The programme facilitator will play a combination of role model, consultant and counsellor roles;

- A well-designed programme will allow sufficient time for self-managed and individual-based learning;
- A successful programme will focus on the needs of a well-defined, relatively homogeneous group of participants;
- The objectives of a successful programme will contain an appropriate mixture of knowledge, skill competence and attitude domains of learning; and
- A well-designed programme will emphasise the need for participants to develop an internal locus of control and a positive attitude towards risk.

Hazeltine and Falk (1999: 2) report on the results obtained from an exploratory study of 24 entrepreneurship and small business management textbooks. Their research reveals that there are 19 common topics, emphasising varying aspects of content for each topic. These topics include the major business functional areas, and strategy formulation and business planning, acquisitions and start-ups, and international business and ethics. The main topics seem to include marketing, financial and operations planning and human resource issues (defined earlier in this chapter under business skills, section 3.2.1.4). Since their investigation was mainly aimed at undergraduate students, the target audience influenced the selection of their course content. In another study conducted by Raffo *et al.* (2000: 356), the findings suggest that entrepreneurs learn best by being able to experiment with ideas, by "doing" and networking with others and by working with more experienced mentors in the different sectors.

If one begins to examine what is actually taught in an entrepreneurship programme, it becomes clear that some programmes tend to be more task oriented than behaviour oriented, focusing on specific skills for small business management such as finance and marketing, as opposed to creativity, innovation and problem-solving abilities (Deakins, 1996: 32). McCabe (1998: 8) argues that many structured training interventions do little to alter the approach of the entrepreneur to solving business problems. Entrepreneurs who become task-oriented are more likely to fail. With this in mind, Garavan and O'Cinneide (1994b: 15) question what can actually be taught in entrepreneurship programmes that is specific to entrepreneurship itself. They support Versper's (1982: 323) view that most entrepreneurship programmes do not even promote entrepreneurship, in that they are not "resource effective" and their

results are poor in comparison with the throughput of participants. Currently the problems of entrepreneurial training are seen in the lack of consensus that exists where the content of courses and curricula is involved. Loucks (1990: 45) supports this statement by pointing out that there is a big gap where substantial standardised components exist within the entrepreneurial training programme.

In a study where Van Vuuren (1997: 598) validated the E/P model (refer section 3.2.1) and conducted secondary research on entrepreneurship education and training, the researcher found the current entrepreneurial programmes as:

- Overemphasising theoretical and quantitative instruments;
- Having too few relevant qualitative factors;
- Placing too much emphasis on instruments, concepts and models;
- Focusing on bureaucratic management only;
- Placing too little emphasis on entrepreneurial activity; and
- Having facilitators that concentrate more on virtual than on real problems.

Another point that must be highlighted is the wide variety in the duration of entrepreneurship training programmes. The programmes currently available to entrepreneurs seem to range from one day to one year and, in general, are very short, perhaps too short, when one considers what needs to be included and also when one compares them with other career development courses.

3.6 Measuring the effectiveness of entrepreneurship training programmes

Many researchers, including Curran and Stanworth (1989), Gibb (1987), Block and Stumpf (1992), Cox (1996) and Young (1997), as quoted by Henry *et al.* (2003: 102), have identified the need for evaluating entrepreneurship education and training programmes. Hill and O'Cinneide (1998: 3) have noted that only a few studies have investigated the effects of entrepreneurship education. Falkäng and Alberti (2000: 101) agree, suggesting that there is a need for much more research on methodologies for measuring entrepreneurship education effectiveness. McMullan, Chrisman and Vesper (2001: 39) have argued that it is necessary to assess the

effectiveness of entrepreneurship courses on a number of grounds:

- There is an expectation that the net benefits of entrepreneurship programmes should outweigh their costs and risks;
- Training programmes and courses can be expensive in terms of money from sponsors and time for participants;
- In addition to the more obvious costs highlighted by these authors there, are hidden costs which should also be taken into consideration when assessing a programme's effectiveness. For example, extra costs might be borne by guest speakers, mentors and unpaid consultants associated with programme delivery; and
- Participants may take additional risks if they decide to implement advice from entrepreneurship programmes. Thus, they suggest that central to such evaluations is an assessment of the cost-effectiveness of a particular programme as well as its opportunity costs.

A further opinion is expressed by Storey and Westhead (1994: 31), who criticise the training performance link approach: *"Even if you accept that training has caused the performance, how do you decide when looking after the performance measure, which part of the performance changes were due to the training and which due to other factors such as the market, the personal life of the owner or action of competitors."*

Cushion (1996) summarise several often-quoted stages of success measurements of small business training (Friedrich *et al.*, 2003: 3):

- Knowledge and skills required;
- Delivery of training;
- Learning occurring in recipient;
- Behaviour change as a result of learning;
- Behaviour leading to a change in business performance; and
- Change in business performance measured.

Storey (2000) and McMullan (2001), in Henry *et al.* (2003: 103) suggest that the best way in which to evaluate training courses is to directly relate programme outcomes to objectives. The determining and measurement of effectiveness of entrepreneurship

training programmes, specifically the Women Entrepreneurship Programme, will be explained and presented in Chapter 6 of this study.

3.7 Selected entrepreneurship training programmes in South Africa

As previously noted, the GEM report of 2002 stated that a lack of education and training is the most important weakness restricting entrepreneurship development in South Africa (Reynolds *et al.*, 2002: 23). According to Ladzani and Van Vuuren (2002: 155), entrepreneurial skills training is relatively new in South Africa. The government's Reconstruction and Development Programme (RDP) places major emphasis on entrepreneurial awareness and training. However, it is only since the early 1990s that colleges for vocational education and National Senior Certificates have started recognising the need for intensive training in entrepreneurship (Bowler & Dawood, 1996: 9). Selected entrepreneurship training programmes are presented in Tables 3.9 and 3.10. These tables emphasise the different providers of the programmes as well as content and outcomes. Table 3.9 illustrates the Youth Entrepreneurship Programmes in South Africa and Table 3.10 examines several short courses in entrepreneurship offered by various South African universities and technikons.

Table 3.9 is presented on the next page.

Table 3.9: Selected South African Youth Entrepreneurship Training Programmes

Programme Name	Training Institution or organisation	Content and duration	Outcome for learner/delegate	Target market/ Delegates/ Participants	Reference or website accessed
Business Box	Entrepreneurs on the Move	Used in schools to provide theoretical knowledge and practical entrepreneurial skills	Resulting in the start-up of a business and culminating in the eventual employment of people	School teachers and pupils	www.netventures.co.za
Business Ventures	South African Institute of Entrepreneurship (SAIE)	Learning materials for each grade at schools. These materials comply with all the requirements for teaching the Economic and Management Sciences (EMS) learning area (which includes entrepreneurship.) Duration – one year	Start own business	School Pupils (Grade 2 – 12)	www.entrepreneruship.co.za/products.asp
YES (Youth Enterprise Society)	Education with Enterprise Trust	Life skills, understanding the market economy, business ideas, evaluating the community, setting goals, market research, the business plan, business finance, human resources, business promotion, selling the product, business accounts, business records leading and managing, business communications and entrepreneurship as a career	The medium to longer term aim is to establish a future entrepreneurial stratum, especially in regions of low income populations, which can then help create jobs, build community resources and thus help contribute to the overall national economy. Start own business Further education Secure formal sector employment	Programme for grade 9 (std 7), grade 10 (std 8) and grade 11 (std 9) pupils.	www.ewet.org.za/yes/yes.html

Source: Own complication

It is evident that the Business Box Programme provides entrepreneurial skills (E/S), whereas Business Venture and YES provide business skills (B/S) as well as entrepreneurial skills (E/S).

Other youth entrepreneurship programmes to take note of that were not discussed in Table 3.9:

- Enterprise Dynamics Programme (Junior Achievement South Africa);
- Business Incubation-cum Entrepreneurship Development Centre in Durban;
- Mindset; and
- Hands-on Market (Foundation for Enterprise and Business Development).

Table 3.10 is presented on the next page.

Table 3.10: Selected short courses offered at various South African Universities or Technikons

Programme Name	University/ Technikon	Content and duration	Outcome for learner/delegate	Target market/ Delegates/ Participants	Reference or website accessed
Executive entrepreneurship Programme	University of Pretoria	Module 1: Introduction to Corporate Entrepreneurial Strategy and Culture Module 2: Formulation and Implementation of corporate Entrepreneurial Strategy Module 3: Corporate Venturing and innovation management Module 4: Entrepreneurial Functional Management and growth Module 5: Study tour – Visit five most entrepreneurial companies on USA East Coast Duration: 16 days spread over a period of one year	Delegates should be able to formulate and implement corporate entrepreneurship strategies and management of the corporate venturing process	This programme is aimed at top executives with a honours degree	Continuing education at the University of Pretoria, available from http://www.ceatup.com
Certificate in Entrepreneurship and Small Business management	University of Pretoria	Skills covered during this course: Motivation, creativity, opportunity identification and risk-taking. Role models are discussed (case studies). Marketing, financial and human resource management skills are covered Duration: 5 day course	Write own business plan and start own business.	Course is aimed at delegates with matric (Grade 12) and one year's working experience	Continuing education at the University of Pretoria, available from http://www.ceatup.com
Advanced Certificate Programme in Entrepreneurship (abacus)	University of Pretoria	Teach motivational, entrepreneurial and business skills Duration: 10 day course	Write own business plan and start own business.	Course is aimed at delegates with matric (Grade 12) and two-three years' working experience	Continuing education at the University of Pretoria, available from http://www.ceatup.com
Advanced Programme in Entrepreneurship	University of Pretoria	Module 1: Introduction to entrepreneurship Module 2: Corporate entrepreneurship Module 3: Creativity and innovation Module 4: Entrepreneurial development Module 5: Growth, failure and turnaround Module 6: Advanced entrepreneurship	Starting own ventures	Employees in financial institutions, participants in the enabling environment, government officials and prospective entrepreneurs	Continuing education at the University of Pretoria, available from http://www.ceatup.com

Table 3.10 continued…

Programme Name	University/ Technikon	Content and duration	Outcome for learner/delegate	Target market/ Delegates/ Participants	Reference or website accessed
		Duration: one year programme			
Corporate entrepreneurship development programme	University of Pretoria	This course improves the entrepreneurial capacity of middle managers and provides them with a competitive advantage in their business environments. Elements covered: entrepreneurial skills, business skills and strategic entrepreneurial growth Duration: 18 days spread over a period of one year	Initiate new ventures inside the organisation, manage such new ventures, contribute to the growth of the organisation, increase the competitiveness and profitability of the organisation and create an entrepreneurial vision	Delegates with B degree and three years' management experience	Continuing education at the University of Pretoria, available from http://www.ceatup.com
Corporate venturing	University of Pretoria	Module 1: Creativity and opportunity identification Module 2: Corporate venturing Module 3: Business skills Duration: 15 days spread over a period of one year	Delegates should design and write business plans.	Delegates with matric (Grade 12)	Continuing education at the University of Pretoria, available from http://www.ceatup.com
Teaching entrepreneurial skills development programme	University of Pretoria	Introduction to entrepreneurship and business skills. Duration: 3 day course	Delegates should be able to understand the process of entrepreneurship, the development of entrepreneurial orientation and understand basic business principles	Educators, trainers and small business owners	Continuing education at the University of Pretoria, available from http://www.ceatup.com
Women Entrepreneurship Programme (WEP)	University of Pretoria	Entrepreneurial skills and business skills are taught during the course. Networking, counselling, mentoring, and balancing work and family are discussed. Duration: Six day course with a week and a half break between days four and five in order for delegates to prepare their business plans.	Developing own business plans, starting own business, growing own business, networking with other women entrepreneurs, receiving mentors to work with in	Women with matric (Grade 12) who want to start their own businesses as well as helping those who are in business already to grow their own businesses	Continuing education at the University of Pretoria, available from http://www.ceatup.com

Table 3.10 continued…

Programme Name	University/ Technikon	Content and duration	Outcome for learner/delegate	Target market/ Delegates/ Participants	Reference or website accessed
			future.		
Business Development Management Programme (BMDP)	Technikon Witwatersrand (now University of Johannesburg)	Module 1: Management Principles and Practice Module 2: Personnel Function Module 3: Marketing Module 4: Financial Accounting Module 5: Law of Contract Module 6: Introduction to Operations Management Duration: 3 trimesters of part-time study	Overview of the most important managerial functions and essential skills to manage the business more effectively	First level managers, or entrepreneurs running their own business	Technikon Witwatersrand, available from http://www.twr.ac.za
Short course in writing a business plan	University of South Africa	Providing entrepreneurs with the necessary skills and knowledge to write a business plan. Duration: Three months	Compiling a business plan for their own businesses	People who wish to start a new business, or who want to expand an existing business and/or delegates who need to obtain finance	University of South Africa, available from http://www.unisa.ac.za
Programme in Entrepreneurship and Small Business Management	University of South Africa	Module 1: Introduction to entrepreneurship Module 2: Entering the business world Module 3: The business plan. Module 4: Managing the small business Duration: One year	Transfer entrepreneurial and managerial skills to potential entrepreneurs through Africa-relevant multi-media (mainly case studies, simulation of real business situations). Improve small business management skills of those entrepreneurs who already own a small business.	A Senior Certificate or equivalent qualification.	University of South Africa, available from http://www.unisa.ac.za
Entrepreneurship and Small Business Development	Technikon Witwatersrand, (now University of Johannesburg)	Topics: entrepreneurship and new venture formation, human resource management in small business, marketing and accounting Duration: 130 teaching hours spread over one year	This programme aims to improve performance, deepen knowledge and provide useful analytical business tools.	Participants should have matric (Grade 12) and have three to five years' experience.	Technikon Witwatersrand, available from http://www.witsplus.wits.ac.za

Table 3.10 continued…

Programme Name	University/ Technikon	Content and duration	Outcome for learner/delegate	Target market/ Delegates/ Participants	Reference or website accessed
How to start your own business	University of The Free State	Introduction to entrepreneurship. Organising the venture – business skills. Business plan preparation. Duration: 16 hours contact time	Understand entrepreneurship, determine the feasibility of a business idea, draw up business plan and apply some basic selling skills and customer relations	Delegates must have at least one year of experience in the private or related sector or any qualification in Economic and Management Sciences	University of Free State, available from http://www.uovs.ac.za
Business Management/ Entrepreneurship	Cape Peninsula University of Technology	Introduction to entrepreneurship, internet, management process, other business skills and the business plan. Duration: 36 hours, comprising a 2-hour session every Tuesday and Thursday	Improve general management skills and startan own business	Owners and managers of small and medium businesses who need to improve their management skills as well as those considering starting their own business.	Cape Peninsula University of Technology, available from http://www.cput.ac.za

Source: Own compilation

The content analysis was based on the information provided by each institution and may not reflect what is actually taught in the various programmes. According to Table 3.10 above, all the short courses presented provide E/S and B/S. The Women Entrepreneurship Programme (WEP) is the only one of its kind in South Africa and Chapter 4 will highlight why there is a need for such a programme. Chapter 5 will emphasise the content of the WEP and illustrate how it differs from other programmes offered to both genders.

Table 3.11 presents other entrepreneurship short courses/programmes and centres in South Africa that are available to entrepreneurs.

Table 3.11: Other entrepreneurship short courses/programmes and centres

Name of programme/short course	University/Technikon/Centre
New Venture Creation	Wits Business School, University of Johannesburg
Entrepreneurship and Small Business Development	Technikon Free State
Entrepreneurship teaching programmes Focus areas include: • Business Planning, Corporate Entrepreneurship, Business Mentoring, Finance and General Administration	Graduate School of Business – University of Cape Town
Various programmes	UCT Centre for Innovation and Entrepreneurship
Matie Community Service	University of Stellenbosch
Entrepreneurship programme	Centre for Entrepreneurship, University of KwaZulu-Natal
Business Beat	Deloitte & Touche Project

Source: Own compilation

There are many more entrepreneurship programmes and short courses that are offered by various organisations or institutions that could not be mentioned in this study. It is, however, evident that for an institution to claim that it provides entrepreneurship training is not enough. The content of what is provided, analysis of potential entrepreneurs and the expertise of trainers should also play an important role (Ladzani & Van Vuuren, 2002: 156).

In a study conducted by Ladzani and Van Vuuren (2002: 158) in the Northern Province (now Limpopo) in South Africa, the following actions are recommended to strengthen entrepreneurship training for successful small business enterprises:

- Existing training firms should revise their training material;
- SMME service providers should benchmark their services against similar successful institutions;
- Educational institutions should introduce and/or strengthen entrepreneurship education; and
- Emerging and potential entrepreneurs should be encouraged to take courses in entrepreneurship.

3.8 Existing Entrepreneurial Skills Development Programmes (ESDP) in Africa

According to Nafukho (1998: 100), youth unemployment in Africa has reached alarming proportions. Since most African countries gained their political independence, there has been increased population growth, rapid expansion of the education systems, high levels of rural-urban migration, political conflicts and worsening economic performance. These factors have led to the problem of unemployment, especially among the youth leaving various educational institutions. This has led to the introduction of ESDPs in countries like Gambia and Nigeria in West Africa, Malawi and Zimbabwe in Central Africa, Swaziland in Southern Africa and Uganda and Kenya in East Africa.

Rao (1991: 2) defines ESDP as any comprehensively planned effort undertaken by an individual, a group of individuals, or any institution or agency to develop entrepreneurial competencies in people. Competencies are intended to lead to self-

employment, economic self-sufficiency and employment generation through long-term education or short-term training (Nafukho, 1998: 100). Table 3.12 sets out the entrepreneurial programmes and activities within some African countries.

Table 3.12: ESDPs in several African countries

Country	Entrepreneurship organisation/Educational Institution	Programme objectives and outcomes
Gambia	The Gambian Technical Training Institute	Prepares candidates for mid-level employment
	Business Advisory Service	Provides expert advice to potential entrepreneurs with technical skills
Nigeria	Industrial Development Centre (IDC)	Stimulates new ventures and provides sufficient motivational force to improve the existing situation
Malawi	The Small Enterprise Development Organisation	Provides financing to motivated entrepreneurs, and development activities of the Malawian Traders Trust provide advisory services to traders
	Chifukuko Cha Amayi M'malawi	Provides advice to women on how to start income-generating activities
	Malawian Entrepreneurs Development Institute	Conducts courses and seminars for beginning entrepreneurs, established entrepreneurs and those who possess neither technical nor entrepreneurial skills
Zimbabwe	The Cooperative Development Centre	Run by the Department of Housing, Community Services
	Ponesai Vanhu Technical Center	Provides management skills to

Table 3.12 continued…

Country	Entrepreneurship organisation/Educational Institution	Programme objectives and outcomes
		those leaving school with various trades. It also provides skills training in agriculture, building, metalwork and home economics
Swaziland	Small Enterprise Development Company	Initiated by the United Nations Development Programme. Provides financial assistance and entrepreneurship information
	Manzin Industrial Training Centre	A business management extension that gives training information with the assistance of US AID
	Swaziland Training for Entrepreneurs Project	Provides financial assistance, baseline information, technical assistance and distribution of relevant information regarding entrepreneurship
Uganda	Namutamba Project	Basic education integrated into rural development
	National Youth Organisation	Develops positive attitudes and cultivates an entrepreneurial spirit
Kenya	The country has more than 500 youth polytechnics, 20 technical training institutes, 16 institutes of research, science and technology and three national polytechnics	These institutions have always offered training in technical skills and in 1990 entrepreneurship education was added to the curriculum.

Source: Own compilation as adapted from Nafukho (1998: 101)

Nafukho (1998: 103) states that a crucial issue that needs to be addressed if entrepreneurship is to be promoted in Africa relates to the content of training in entrepreneurship. There is a need to systematically build up a body of knowledge and skills in the new field of entrepreneurship education.

3.9 Other international (USA, Europe and Asia) entrepreneurship programmes

According to Garavan and O'Cinneide (1994a: 3), a wide range of factors have contributed to the revival of interest in entrepreneurship and small business in both Europe and the USA in the 1990s. Entrepreneurship education is a fast-growing area in colleges and universities in the USA and throughout the world.

3.9.1 The US perspective

The United States Small Business Administration (USSBA) reports that small businesses represent more than 99.7 % of all employers, employ more than half of all private-sector employees and generate 60 to 80 % of new jobs annually in the USA (Longenecker, Moore, Petty & Palich, 2006: 6). These figures may seem unbelievable, but it should be taken into account that the USA does not make use of a standard definition to define a small business, as is the case in South Africa. The United States Small Business Act states that a small business concern is one that is independently owned and operated and which is not dominant in its field of operation. The law also states that in determining what constitutes a small business, the definition will vary from industry to industry to reflect industry differences accurately (USSBA, 2006).

It is clear that entrepreneurship and small business training is seen as high priority in the US. Tertiary institutions only started presenting entrepreneurship during the early 1970s in the USA. Today more than 1000 universities and colleges are presenting courses in entrepreneurship, compared with 50 in 1975, 117 in 1979, 263 in 1983 and 417 in 1986 (Timmons, 1994: 7). Hisrich *et al.* (2005: 19) agree that many universities in the USA offer at least one course in entrepreneurship at the graduate or undergraduate level and a few actually have a major or minor concentration in the

area. Falkäng and Alberti (2000: 101) state that there were at least 102 endowed positions (chairs and professorships) in entrepreneurship in 1995.

Hills, Romaguera, Fernandez, Gonzalez, Hamilton, Perez and Rollman (1996: 23), reporting on entrepreneurship training developments in Puerto Rico, South America, suggest that there are three emerging models for entrepreneurship education and training programmes:

- Introductory courses which focus on the development of a business plan;
- Courses for established businesses which focus on growth; and
- Management-related courses which emphasise innovation, team-building and entrepreneurial characteristics.

3.9.2 The European perspective

Volery (2004: 1) notes that the recent Entrepreneurship Green paper published by the European Union (EU) states that there are lower levels of entrepreneurial activity in the European Union than in economies such as the USA. It appears that too few Europeans set up their own businesses and too few small businesses in Europe experience substantial growth. Yet almost half of Europeans note that they would prefer to be self-employed, and almost a third of Europe's Small and Medium Enterprises (SMEs) cite growth as their main ambition.

There would appear to be general consensus within the EU that SMEs are the key sector for generating employment opportunities and growth throughout Europe. The European Commission (2001: 15) states that 66 % of total employment in the EU comes from the SME sector and that the potential for SMEs to grow and create even more jobs has not yet been fully realised. The European Commission (2001: 17) introduced a multi-annual programme for the period 1997-2000 which includes the following:

- The reduction of "red tape", which hampers entrepreneurship;
- Ensuring better involvement of SMEs with state agencies in the decision-making process;
- Helping to finance the SMEs which can create jobs;
- Vigorous action to promote research, innovation and training for SMEs; and

- Enhancing competitiveness and internationalisation of SMEs.

A key challenge facing Europe is how to motivate individuals to become entrepreneurs and to equip them with the right skills to turn opportunities into successful ventures (Volery, 2004: 1). Van Voorhis, Stenhorn and Hofer (1996: 435) incorporated a 30-week entrepreneurship training schedule into the "B-17 Educational Plan", a Swedish pilot programme for teaching entrepreneurship to the unemployed. The course, involving a cross-functional team approach with 20 team members and a "president" per business proposal, has been designed to progressively develop and/or enhance the core enterprise skills required for setting up a new business. Strong emphasis has been placed within the course on sales training. As Van Voorhis *et al.* (1996: 435) point out, in their experience selling skills are not only crucial to the successful start-up of a new business venture, but are highly valued by government agencies and funding bodies whose ultimate goal is to create more exports. Hence, the "B-17 Educational Plan" uses sales capability as a discriminating factor as participants progress through the programme. Since the "B-17 Plan" is still in its infancy, no empirical data has yet been gathered to test the long-term effectiveness of the programme.

Furthermore, as previously mentioned, Garavan and O'Cinneide (1994b: 13) reviewed the literature on the design of entrepreneurial education and training programmes in Europe. The six programmes that were studied included:

- The High Technology Entrepreneurship Programme, Limerick, Ireland;
- The Entrepreneur Programme, Lyon, France;
- The Students' Entrepreneurship Programme, Lyon, France;
- The Gemini New Entrepreneurs' Programme, Milan, Italy;
- The High Technology Start-up Programme, Barcelona, Spain; and
- The Business Growth Programme, Cranfield, England.

All the programmes take as a philosophical starting point the view that there is a strong connection between the quality of the rounding entrepreneurial team, its growth potential and its ability to attract funding. A second dimension of philosophy common to all the programmes is the use of learning strategies. Participants are expected to take full responsibility for the learning process and to view it as

continuous. This is done through workshops, individual counselling, peer evaluation, case studies and role-plays.

Another study conducted by Henry *et al.* (2003: 124) describes the comparative analysis of eight other entrepreneurship training programmes in Europe. The programmes included in the investigation were as follows:

- Four programmes from Ireland:
  - An all-Ireland, industry sponsored programme (Programme A)
  - A cross-border programme (Programme B)
  - An industry-sponsored redundancy programme (Programme C)
  - A Dublin based programme (Programme D)
- One programme from the Netherlands (Programme E)
- One programme from Sweden (Programme F)
- One programme from Finland (Programme G)
- One programme from Spain (Programme H)

Some problems were encountered by Henry *et al.* (2003: 145) when they conducted the comparative analysis on the eight different European entrepreneurship programmes. In a number of cases, a breakdown of specific programme elements was not available and often no distinction was made between formal training and practical workshops, or between mentoring and business counselling. In spite of these constraints, it was possible to compare the programmes by content, specifically in terms of training, in Table 3.13.

Table 3.13 is presented on the next page.

Table 3.13: Comparative analysis of eight European entrepreneurship training programmes

Programme	Programme description	Structure and Content	Other support services provided	Overall Effectiveness
Programme A	Designed to promote graduate entrepreneurship throughout the island of Ireland.	Delivered over a six-month period and included topics such as generating the business proposal, determining legal and financial requirements, planning the business operation and human resource development	Mentoring Counselling Access to finance	By the end of the programme three out of the 35 participants reported that their businesses had already reached start-up stage, 15 indicated that they intended to proceed to start-up.
Programme B	This programme was designed to assist those with technology based product or service ideas.	The programme had a total duration of 15 months and was structured in two stages. Stage one concerned market feasibility. Stage two focused on developing a prototype, determining an appropriate marketing strategy and completing a business plan.	Mentoring Counselling Incubation Access to finance	During the first three rounds of the programme, a total of 30 technology projects were supported through the complete 15-month phase, resulting in the establishment of 26 new businesses.
Programme C	Programme designed for redundancy individuals	Three-day training programme. Covering areas of marketing, finance and developing a business plan.	Mentoring Access to finance	By the end of the programme three of the 48 individuals who had participated had managed to set up their businesses, with a further 15 stating that they intended to proceed.

Table 3.13 continued…

Programme	Programme description	Structure and Content	Other support services provided	Overall Effectiveness
Programme D	This programme was designed to assist entrepreneurs in developing knowledge-based enterprises.	This programme was offered over a nine-month period. The content included: improving efficiency and identifying opportunities for expansion, developing a business plan and analysing business ideas.	Mentoring Counselling Access to finance	During the first year of operation, this programme supported 11 entrepreneurs, where 7 had already established businesses and they all rated the programme as "excellent".
Programme E	This programme was designed to encourage graduates of the Dutch University to set up their own knowledge-based businesses.	Support was offered over a one-year period. This support included: Office space and facilities, training, financing and mentoring.	Mentoring Counselling Incubation Access to finance Follow-up support	From its establishment in 1984 up to the end of 1997, 230 individuals had participated in this programme, resulting in the creation of 170 knowledge-based firms.
Programme F	This programme was an initiative of a Centre for Innovation at a Swedish based University. It was targeted at individuals who had a viable business idea.	The participants must develop business plans, mentoring is an important aspect of this programme.	Mentoring Counselling Access to finance Follow-up support	This programme was first developed in 1993 and during the following four-year period, 25 new firms were created.
Programme G	This programme is a	This programme helps new entrepreneurs to	Mentoring	By the time this research was

Table 3.13 continued…

Programme	Programme description	Structure and Content	Other support services provided	Overall Effectiveness
	joint venture between the scientific institutions, technical research centres, public authorities, financiers and the local business community.	identify the resources needed to develop their ideas into businesses or to license them to other companies. It also assists entrepreneurs in estimating the profitability of proposed new ventures.	Counselling Access to finance Follow-up support	conducted, this particular programme had received more than 600 applications and 230 had been accepted, of which 170 had progressed through the programme and developed new companies.
Programme H	This programme is managed by one of Spain's Polytechnic Universities and its main objectives are to introduce new employment opportunities to graduates and support technology transfer through the creation of new firms.	This programme was structured in two parts. Part one: Submission of a short proposal by aspiring entrepreneurs interested. Part two: lasted 10 – 12 months; participants were helped to develop a full business plan, offered finance for the development of their products or services.	Mentoring Counselling Access to finance	The programme has been in operation since 1992 and up until 1999. 431 proposals were accepted and 77 business plans were developed, which in turn created 56 new businesses.

Source: Own compilation adapted from Henry *et al.* (2003: 124–150)

Three of the programmes (programmes E, F and G) provided follow-up support, although it was unclear what this involved.

3.9.3 The Asian perspective

3.9.3.1 India

According to Dana (2001: 405) the National Institute for Entrepreneurship and Small Business Development is the parastatal organisation that oversees the formal training of small business managers in India. The institute organises entrepreneurship development programmes, prepares manuals and produces educational videos. Non-governmental organisations also teach small business management in India. The Progress Harmony Development (PHD) Chamber of Commerce is notably active in this field. Since its establishment, in 1905, the chamber has grown to include over 1 600 direct members and 80 associates serving over 22 000 small enterprises (Dana, 2001: 406). Since 1988, the Konrad Adenauer Foundation of Germany has cooperated with the chamber, sharing the belief that the development of enterprising spirit and initiative among individuals can help a society achieve self-reliance and optimal development. Functions of the PHD Chamber of Commerce and Industry include: developing entrepreneurial skills and attributes; training of small firms to improve productivity; fostering a spirit of self-reliance and self-confidence to make entrepreneurship self-generating; and providing vocational education and training.

3.9.3.2 Indonesia

To encourage enterprise among the indigenous Indonesians – known as pribumis – the state introduced a policy allowing these people favourable credit terms and easy access to business permits (Dana, 2001: 406). Yet they often lacked entrepreneurial skills and were rarely interested in pursuing entrepreneurial training. In 1973, Indonesia introduced the Small Enterprises Development Programme, a subsidised credit scheme. Results were less than satisfactory and the programme was discontinued. The government concluded that small-scale entrepreneurs could be better assisted through vocational education and training than with finance alone, and a special guidance scheme was introduced to train these entrepreneurs.

3.9.3.3 Malaysia

In recent years, Malaysia's Ministry of Entrepreneur Development has been very involved in training entrepreneurs (Dana, 2001: 409). Its courses teach business registration, book-keeping and ethics. The focus is on teaching the managerial skills required to operate a small firm successfully.

3.9.3.4 The Philippines

The Small Enterprises Research and Development Foundation of the Philippines (SERDEF) was established by the private sector to initiate, sponsor, promote, assist and conduct research, training and development in micro-enterprises, cottage industries and small and medium sized firms in the Philippines. The foundation works with a variety of organisations, forging linkages with government agencies, industry associations and educational institutions, such as the University of the Philippines Institute for Small Scale Industries. SERDEF has funded several training and support publications, including: *Introduction to Entrepreneurship; Credit Manual for Small and Medium Enterprises* and *Filipino Women in Business.* (Dana, 2001: 409).

3.10 Training programmes for women entrepreneurs

This study is concerned with a training programme designed for women entrepreneurs (WEP) and therefore it is necessary to explain why there is such a programme. A long-running debate in the development of start-up training programmes and services for women has been concerned with the need for single-sex provision (Richardson & Hartshorn, 1993: 43). The key issue in single-sex provision lies in the fact that some women may require greater nurturing of self-confidence and esteem, as well as business skills. The WEP includes topics that are not normally included in entrepreneurship training programmes for both genders. The WEP includes topics such as: networking and support; making use of role models, mentors and counsellors; confidence-building; and places more emphasis on the financial and marketing aspects of a business. A needs analysis was done (presented in Chapter 4) which highlighted the fact that women want a programme

specifically for them. For this reason, it seems clear that if there is a demand for such services, there should also be provision (Carter, 2000: 330). Chapter 4 will further emphasise why there is a need for a women entrepreneurship programme and Chapter 5 will focus on the design of this programme.

3.11 Conclusion

This chapter endeavoured to answer the questions concerning "objectives, content, design and duration" and "effectiveness" of the entrepreneurship programme with regard to the training models and programmes presented.

Although there has been a growth in the number and type of entrepreneurship programmes and courses in South Africa, it would appear that little empirical research has been directed towards evaluating the content and pedagogy of these programmes, and also their effectiveness. Falkäng and Alberti (2000: 102) agree that many studies aimed at assessing the impact of educational content or method tend to be centred on a specific course, with obvious problems of generalisation.

Two training models were discussed and an improved entrepreneurship training model was developed. This was done to provide the framework for developing the WEP, discussed in Chapter 5. Various entrepreneurship training programmes in South Africa and internationally were presented in this chapter. The chapter concluded by focusing on specific training programmes for women entrepreneurs. It is, however, necessary to do a thorough investigation into the literature on women entrepreneurs in the next chapter, with specific reference to education and training.

Chapter 4: Women entrepreneurs in South Africa

"To encourage larger numbers of women into self-employment, there is a clear need to widen access to business start-up training and advice. In practice, this implies offering a wide range of start-up support services which encourage women into business. Women enter business from a wide variety of backgrounds and with a wide range of experience. The provision of business start-up training and advice needs to accommodate these very different experiences. Women attending entrepreneurship programmes have often criticised these programmes as being male-orientated and prescriptive. Despite the prevailing view among management theorists of the need for businesses to use female management skills, there is little evidence of this being addressed in start-up programmes. By contrast, women are expected to conform to male models and standards of behaviour and learning is seen as being 'one-way', that is, women learn male behaviours."

- Carter (2000: 313)

4.1 Introduction

Reflection on the social construction of gender and economics (and business economics in particular) started late in comparison with other scientific disciplines. Its most obvious contentions were that men have always dominated the scientific community, that gendered attitudes to entrepreneurs make women invisible and that analyses of women's experiences are inadequate, biased or distorted (Bruni, Gherardi & Poggio, 2004: 258). During the same period, management and organisation studies took a "gender-neutral" approach to entrepreneurship (Aldrich, Baker & Liou, 1997: 224), but they did so by studying male entrepreneurs and considering their female counterparts to be only a tiny minority, not worthy of particular attention.

Moore and Butter (1997: 19) maintain that until the beginning of the 1980s almost nothing was known about women entrepreneurs and that entrepreneurship studies concerned themselves almost entirely with men. It was therefore during the 1980s that scientific discourse on women entrepreneurs and women-run organisations began to gain ground. Mattis (2004: 155) agrees stating that until recently much of

what has been known about the characteristics of entrepreneurs, their motivations, backgrounds, families, occupational experience, their successes and failures, has been based on male entrepreneurs. In addition, little attention has been given in entrepreneurship studies to under-represented minority business-owners.

According to Timmons and Spinelli (2004: 256) now that there is an increase in the number of women involved in entrepreneurship, researchers have begun to study why this disparity exists and whether there are inherent differences between men and women entrepreneurs. Statistics in the USA show that women-owned businesses are the fastest growing segment of new business start-ups; black women's businesses form a larger share of black-owned businesses than white women's businesses do of white firms (Mattis, 2004: 155). Researchers' interest in entrepreneurship among women is reflected in the number of PhD dissertations on women entrepreneurs – 54 between 1993 and 2003. Attention is also given to this topic at professional meetings such as the 2003 annual meeting of the Academy of Management in the USA and various other women's conferences and societies. (Mattis, 2004: 155).

Yet despite the growing number of women entrepreneurs, Starr and Yudkin (1996: 11), state: "*we know surprisingly little about women entrepreneurs' business practices, survival and growth strategies, and their perceptions of their entrepreneurial careers"*. McClelland, Swail, Bell and Ibbotson (2005: 85) agree and argues that: *"women entrepreneurship is an under-researched area with tremendous economic potential and one that requires special attention"*. However, Brush (1992), Ahl (2002) and Monaci (1997) in Bruni *et al.* (2004: 259) state that research has indicated that studies on women entrepreneurs are broadly divided among five thematic areas:

- The "breeding grounds" of female entrepreneurship;
- Patterns of female entrepreneurship;
- The barriers against female entrepreneurship;
- The motivations of women entrepreneurs; and
- Their organisational and managerial methods – the enterprise culture of women entrepreneurs.

This chapter, therefore, endeavours to address these issues through investigating South African women entrepreneurs. An investigation is launched to find the most significant reasons why women start businesses, the barriers they face as well as comparisons between men and women entrepreneurs. The chapter concludes by presenting women entrepreneurs' needs in terms of entrepreneurial and business training and exploring the need for women entrepreneurship training programmes.

4.2 Literature on women entrepreneurs in South Africa

McClelland *et al.* (2005: 87) define a woman-owned business as one which is at least 51 % owned by one or more women or, in the case of any publicly-owned business, at least 51 % of the stock of which is owned by one or more women; and the management and daily business operations of which are controlled by one or more women.

According to Friedrich *et al.* (2003: 2), the focus of the South African government is primarily on the development of previously disadvantaged communities. Women entrepreneurs in South Africa have, however, been particularly disadvantaged as, in the past, they owned no property to be used as collateral on loans and in fact needed their husbands' permission to enter into financial arrangements (Simbwaye, 2002: 3). As a result, many of the informal sector women entrepreneurs do not even have bank accounts, let alone access to external finance. The shift of the new South African government after 1994 was not accompanied by a widespread rise of research in this sector linked to psychological, cultural and economic factors. This is especially true for the training sector. Due to the restructuring policies in organisations, the current business climate in South Africa is certainly right for women to enter business in much larger numbers and play a leading role in organisations. They are much more at ease around critical issues such as co-operation, networking, transparency and relationships.

According to Foxcroft *et al.* (2002: 25) the rate of entrepreneurial activity among men is far higher than that among women. South Africa is no exception. Cultural and social norms are more likely to play a role in these gender differences, particularly since women traditionally have more domestic responsibilities such as child-rearing.

The authors stress that it is important that more South African women be encouraged to pursue entrepreneurial ventures and point out that particular obstacles to the involvement of women in self-employment activities need to be addressed. However, in August 2005, Nkau (2005: 20) quoted the GEM international study, stating that women in South Africa are matching men step by step when it comes to starting and running their own businesses, putting local female entrepreneurial activity at the same level as that in developed countries like the USA and Finland. Von Broembse, lead researcher on the South African GEM report conducted by the University of Cape Town (UCT) Graduate School of Business, states that the goal of this report is to provide a comprehensive and up-to-date study of the role played by women involved in entrepreneurial activity in the world economy (Nkau, 2005: 20). The report shows that the gender gap is widest in middle-income countries and lowest in high-income countries. In low- and middle-income countries, South Africa being classified as the latter, many women are involved in entrepreneurship because of a lack of alternative job opportunities.

According to Hendricks (2001: 7), the multitude of challenges facing women entrepreneurs in South Africa means that their full economic potential is not fully exploited by both business and government. Such challenges have been documented in many documents and articles, including the report compiled by the Africa Project Development Facility (APDF), which points out that such challenges include access to finance and the cost of finance, access to the market, access to information on support services available and access to training (Dlamini & Motsepe, 2004: 13). Mallane (2001: 21) highlights the fact that the report, “Profile of Successful Women in Business” pointed out some of the challenges facing women in business. With the increasing level of participation of women in small business activities comes the challenge of providing supportive measures that will ensure their success in the sector. The author continues by arguing that it is important to put gender equality in its proper perspective; gains by women do not necessarily mean losses for men. On the contrary, communities and countries that have given equal access to women and men in the economic sphere have progressed much faster than those that have denied such access. It is true that although there has been a general expansion of women’s capabilities, women have on the other hand experienced only limited opportunities despite these changes: women entrepreneurs

still face gender-specific constraints at almost every stage of their business operation. These constraints normally include lack of financial skills, lack of training and market access and role barriers, to name but a few. Moreover, policy interventions designed to alleviate the constraints in the SMME sector have often not been beneficial to women entrepreneurs (Mallane, 2001: 22).

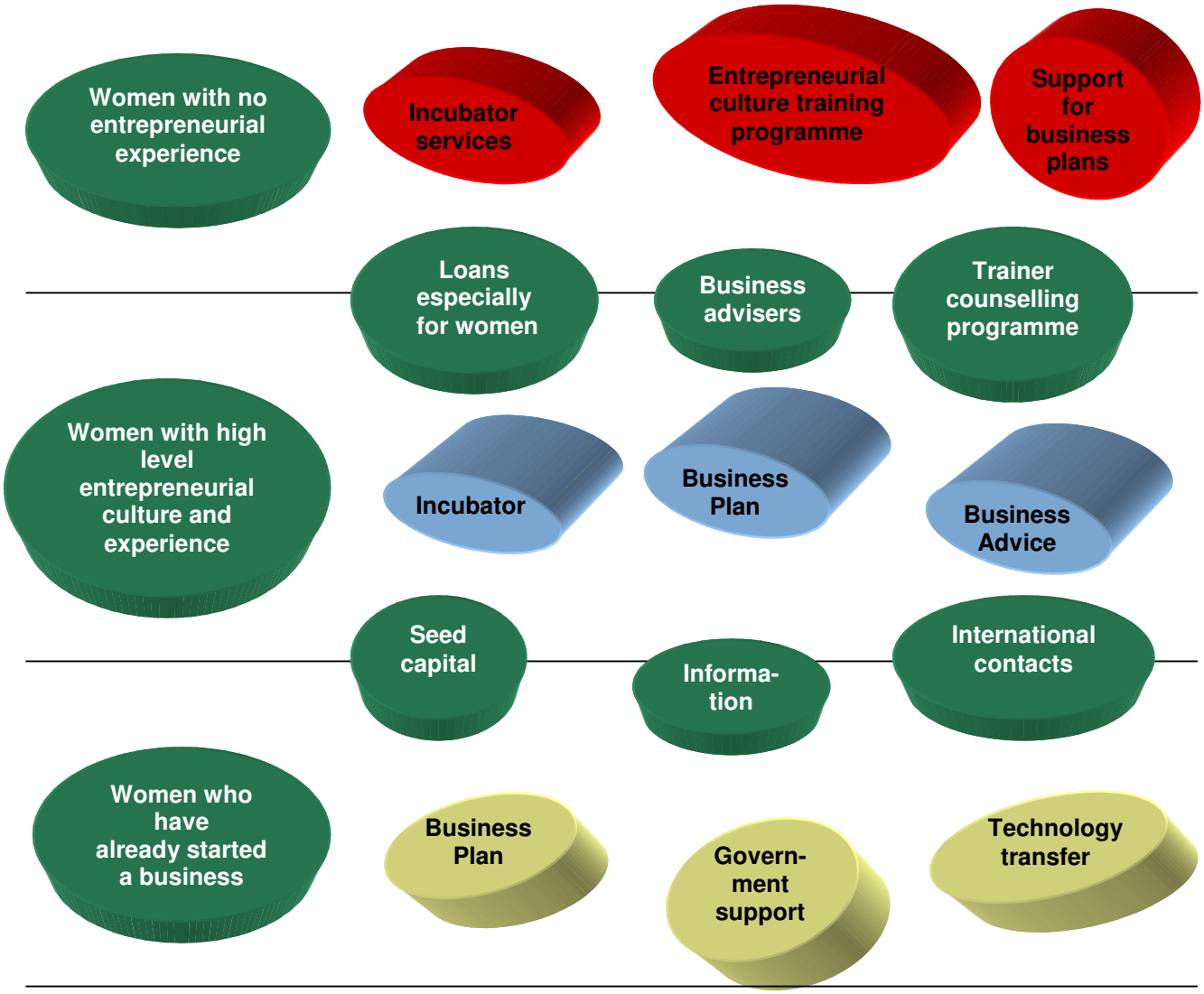
McClelland *et al.* (2005: 91) conducted an investigation to compare the cross-cultural motivations of women entrepreneurs to start their own business within six different countries: Canada, Singapore, Australia, New Zealand, Ireland and South Africa. Many of the businesses that they studied can be described as "socially oriented", designed to help the overall community, environment or disadvantaged groups in society. In South Africa this trend appears most strongly across a diverse range of business sectors, with three different entrepreneurs citing the following reasons for their business activities:

- Had an interest in women's issues and used the business as a promotional tool to fund and address the issue of abusive relationships;
- Felt compelled to use her business venture to create a strong community spirit; and
- Had a strong desire to address the gross inequalities, poverty, underdevelopment and the information drought experienced by women in business.

Support structures for women entrepreneurs in South Africa are a crucial element that can contribute to more successful women business owners. Figure 4.1 illustrates some of the support mechanisms that are available to women entrepreneurs at different levels of their entrepreneurial culture and experience.

Figure 4.1 is presented on the next page.

Figure 4.1: Support mechanisms for women entrepreneurs in South Africa



Source: Own compilation

The following observations can be made from Figure 4.1:

- Women with no entrepreneurial experience, as well as women with a high-level entrepreneurial culture and experience, could make use of incubator services, entrepreneurial culture training programmes and find support for business plans.
- Loans especially for women, business advisors and trainer counselling programmes can be utilised by women with no entrepreneurial experience as well as women with a high-level of entrepreneurial culture and experience.
- Seed capital, information and international contracts can be utilised by women with high-level entrepreneurial culture and experience as well as women who

have already started a business (start-up and already established women entrepreneurs).

- Start-up and already established women entrepreneurs can make use of business plan support, government support and technology transfer.

Other women business associations and organisations that can provide support and assistance to entrepreneurs in South Africa are highlighted in Table 4.1.

Table 4.1: Support organisations for women entrepreneurs in South Africa

Name of organisation	Abbreviation used
South African Women Entrepreneurs Network	SAWEN
Business Women's Association of SA	BWASA
Technology for Women in Business	TWB
SA Women In Mining Association	SAWIMA
National Women in Agribusiness Co-operative	NAWACO
Women in Oil and Energy of SA	WOESA
Women In Nuclear	WIN
African Women Chartered Accountants	AWCA
Women in Information Communication and Technology	WICT
The National African Women's Alliance	NAWA
Women In Research	WIR
South African Women In Construction	SAWIC

Source: Own compilation

4.3 Factors motivating women to start their own business

Recent studies have shown that the choice to start a new business is far more complex for women then men, and that women tend to be more sensitive than men

to a variety of non-monetary incentives. For women more than for men, the choice to start a new business is often linked to necessity or to time and location flexibility; that is, to the type of independence that can accommodate family needs and child rearing (Arenius, Minniti & Langowitz, 2005: 15). According to Adhikary and Rai (1999: 60), 49 % of all women in South Africa indicated that they started their businesses because of their own ideas. Overwhelming variety can be seen in the ideas and motivation to start a business. 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 six (Arenius *et al.*, 2005: 12).

Dollinger (1999: 43), Wickham (2001: 63) and Nieman *et al.* (2003: 31) present a method for analysing the WHY (do women start businesses) question by means of push and pull factors. This section of the chapter focuses on the main reasons or forces that drive individuals to become entrepreneurs. They can be classified as either opportunity (pull factors) or necessity (push factors) of entrepreneurship. Necessity and opportunity entrepreneurship were mentioned in Chapter 1. Most people face a combination of push and pull factors, as indicated in Figure 4.2. Schindehutte, Morris and Kuratko (2000: 6-8) indicate that push versus pull factors or positive versus negative circumstances give rise to entrepreneurial action. Thus one is "pushed" into entrepreneurship by job dissatisfaction and another "pulled" into entrepreneurship by perception of market opportunities. These authors continue by stating that start-ups are generally thought to be triggered by individual factors such as the need for survival, job dissatisfaction or lay-off, divorce, death of a family member, desire to improve one's lot, a windfall, deliberate search or invitation. 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 factors as a career path that offers entrepreneurial opportunities or an education that gives the individual the appropriate knowledge and opportunity. 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.

Nieman *et al.* (2003: 31) indicate that push factors are those which encourage entrepreneurship for reasons such as traditional jobs being less attractive or possibly the fact that an individual does not have any other career choice or option; they include:

- Unemployment: a person who does not have a job in the established economy;
- Job insecurity, for example if a person is only appointed on a contract basis for a short-term period;
- Disagreement with management, career limitations and setbacks in a conventional job;
- Inability to "fit in" with the organisation; the inability to pursue a personal innovation in a conventional job;
- The limitations of financial rewards from conventional jobs;
- No other alternatives; and
- Reaching the "glass ceiling".

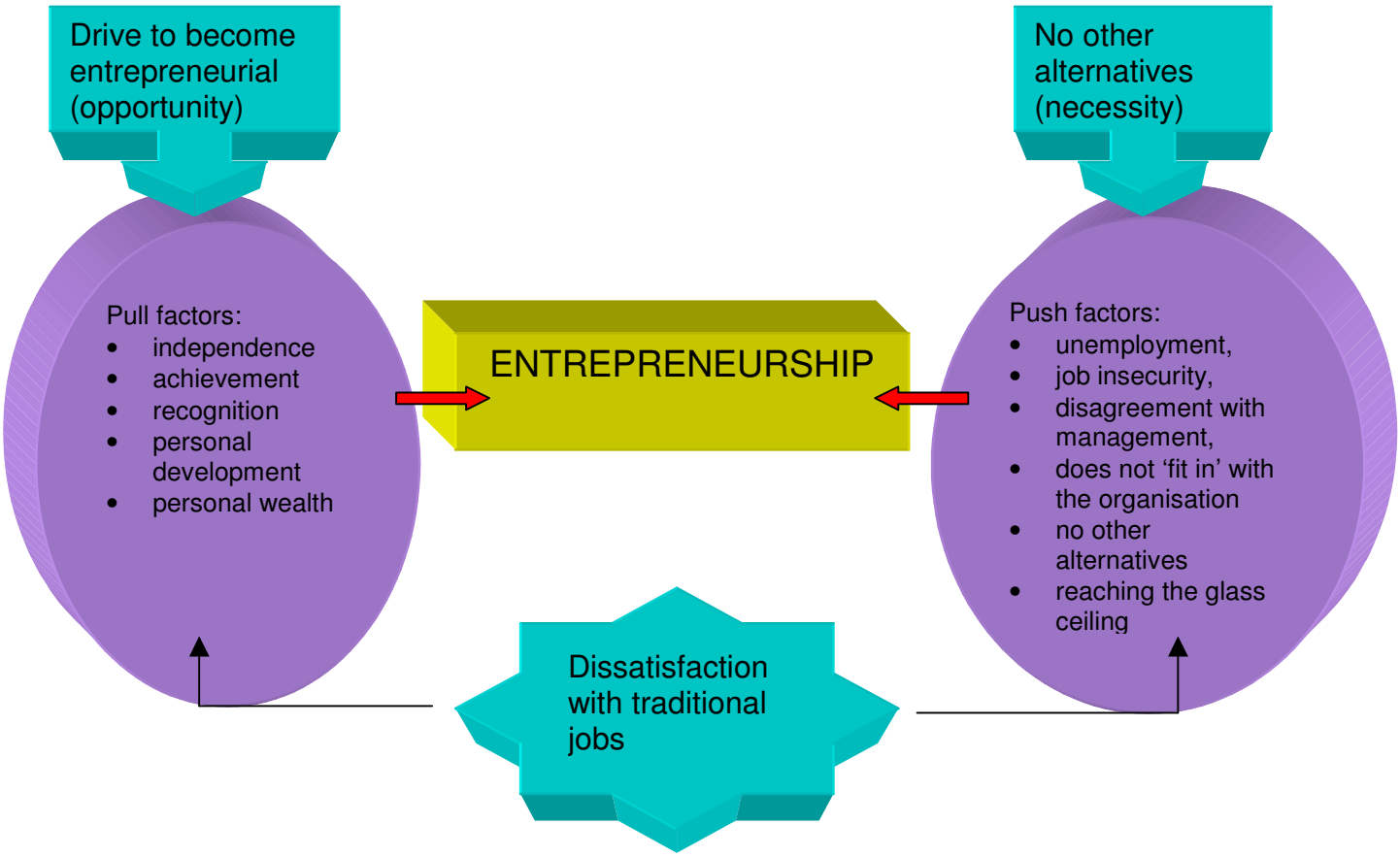
Welsh (1993: 12), Carter and Cannon (1992: 21) and McClelland *et al.* (2005: 85), found evidence of a "glass ceiling effect" that impede's executive women from reaching more senior executive positions and thus pushes them from management positions into their own business.

Pull factors are those factors which encourage people in traditional jobs to leave their current jobs to become entrepreneurs; they include:

- Independence, the freedom to work for oneself;
- Achievement, the sense of acknowledgement to be gained from running one's own venture;
- Recognition; a desire to gain the social standing achieved by entrepreneurs;
- Personal development; the freedom to pursue personal innovation; and
- Personal wealth, the financial rewards of entrepreneurship.

The need for independence and the challenge of business ownership are the most frequently quoted pull factors for women entrepreneurs (Carter & Cannon, 1992: 14).

Figure 4.2: The push and pull factors of entrepreneurship



Source: Nieman *et al.* (2003: 31)

Cooper (1981: 39) developed a model that is used to analyse the factors which influence the initial entrepreneurship decision and to develop a theory to apply to women entrepreneurs. Cooper's model incorporates three broad categories of influence:

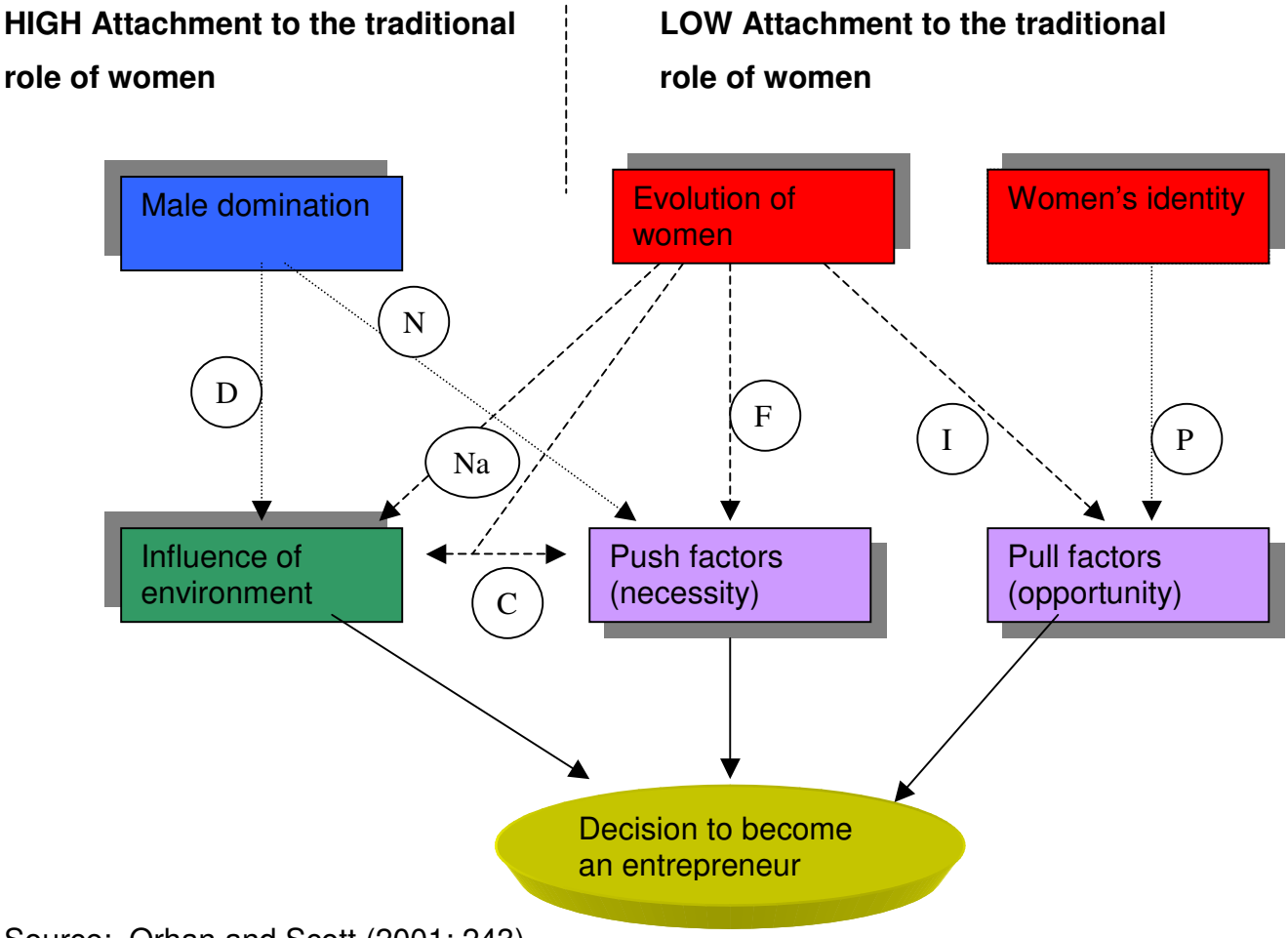
- **Antecedent influences** incorporate aspects of the entrepreneur's background which affect motivation, perceptions, skills and knowledge. They include genetic factors, family influences, education and previous career experiences;
- **Incubator organisation** describes the types of organisation for which the entrepreneur worked immediately prior to start-up. Characteristics include geographic location, type of skills and knowledge acquired, contact with other potential entrepreneurs and experience in a small business setting. In addition, Cooper (1981) cites the above-mentioned push and pull factors such as job loss (push) and desire for independence (pull); and

- **Environmental factors** include prevailing economic conditions (particularly the availability of venture capital), role models and access to support services.

Orhan and Scott (2001: 247) conducted a study on why women enter into entrepreneurship and developed a model of women entrepreneurship motivation as seen in Figure 4.3. These authors divide women into several categories based on why they started their own businesses:

- Dynastic compliance (D) – Motivation to perpetuate a dynastic business such as a family business where succession occurs due to death of current owner or inability to continue running the business.
- No other choice (N) – Self-employment for women who could not find a job after having taken some time off from work, or who followed their partner to a different location.
- Natural succession (Na) – Either it was considered a natural progression into a family business, after having acquired the relevant education, or the business itself was created by the husband's technical expertise and the wife found it logical to assist with the start-up in a commercial and administrative position.
- Entrepreneur by chance (C) – Women who accepted the role of entrepreneur rather than seeking it, who were for example forced to take over a family business due to financial difficulty of owners or parents.
- Forced entrepreneur (F) – Women who want to leave their current jobs to start their own businesses but lack start-up finance and other resources and therefore start anything to put food on the table; they often continue to look for other opportunities to rebuild their finances.
- Informed entrepreneur (I) – Well educated in entrepreneurship and gain as much information as possible before starting their own business.
- Pure entrepreneur (P) – For this group, running their own business appeared as a natural development of their previous experience. Entrepreneurship appeared to be a professional as well as a lifestyle choice and pull factors are evident for this group.

Figure 4.3: Model of women entrepreneurship motivation



Source: Orhan and Scott (2001: 243)

The main elements of the model of women entrepreneurship motivation can be explained as follows:

- **Male domination** – A low education level and/or female-specific education or training such as clerical work or nursing;
- **Evolution of women** – Education at graduate level, in professional areas such as business, law, medicine and engineering;
- **Women's identity** – Education did not have a real impact on the orientation of the person. The person's activity showed a level of achievement and originality;
- **Environmental influence** – Three different features exist: the case of succession in a family business; the existence of role models in the close environment; and the reliance on a partner's (usually the spouse) expertise; and
- **Push and Pull factors** have already been discussed.

4.4 Comparison between men and women entrepreneurs in South Africa

Hisrich *et al.* (2005: 69) argue that although the characteristics of men and women entrepreneurs are generally very similar, women entrepreneurs differ in terms of motivation, business skills and occupational background. Factors in the start-up process of a business for men and women entrepreneurs are also different, especially in such areas as support systems, sources of funds and problems. Brush (1992: 5) mentions that women start their own businesses with the objective of "making a difference", which means being more client-focused than men, ethical in operation and making a social contribution in addition to pursuing economic motives.

According to Barret (1995: 14), women in small business are keen to use sources of training and business advice and to act upon it, and place a higher value on such advice than men do. Stanger (2004: 471) further reports that women are more likely than men to consult multiple sources of advice at start-up. The author suggests that the willingness of female proprietors to acquire formal business skills and to develop non-formal management skills (such as networking and flexibility), which help in periods of company growth and development, may give them a competitive advantage over their male counterparts. Sandberg (2003: 410) argues that networking is both more critical to, and should be greater among, female entrepreneurs than male entrepreneurs. Irrespective of the precise nature of the influence which gender has upon networking it is clear that profound gender differences exist. As Brush (1992: 7) concludes: *"women are less welcome in social networks … and are left out of those loops, meaning they do not have access to as much information. So social structures and the way that women socialise influence the human and social capital endowments with which they start their businesses".*

There is evidence that there is a marked difference between male and female management values (Carter & Cannon, 1992: 20). Oliver (1996) in Sandberg (2003: 411) states that women measure their success qualitatively in terms of factors such as personal satisfaction, customer service ratings and additional employment created, while males tend to measure their success quantitatively in terms of market position, turnover and profitability. It is necessary to draw a contrast between male and female entrepreneurs to highlight the most important differences between these

two counterparts. The two tables below indicate the differences between male and women entrepreneurs based on their characteristics/needs and start-up factors.

Table 4.2: Characteristics/needs of male versus female entrepreneurs

Characteristics/Needs	Male entrepreneurs	Female (women) entrepreneurs
Starting a business	❑ Male entrepreneurs have set the foundation in the business environment for women entrepreneurs to follow	❑ Latecomers to the entrepreneurial game. Some women are not aware of the fact that they can conduct business activities on their own
Type of business started	❑ Traditionally manufacturing or construction ❑ 21st century service related – such as hairdressing and guest houses	❑ Traditionally service related – examples include guesthouses, coffee shops and catering businesses ❑ 21st century manufacturing and male-dominated services such as car service businesses
Relationship building	❑ More short-term orientated. Male entrepreneurs search for the best way to get the job/deal done	❑ Women tend to build strong relationships with service providers, especially lenders such as bankers
Access to finance	❑ Can be a barrier if the male entrepreneur does not have adequate collateral	❑ Seen as women entrepreneurs' most severe barrier. Discrimination is also prevalent when applying for finance. She must take her husband or male partner along to the

Characteristics/Needs	Male entrepreneurs	Female (women) entrepreneurs
		bank when applying for financial assistance.
Support groups	❑ Friends, professional acquaintances, colleges, business partners and spouse	❑ Spouse, network group or association for example The Business Women's Association and family members

Source: Own compilation

Hisrich *et al.* (2005: 71) also tabulated the major differences between male and women entrepreneurs, which are summarised in Table 4.3. These authors focused on motivation, departure point (reason for starting a business) and the background of entrepreneurs.

Table 4.3: Comparison between men and women entrepreneurs when starting a business

Start-up factor	Men (male) entrepreneurs	Women entrepreneurs
Motivation	❑ Achievement – striving to make things happen ❑ Personal independence – self-image as it relates to status though their role in the corporation is unimportant ❑ Job satisfaction arising from the desire to be in control	❑ Achievement – accomplishment of a goal ❑ Independence – doing it alone
Departure point	❑ Dissatisfaction with present job	❑ Job frustration ❑ Change in personal

Start-up factor	Men (male) entrepreneurs	Women entrepreneurs
	❑ Sideline in college, sideline to present job	circumstances
Background	❑ Age when starting venture: 25 – 35 (USA) ❑ Father was self-employed ❑ College educated – degree in business or technical area	❑ Age when starting venture: 35 – 45 (USA) ❑ Father was self-employed ❑ Not always college educated – degree in liberal arts

Source: Adapted from Hisrich *et al.* (2005: 71)

Other differences can be noticed in studies comparing the performance of firms owned by men and women. These studies show that businesses headed by women tend to be smaller than those headed by men (Arenius *et al.*, 2005: 28). Normally, the smaller size is perceived as a problem and it is assumed that, if they could, women would want to expand their businesses as much as male entrepreneurs do. This perception has important consequences for women entrepreneurship, as women may have a harder time in obtaining external financing and, in general, credibility as business owners and managers. However, evidence is beginning to accumulate that men and women have different preferences with respect to start-up size which, in turn, depends on different managerial styles (Arenius *et al.*, 2005: 28):

- First, women forge relatively strong ties, while men forge relatively weak ties.
- Second, women form relatively egalitarian coalitions, while men forge relatively hierarchical coalitions. The hierarchical structure of male organisations allows them to create organisations that effectively monitor large numbers of people and that permit the rapid dispersal of information. The stronger ties of women organisations, on the other hand, reduce the need for monitoring and for systems of explicit incentives. This analysis suggests that men and women entrepreneurs will differ in the value attached to start-up size and to business expansion.

4.5 Barriers facing women entrepreneurs

Starting and operating a business involves considerable risks and effort for entrepreneurs, particularly in view of the high failure rate. Perhaps the risk is even higher for a woman entrepreneur, who not only has the problems associated with being in a traditionally male-dominated area but also often lacks education and training in this specific field.

It is imperative to note that it is believed that a person with the perseverance and drive to become an entrepreneur will be successful no matter what hinders him or her. The literature on women entrepreneurship suggests that, in terms of both entrepreneurial options (for example occupational choices) and entrepreneurial resources (for example sources of capital and training), women are more disadvantaged than men, and minority women are more disadvantaged than white women (Smith-Hunter & Boyd, 2004: 20). McClelland *et al.* (2005: 87) state that women confront a variety of challenges in developing and running a business, and many argue that significant barriers still remain for women establishing and growing businesses. Among these barriers are: difficulty of access to financial resources, lack of support, prevailing negative socio-cultural attitudes, sex discrimination or gender bias and personal difficulties (Valla, 2001: 2). A woman often also suffers from low credibility when dealing with the various stakeholders associated with her firm – such as suppliers, bankers or customers.

In a study conducted in South Africa, Allie and Human (1997: 8) found that although 72 % of micro-enterprises were owned by women, both internal and external barriers impacted on the success of these businesses. These barriers ranged from a lack of basic life-skills in women entrepreneurs (self-confidence; assertiveness; self-motivation; achievement-orientation; reliability and communication skills) through the virtual absence of mentorship opportunities, to a lack of marketing and basic holistic management training (Allie & Human, 1997: 8).

Bruni *et al.* (2004: 261) report on studies conducted in the majority of Western countries, where three main types of barriers against women entrepreneurs were identified:

- The socio-cultural status of women, which identifies the primary role of women with family and domestic responsibilities, reduces the credibility of women intent on setting up businesses in a variety of ways.
- The lack of access to networks of information and assistance, which are often the main source of information and contacts, but which equally often comprise more or less overt mechanisms of gender exclusion.
- The lack of access to capital; whether women entrepreneurs apply to an institutional financier, a friend, a relative or even their spouse, they are likely to come up against the assumption that "women can't handle money". Sometimes the removal of barriers may foster more and better entrepreneurship than any incentives.

The list of barriers faced by women entrepreneurs in particular is discussed further below.

4.5.1 Lack of access to financial resources

Wickham (2001: 71) mentions that access to capital is one of the main stumbling blocks preventing women from starting their own businesses in greater numbers. Brush (1992: 14) agrees and is of the opinion that financial aspects of venture start-up and management are without a doubt the biggest obstacles for women. According to Dollinger (1999: 217), women have difficulty getting financing partly because of discrimination. The author quotes Sharon McCollick who used: *"clawing your way to the top without nails"*, to describe the scratching at the doors of banks to secure financing for her now successful business. According to Arenius *et al.* (2005: 31), venture capitalists expect a funded venture to grow rapidly in term of sales and profits so that the venture capital firm can exit within a few years and benefit from the risk taken. Such a strategy may not fit with women's more conservative approach to growth. Consistent with overall GEM results for both genders, in most of the countries, and regardless of per capita income level, the majority of women entrepreneurs provide all the required start-up capital themselves. Moreover, because personal assets are often shared with a spouse, they are more likely to be

asked for spousal co-signature, rather than personal assets (Walker and Joyner, 1999: 95). Obtaining start-up financing and credit (Schwartz, 1979; Pellegrino & Reece, 1982; Hisrich & Brush, 1984 and Neider, 1987), cash flow management in early operations (Hisrich & Brush, 1984 and Scott, 1990) and financial planning (Hisrich & Brush, 1984) are quoted by McClelland *et al.* (2005: 87) as being frequently noted as obstacles for women entrepreneurs.

Mattis (2004: 155) found that in recent years, women-owned business start-ups have received less than 2 % of available venture capital funds, especially in potentially lucrative new ventures in high-technology fields. Whereas men often list investors, bank loans, or personal loans in addition to personal funds as sources of start-up capital, women usually rely solely on personal assets, such as savings and credit cards. Hendricks (2001: 18) points out that another major problem could lie in the fact that most women who want to borrow money from banks do not have the necessary skills to formulate a professional business plan. Other studies on gender and business ownership have generated conflicting evidence on whether financing poses problems for women starting and running businesses. Sandberg (2003: 409), however, identifies four areas of the financing process that have consistently been noted as posing particular problems for women:

- Women may be at a disadvantage in their ability to raise start-up funds.
- Guarantees required for external financing may be beyond the scope of most women's personal assets and credit track record.
- Finance for ongoing business costs may be less available for female owned firms than for male enterprises, largely due to women's inability to penetrate informal financial networks.
- Women entrepreneurs' relationships with bankers may suffer from sexual stereotyping and discrimination.

4.5.2 Lack of support structures

Brindley (2005: 149) argues that during the women entrepreneurs' start-up phase the main source of support and assistance come from family and friends, which is trusted sources of help that women have previously experienced. Maharaj (1998: 16) argues that women generally have great difficulty in accessing training, credit, market

information and other forms of support to help them reach beyond such survivalist activities as street vending. Although support structures and organisations that can provide support to women entrepreneurs have been identified in section 4.2, many women still do not have access to these support structures or organisations.

Olson (2000: 34) argues that it is not the lack of entrepreneurship that has kept underdeveloped countries economically backward, but the lack of market-augmenting governments. The author provides a useful framework showing how a government could function in a market-augmenting, rather than a market-hindering way. A government that is not strong enough to enforce private contracts and protect property rights, or one that is too strong and tramples on them, can both create unsurmountable barriers to entrepreneurship. Hendricks (2001: 18) argues that there needs to be improved and decentralised access to information, training, finance, technology and business infrastructure, including the strengthening of networks between large and small enterprises.

4.5.3 Balancing business and family responsibilities

Women are not usually relieved of household responsibilities when starting a venture but remain the primary parent, emotional nurturer and housekeeper (Unger & Crawford, 1992: 23). Ljunggren and Kolveireid (1996: 3) agree and state that the differences between male and women entrepreneurs can be explained by the traditions of society and the persisting notion that women (more than men) carry the primary responsibilities of home and family. Depending on her stage of career progression, the woman entrepreneur might have had to adopt several roles as a result of changes in her family, business and personal life (Dyer, 1994: 8). According to Verwey (2005: 20), a serious handicap preventing women from realising their entrepreneurial potential is lack of reliable, affordable and conveniently situated day care facilities for children, operating on flexi hours to suit the entrepreneurial work situation of the mother. The influence of an entrepreneurial mother on a child's career choices is tied to the ways in which the entrepreneur's roles change over time and to the dilemmas and conflicts encountered at different stages of her life. Children of entrepreneurial mothers might have different experiences, based on whether the mother starts a business later in life when the children are grown or

whether she experiences the stresses of entrepreneurship and motherhood simultaneously.

According to Schindehutte, Morris and Brennan (2003: 96), there are multiple points at which the business and family interact, often creating tensions and destabilising family life. One study found that variables most impacting on the extent to which women entrepreneurs experience work-home role conflict are fatigue, difficulty in relaxing, inability to pursue personal interests and schedule conflicts/inflexibility. Women entrepreneurs develop various strategies to balance the roles of parent and entrepreneur. The allocation of time and energy to competing role demands is based on rational models of decision-making, gender-role congruence and the psychological importance of the two roles.

4.5.4 Gender discrimination and bias

According to Zabludovsky (2001: 356), women think the challenges depend not only on their training and their own attitude, but also on overcoming cultural and organisational barriers that are linked to the gender-based social structure in our societies.

The Oxford dictionary (2005) defines the term "discrimination" as distinguishing unfavourably; or the recognition of the difference between one thing and another, with synonyms such as: oppression, domination, and tyranny. Verwey (2005: 53) states that the first South African Convention for the elimination of all forms of discrimination against women defined discrimination against women as "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". 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 study was conducted by Van der Merwe (2002: 62) on women

entrepreneurs in South Africa and their perceptions and attitudes towards discrimination against them when they apply for financial assistance. Although the sample consisted of only 55 women entrepreneurs, it should be noted that 86 % of the women felt that they were being discriminated against.

On the issue of discrimination, Hertz's results (1987) in Birley (1989: 36) are particularly interesting. Fully 60 % of her respondents considered that to succeed, women had to be "better" than men – a better business person, more confident, and better at absorbing stress. Moreover, it is interesting to note that 40 % of Hertz's respondents felt that being a woman gave them a positive advantage over men. Marlow and Strange (1994: 182) state that women's experience of subordination colours and influences their motives. For men, self-employment is an individual response to an individual situation. For women, it is an individual response to the effects of group stereotyping, based upon presumptions arising from gender discrimination.

4.5.5 Lack of training and education

Worldwide, employment rates are much higher, and the gender gap lower, among women with a tertiary qualification (college or university) than among less educated women (Arenius *et al.*, 2005: 21). Although the gender gap is closing in some countries in primary and secondary schooling, women still lag behind men in some countries, especially in Africa and Southern Asia. In almost all economies for which information on illiteracy is available, women are more likely than men to be illiterate. Blenker, Dreisler and Nielsen (2003: 385) conducted a study on how entrepreneurship can be promoted, and found that information and education are problems for most women entrepreneurs. They argue that information could be disseminated to potential entrepreneurs and that courses on how to compile a business plan, on small business marketing or on the legal problems of starting a firm could help potential entrepreneurs to overcome the behavioural barriers. Stanger (2004: 465) found that the use of government services as a source of training and assistance by women was generally low, whereas professional sources of training and assistance were the ones most frequently used by women entrepreneurs.

In a recent study conducted by Mattis (2004: 158) it was found that overall the educational attainment of a group of women entrepreneurs was lower than for a group of high-level corporate businesswomen (Table 4.4). This finding may suggest another reason why women with considerable business experience, but lacking advanced degrees, especially MBAs, were pushed out of corporate careers into starting their own businesses, having no other alternatives.

Table 4.4: Educational attainment: women entrepreneurs and women executives

Educational Attainment	Women entrepreneurs	Women executives
	Percent (N = 650)	Percent (N = 461)
College or less	81 %	36 %
Master of business administration (MBA)	7 %	31 %
Other graduate school or degree	12 %	33 %

Source: Mattis (2004: 158)

O'Neill and Viljoen (2001: 41) conducted a study on how support, including training, could be improved for women entrepreneurs in South Africa. The authors' findings presented the following suggestions on how training could be improved for women entrepreneurs:

- There must be specially developed entrepreneurship development programmes.
- Training should be linked to services such as mentoring and after-care.
- Training must be skills- and sector-based.
- Training in life skills (planning and budgeting skills) for the less educated should be considered.

4.6 Training needs analysis of women entrepreneurs

According to De Faoite *et al.* (2003: 430), an important theme that has emerged from the literature of entrepreneurship training programmes is the failure of many programmes and initiatives to take on board the particular needs, the cultural, social and educational backgrounds of the entrepreneurs, in developing training and support systems. These authors agree that a prerequisite for training people is to understand them, their cultural values, historical experiences and mindset. As mentioned in Chapter 3, a failure to do so means that, in many cases, the training and economic development programme fails to assist those it was designed to help and educate. While, internationally, entrepreneurship programmes may have a common focus in terms of new business creation and the development of a business plan, there should be differences in emphasis depending on the particular needs of the participants, the country or the funding available (De Faoite *et al.*, 2003: 433).

Training needs assessment workshops are normally carried out prior to the actual commencement of training, on the specific group that is going to receive the training. Such a workshop was conducted by Kao and Choon Chiang (2000: 88) in China on 25 women entrepreneurs. As a result, four major areas of interest for women entrepreneurs were identified: marketing, finance/accounting, human resources development (including personnel management) and strategic business management. In the study conducted by Stanger (2004: 467) on women entrepreneurs in Australia, the type of training and assistance needed by women lay in financial management. These specific and other detailed findings are discussed below:

- The Western Australian Department of Employment and Training found the needs of women entrepreneurs were: business operations (60 %), expert advice on type of business (57 %) and management experience (52 %). Regardless of age, education, present employment and the presence of a partner, 48 % indicated they lacked confidence. Additionally, 43 % indicated that borrowing finance was a concern. For women with pre-school children, 44 % felt arranging childcare would be an issue.
- The most desired services for both men and women starting their own businesses were business training, access to expertise and a loan.

- For women operating a business, the Victorian Women's Consultative Council found that additional advice and information on financial management and industry-specific matters were required. Only 2 % stated that their training needs were currently being met. Meredith and Barrett (1994: 72) report that 78 % of women operators indicated assistance was required in financial management (including record keeping and cash flow), planning for the future and marketing and promotion (38 %). In comparison with men, women nominated more areas of assistance that were required.
- With regard to training and business assistance delivery mechanisms, the majority of women entrepreneurs prefer women-only training programmes and woman consultants and experts.
- Financing was also found to be important by Naffziger and Hornsby (1992: 184), who tested a number of hypotheses with a convenience sample of 311 intake forms of women business development clients in Chicago, USA. For start-up firms, they found the most important information and assistance needs were assistance in starting a new business (79 %), sources of financing (55 %), and advertising/sales promotion (36 %). For early growth firms, women's information needs were financing sources (69 %), advertising/sales promotion (56 %) and increasing sales (53 %).

It is evident from the above findings that the needs analysis for women entrepreneurs differs in various countries.

4.6.1 Training needs analysis of women entrepreneurs in South Africa

Van der Merwe and Nieman (2003: 54) conducted a study on 174 women entrepreneurs in 2003 to establish the areas where they required training. Probability sampling, more specifically stratified random sampling was used and the sample was unrestricted. One limitation of this study was the response rate (350 questionnaires were distributed of which 174 was usable, this represented a 50 % response rate. The demographic profile of the women entrepreneurs is set out in Table 4.5.

Table 4.5: Demographic profile of sample

Variable	Frequency	Percent
Age		
20 – 29 years	25	14
30 – 39	44	25
40 – 49	62	36
50 – 59	25	14
60 years and older	8	5
Did not respond	10	6
Total	174	100,00
Education		
Less than matric	16	9
Matric (Grade 12)	50	29
National Diploma (3 years)	40	23
Baccalaureus (or Bachelor's) degree (3 years)	21	12
B Tech degree (4 years)	11	6
Honours degree	19	11
Master's degree	10	6
Doctor's degree	5	3
Other (industry related training)	1	0.50
Did not respond	1	0.50
Total	174	100,00
Home Language		
Afrikaans	30	17
English	75	43
Zulu	15	9
Xhosa	34	20
Sotho	6	3
Tswana	3	2
Tsonga	1	0,50
Mandarin	1	0,50
Did not respond	9	5
Total	174	100,00

Table 4.5 continued...

Variable	Frequency	Percent
Marital status		
Never married	30	17
Married: In community of property	42	24
Married: Out of community of property	59	34
Divorced	24	14
Widowed	9	5
Living together	9	5
Did not respond	1	1
Total	174	100,00
Race		
Black	68	39
Coloured	10	6
Indian	8	5
White	84	48
Other	2	1
Did not respond	2	1
Total	174	100,00

Source: Van der Merwe and Nieman (2003: 54)

The respondents' ownership of business and form of business are set out in Table 4.5. The most important findings can be summarised as follows:

- 44 % of the respondents operated as sole proprietor business owners.
- 32 % of the respondents operated as close corporation business owners.
- 35 % of the respondents' businesses fell into the R250 000 - R2 million category.
- 30 % of the respondents' businesses were 3 - 5 years old.
- 71 % of the respondents stated that their businesses fell into the service sector.

Table 4.6: Respondents' business information

Variable	Frequency	Percent
Form of business ownership		
Sole proprietor	76	44
Partnership	21	12
Close Corporation	56	32
Company	12	7
Other: Trust	7	4
Did not respond	2	1
Total	174	100,00
Annual sales/turnover		
R1 - R250 000	83	48
R250 001 - R2 million	61	35
R2 million - R5 million	15	9
R5 million - R10 million	4	2
R10 million – R50 million	9	5
Did not respond	2	1
Total	174	100,00
Age of business		
0 - 2 years	43	25
3 - 5 years	53	30
6 – 10 years	34	20
10 plus	32	18
Not indicated	12	7
Total	174	100,00
Sector of business		
Service	123	71
Retail	35	20
Wholesale	11	6
Manufacturing	2	1
Construction	1	1
Marketing and advertising	2	1
Total	174	100,00

Table 4.6 continued...

Variable	Frequency	Percent
City /town where head office/main business is situated		
Pretoria	38	22
Durban	35	20
Johannesburg	23	13
Port Elizabeth	45	26
Cape Town	27	16
Bloemfontein and Mpumalanga	6	3
Total	174	100,00

Source: Van der Merwe and Nieman (2003: 57)

4.6.1.1 Specific training needs of women entrepreneurs

Table 4.6 specifies the type of training needs and services that women entrepreneurs stated they would like from various support organisations and structures.
The results were:

- 73 % of the respondents stated that they wanted to have guidance on how to compile a business plan.
- 77 % of the respondents reported that they wanted organisations to provide guidance on market research on various business and market opportunities for women.
- 74 % of the respondents emphasised that they would like to receive advice and guidance on marketing and advertising.
- 68 % of the respondents reported that they wanted entrepreneurial training and education in the form of “how to start/grow your own business” programmes.
- 80 % of the respondents stated that they would like to receive guidance and advice on financial and cash flow planning for business owners.
- 71 % of the respondents reported that they would like to make use of empowerment and enrichment programmes for women.

- 83 % of the respondents stated that they wanted to receive networking opportunities for them as women, for example the Business Women's Association, sponsored by Nedbank.
- 74 % of the respondents suggested that they would like to have a relationship-building programme, including mentoring, counselling and advice on managing a business.
- 86 % of the respondents wanted a training programme that included risk management and tax advice.

Table 4.7: Targeted training needs of women entrepreneurs

Variable	Request training	Frequency	Percent
1. Compiling a business plan	**Yes**	127	73
	No	25	14
	Did not indicate	22	13
	Total	174	100,00
2. Market research	**Yes**	134	78
	No	20	11
	Did not indicate	20	11
	Total	174	100,00
3. Cash flow and financial planning	**Yes**	140	81
	No	20	11
	Did not indicate	14	8
	Total	174	100,00
4. Marketing and advertising	**Yes**	128	74
	No	28	16
	Did not indicate	18	10
	Total	174	100,00

Table 4.7 continued...

Variable	Request training	Frequency	Percent
5. Entrepreneurial (business) training and education	**Yes**	118	68
	No	32	18
	Did not indicate	24	14
	Total	174	100,00
6. Empowerment/enrichment programmes for women	**Yes**	123	71
	No	29	16
	Did not indicate	22	13
	Total	174	100,00
7. Network opportunities	**Yes**	145	83
	No	17	10
	Did not indicate	12	7
	Total	174	100,00
8. Mentoring to manage the business	**Yes**	115	66
	No	29	17
	Did not indicate	30	17
	Total	174	100,00
9. Risk management	**Yes**	132	76
	No	21	12
	Did not indicate	21	12
	Total	174	100,00
10. Business counselling and advice	**Yes**	129	74
	No	23	13
	Did not indicate	22	13
	Total	174	100,00

Table 4.7 continued...

Variable	Request training	Frequency	Percent
11. Tax advice	**Yes**	149	86
	No	16	9
	Did not indicate	9	5
	Total	174	100,00
12. All of the above	**Yes**	91	52
	No	21	12
	Did not indicate	62	36
	Total	174	100,00
Respondents prepared to pay for training provided on the above topics	**Yes**	116	67
	No	55	32
	Did not indicate	3	1
	Total	174	100,00

Source: Van der Merwe and Nieman (2003: 62)

From the above findings (Table 4.7) the need that women entrepreneurs require entrepreneurial training on various areas and topics, of which financial aspects were the most highly rated, are identified. It should also be noted that the respondents could choose more than one variable. As already mentioned this need is also supported in other studies (Arenius *et al*., 2005: 13; Birley, 1989: 32; Kao & Choon Chiang, 2000: 88; Meredith & Barrett, 1994: 72; and Stanger, 2004: 467).

4.7 The need for women entrepreneurship training programmes

The needs analysis has highlighted the most significant training areas that should be included in an entrepreneurship training programme. It has further indicated that

there is a need for training programmes designed specifically for women entrepreneurs. Birley (1989: 32) indicated that in the UK in 1989, in the education sector alone, many "Start-your-own-business" programmes were designed for students, for the unemployed, for managers, for ethnic minorities and for women. The rapid growth in this segment has, however, been based on research which has drawn evidence almost entirely from male entrepreneurs. According to Arenius *et al.* (2005: 13), the main policy implication provided by the GEM 2004 Global Report is that, when it comes to entrepreneurship, "one size does not fit all". In order to be effective, many policies with respect to entrepreneurship need to be tailored to a country's specific context and, perhaps, even to that of sub-national regions. This is particularly important for women since they tend to be much more sensitive than men to conditions in their local environment. That said, there are universal best practices that address the need for reforming the social entrepreneurial environment. Eliminating barriers to competition, reducing regulator burdens, and providing more efficient services for new and developing businesses will benefit all individuals interested in starting a business.

According to Stanger (2004: 464), while there are no clear determinants of entrepreneurship success or failure, a cluster of factors are correlated with success, including prior experience in the industry, finance and management skills and networking. Women's more general educational background and traditionally limited relevant prior work experience is likely to have limited their opportunities to accrue the necessary experience and skills associated with entrepreneurship success. Therefore, women contemplating, starting and operating a small business are likely to be in greater need of training and business assistance. The GEM report of 2004 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 to business leadership and new venture creation. Regardless of per capita income, some of the most successful policies and programmes worldwide are those able to increase women's awareness about entrepreneurship and provide them with role models and networking possibilities (Arenius, *et al.*, 2005: 13). There is a need to instil fundamental aspects of the entrepreneurial mindset and to increase the attractiveness of entrepreneurship as an income-producing activity for women.

Carter (2000: 331) states that not only is there a need to widen access and accommodate typically female experiences within start-up programmes; there is also a need to amend the content of these programmes to address the weaker financial position that many women start from. Research has shown that women not only have fewer financial resources than men, but they are also more reluctant to take on large sums of debt when starting a business. Adhikary and Rai (1999: 74) state that any intervention to promote women entrepreneurship should look at the overall "gender" consequences at a macro level rather than addressing the gender problem at only the micro or the business level.

There are several women training programmes worldwide, focusing on industry-specific sectors such as (Blisson & Nelson, 2004: 2):

- The United Nations Industrial Development Organisation executed a training programme on training the trainers and women entrepreneurs in food processing, piloted in five provinces of Northern Vietnam from 1996-1999.
- An educational programme to encourage women's entrepreneurship was organised in India in 2004 on beauty culture and health care and how to make their own products.
- The Women's Business Development Agency has been in existence in the West Midlands region of the UK for over twelve years. The organisation provides business counselling, advice, guidance, training and support to women, predominantly from black and minority ethnic groups, women from low income households and other women who are either economically or socially disadvantaged.
    - The agency successfully attracted funding for its project, called 'Bridge over troubled waters' in 2001. The 'Bridge' Project was based upon the premise that fewer women than men start businesses in the UK and that there are fewer existing businesswomen than men.
    - Another innovative approach was the development of the Women's Empowerment Programme. This programme is a series of training events, specifically designed and delivered for women by women. Material was developed and is relevant to women's lives, with case-study experience, guest visits from businesswomen and female business professionals. The trainers and staff supporting the programme have all had businesses

themselves, which also helps to give them credibility with the female participants.

Research undertaken by Blisson and Nelson (2004: 15) on training programmes for women entrepreneurs highlighted that:

- High-quality business counselling is needed, which includes counsellors being trained in equal-opportunity training and specifically in methods and approaches for dealing with women clients.
- Confidence building should form the core of a foundation course for women's start-ups.
- Women would benefit from in-depth business mentoring, particularly during the early development stages of running their businesses.
- Women mid-life changers are increasingly starting businesses but find it difficult to raise finance at start-up and lack financial management skills. These women require business planning assistance and help with approaching banks and other funding agencies.
- Business advice and training should be offered with the provision of childcare facilities and/or at times when children are in schools or nurseries.

Stanger (2004: 471) adds that available training programmes for women entrepreneurs should:

- Be provided in a woman-oriented way, such as single-sex training and an increase in female counselling staff. However, training offered on an individual rather than group basis may deny women the possibility of confidence building through the sharing of ideas, networking and brainstorming possibilities.
- Avoid content-based barriers such as courses pitched at a level which ignores women's generally less relevant educational background and limited prior work experience.
- Avoid structure-based barriers such as intensive two week full-time courses that do not fit in with women's family commitments.
- Take into account the diversity of needs across background skills and training, industry sector, stage of business development, size of business and goals for the business. Most business training and advice schemes for women proprietors

focus on the start-up phase. There is an identified need for services which aid the consolidation of existing firms, such as joint marketing and product development and the development of regional and industry-based networks.

4.8 Conclusion

Any government interested in boosting economic prosperity should be interested in promoting the entrepreneurial dynamic of its country. Adult women represent a readily available pool of potential entrepreneurs that countries in various stages of development, with different demographic patterns and different labour force conditions, can leverage to improve their economies.

Verwey (2005: 37) states that although much women entrepreneurship in low-income countries such as South Africa 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. A women entrepreneurship programme should include the following areas of importance: financial assistance, management assistance and training as well as networking, mentoring and counselling. Stanger (2004: 471) agrees that business advice and training should ensure that they cater for those areas of business most often undertaken or needed by women entrepreneurs, i.e. financing/financial management, marketing and promotion and confidence building.

This chapter has highlighted the literature on women entrepreneurs in South Africa and elaborated on the barriers they face. Women entrepreneurs were compared and contrasted with male entrepreneurs. A training needs analysis was done on women entrepreneurs, and the areas of importance in the findings are highlighted in this chapter. The final section of this chapter emphasised the need for women entrepreneurship training programmes and provides the theoretical framework for Chapter 5.

Chapter 5: Women Entrepreneurship Programme (WEP)

"I am very grateful for doing the Women Entrepreneurship Programme; through it... I had guts to leave my job three months ago, won a tender for three vacant plots, sold them and is currently negotiating to become a Pam Golding franchisee...and the negotiations are very positive!"

- Pumeza Dziba (WEP delegate)

"My WEP experience has been one of the most exciting experiences of my life. (And I have had an extraordinary life!) I would like to compare myself to a dried out sponge that suddenly had some water sprinkled over it and I could feel myself expanding during the course of the week as my mind was continually stimulated and fed and I soaked up every little bit of it!"

- Lynn Angel (WEP delegate)

5.1 Introduction

Before establishing a training programme for entrepreneurs, as for any other training programme, it is crucial to clearly establish and define the target group's needs, as well as their current level of training. The Women Entrepreneurship Programme (WEP) has done so and focuses on the training needs of potential, start-up and already established women entrepreneurs. The WEP is a training intervention specifically designed and delivered for women, by women, and Figure 5.1 below illustrates the logo that is used by the various role-players of the WEP.

Figure 5.1: The WEP logo as registered with the Companies and Intellectual Property Registration Office (CIPRO)

The WEP was designed after a study conducted by the University of Pretoria (UP) in 2002 and 2003, on constraints to women entrepreneurs' access to finance. The study concluded that women-owned businesses were generally less competitive, and less equipped to present convincing business proposals to financial institutions. The growth of these businesses was very limited and failure rates high. The barriers to accessing finance could all be related to the patriarchal South African legal framework, the socialisation process and the limited business opportunity and experience associated with women as a gender.

This chapter highlights the overview and background of the WEP and explains how and why the programme was established and how it satisfies the training needs of women entrepreneurs. The lessons learned from the WEP pilot programmes are shared. The objectives, outcomes and contributions of the programme are stated and the design and content of the WEP are examined, bringing to light the current strengths and weaknesses of the programme. All the WEP service providers and sponsors are identified and their contributions to the WEP explained. The final sections of this chapter will investigate how the WEP is measured against the improved entrepreneurship training model that was developed in Chapter 3.

5.2 The WEP overview and background

The WEP is intended for women who want to start their own businesses, and for those who have already started their own businesses and want to improve their entrepreneurial and management skills. The WEP also includes potential women entrepreneurs or, as the literature calls them, the would-be entrepreneurs, who represent the most important group from the point of view of government policy. The WEP is a one-stop solution that seeks to improve financial service delivery and access to markets for growth-orientated women-owned small and medium sized enterprises (SMEs); and thus promote women's participation in the economy. The programme will show women that they can conduct business on their own and become financially independent. It integrates personality profiling, business planning training, coaching, access to business networks, access to markets and finance.

The purpose of the WEP is to facilitate the significant growth of women-owned enterprises through offering relevant entrepreneurial training that will enable their enterprises to become more competitive and attractive to financiers. According to Dlamini and Motsepe (2004: 2), the WEP components are in line with the Industrial Finance Corporation (IFC)/World Bank SMME Department development pillars of:

- **Creating and enabling business environment**

  The University of Pretoria conducted a study in 2002 and 2003 on constraints to women entrepreneurs' access to finance and other barriers, which identified the need for entrepreneurial training. The main findings of that study informed the design of the WEP.

- **Access to business development services**

  The training module on business planning offered under the WEP covers a range of topics (including gender empowerment) deemed relevant to the survival and success of women-owned and managed enterprises in South Africa. It emphasises topics such as financial management, marketing management and networking, as these were found to be the areas in which women entrepreneurs often fall short.

  Training is run over a four-week period. During that month participants are given about ten days in between the classroom sessions to work on their business plans. Only those who get at least 50 % for their business plan at the end of the training component are offered certificates of competence by the UP. The rest of the participants who have completed the programme are given certificates of attendance.

- **Access to markets and information**

  A business plan simply articulates how one plans to win and grow a sustainable paying customer base; and manage internal resources to minimise the cost of inputs. The starting point of planning a business is therefore the market. Women entrepreneurs in particular struggle to access new and sustainable markets. Their enterprises tend to be smaller and their business concepts traditional. Many women go the route of trying to commercialise domestically acquired skills (for

example catering, cleaning and childcare) rather than looking for actual market needs to fulfil. This lack of market intelligence, personal and business branding techniques and business networks is addressed under the WEP by the Insights SA counselling service, SAIBL and SAWEN market linkage and networking services that will be explained in section 5.4 of this chapter.

- **Access to finance**

  As already identified in Chapter 4, entrepreneurs often cite the lack of access to finance as a key barrier to growth. The WEP participants are introduced to an ABSA Bank representative in their area, where it is hoped that ABSA Bank will assign woman relationship bankers to the WEP at selected branches. ABSA relationship banker contact information will be provided to WEP participants at the end of each training sessions. This will enable participants to consult with ABSA Bank on specific issues before submitting their business plans for adjudication. ABSA Bank is one of the sponsors of the WEP, as indicated later in section 5.4.

5.2.1 The WEP pilot programmes

The WEP was piloted in Gauteng in November 2002, when nine participants attended, and again in November 2003, when 16 participants attended. Of the pilot programme it was found that 75 % of the participants passed the training component during the pilot phase and that ABSA Bank considered 30 % of the adjudicated business plans feasible, though it has not yet invited any loan applications (Dhlamini & Motsepe, 2004: 3). Feedback from the pilot phase suggested the following improvements. The partners (identified later in this chapter) responsible for implementing the listed changes appear in brackets:

- The WEP should target growth-oriented women-owned enterprises and screen applications accordingly. The partners should design and apply a suitable screening tool (APDF).
- More time should be given to participants to develop their business plans. This can be achieved by splitting the course into two three-day sections with some time in between. This should give the participants at least two weeks in between training (UP).

- More attention needs to be given to the financial modelling component of the programme, and appropriate software should be distributed as part of the course (APDF).
- More attention should be given to the operational aspect of the business plan and management accounts. The participants should be given a management reporting/ accounts template (UP).
- More attention needs to be given to how to conduct product research and develop new products in the training session (UP).
- Inclusion of a presentation on the company registration process and options by the Department of Trade and Industry; and the protection of intellectual property was recommended by the participants (DTI).
- Pre-, mid- and post assessment of participant understanding and knowledge should be done to monitor progress more closely (UP).
- A team of qualified coaches should be retained to assist with business plan finalisation before adjudication by ABSA Bank. This process should be closely supervised to ensure effectiveness (APDF).
- ABSA Bank should judge the best business plan from each course and the programme should certify the provincial participants. The prizegiving, however, should be done at a national end-of-year function (ABSA Bank).
- More attention is to be given to public relations and media exposure (APDF).

All these improvements have been implemented. The most significant ones are the inclusion of Insights SA in the service delivery consortium; and APDF providing participants with a CD with a financial modelling tool.

Based on this success of the pilot programmes, the sponsors of the WEP decided to roll it out to all South African provinces. The WEP was successfully executed in Gauteng in January and April 2004 with 34 Gauteng based women entrepreneurs. There was a great demand for the programme even at the pilot stages. Twice as many people as could be accommodated registered for the WEP. The next training sessions took place in KwaZulu-Natal in October 2004, Western Cape in April 2005, Free State and Northern Cape combined in June 2005 and the last training that will be included in this study took place in Limpopo in September 2005.

5.2.2 Objectives, outcomes and possible contributions of the WEP

The following objectives are set out in the WEP to train women on how to:

1. Compile a business plan;
2. Start their own business;
3. Grow their own business;
4. Register their own businesses, patents, logos and trademarks;
5. Obtain financial assistance for the start-up or expansion business;
6. Manage the growth of the business;
7. Develop their own products and/or services;
8. Be more creative and innovative in running their own business;
9. Develop a sustainable competitive advantage for their business;
10. Compile financial statements and understand financial aspects of their business;
11. Network with other women in business;
12. Overcome the barriers that women face in a business environment;
13. Be aware of failure signs and know how to turn a troubled business around; and
14. Market their business, products and services effectively.

The objectives will be coordinated with the WEP design and content phases in section 5.3.4.

As learning outcomes after the completion of the WEP participants should be able to:

- prepare and present a business plan;
- use the business plan that they prepared to obtain financial assistance;
- start their own business;
- grow their own business;
- register their businesses, patents, logos and trademarks;
- develop new products or services;
- incorporate the sustainable competitive advantage developed during the programme;
- compile and interpret their own financial statements;
- determine their own break-even analysis for their business;
- improve the general management and marketing skills; and
- improve their confidence and morale levels.

The possible economic contributions of the WEP are: the number of new firms, number of employees, increased turnover and productivity and other impacts on the economy (for example innovation). The possible contributions of the WEP to the individual participant are: self-employment and ability to act as independent operator of venture, personal and business satisfaction, knowledge and skills acquisition, changed attitude and achievement of economic objectives.

5.2.3 The WEP targets and training schedule

The WEP targets as identified in Table 5.1 were set before the actual commencement of training in 2004 and the findings of this study are presented in Chapter 7, which will determine whether the targets set in this chapter were met.

The most important WEP targets are to:

- Screen and profile 240 women entrepreneurs for growth orientation;
- Train and coach 120 growth-orientated women entrepreneurs;
- Assist the WEP participants to mobilise significant amounts of finance;
- Link participating women-owned enterprises to new markets; and
- Facilitate access to the Department of Trade and Industry (DTI) business incentives and export support for growth-orientated enterprises.

Table 5.1: The WEP targets

Indicator	Target	Notes
Number of enterprises screened and profiled	240	Branding advice offered to all
Number trained	120	Growth-orientated women entrepreneurs
Number qualified	90	75% get UP qualification
Number financed	36	20% get financed
Increase in turnover	5% (average)	Assessed after six months
Increase in jobs	5% (average)	Assessed after six months

Source: Dlamini and Motsepe, 2004: 13

For the above-mentioned targets to be achieved, it is evident that a training schedule must be provided to make sure that training in the different provinces takes place. Table 5.2 provides the training schedule for the six groups of participants in seven different provinces that were included in this study.

Table 5.2: The WEP training schedule

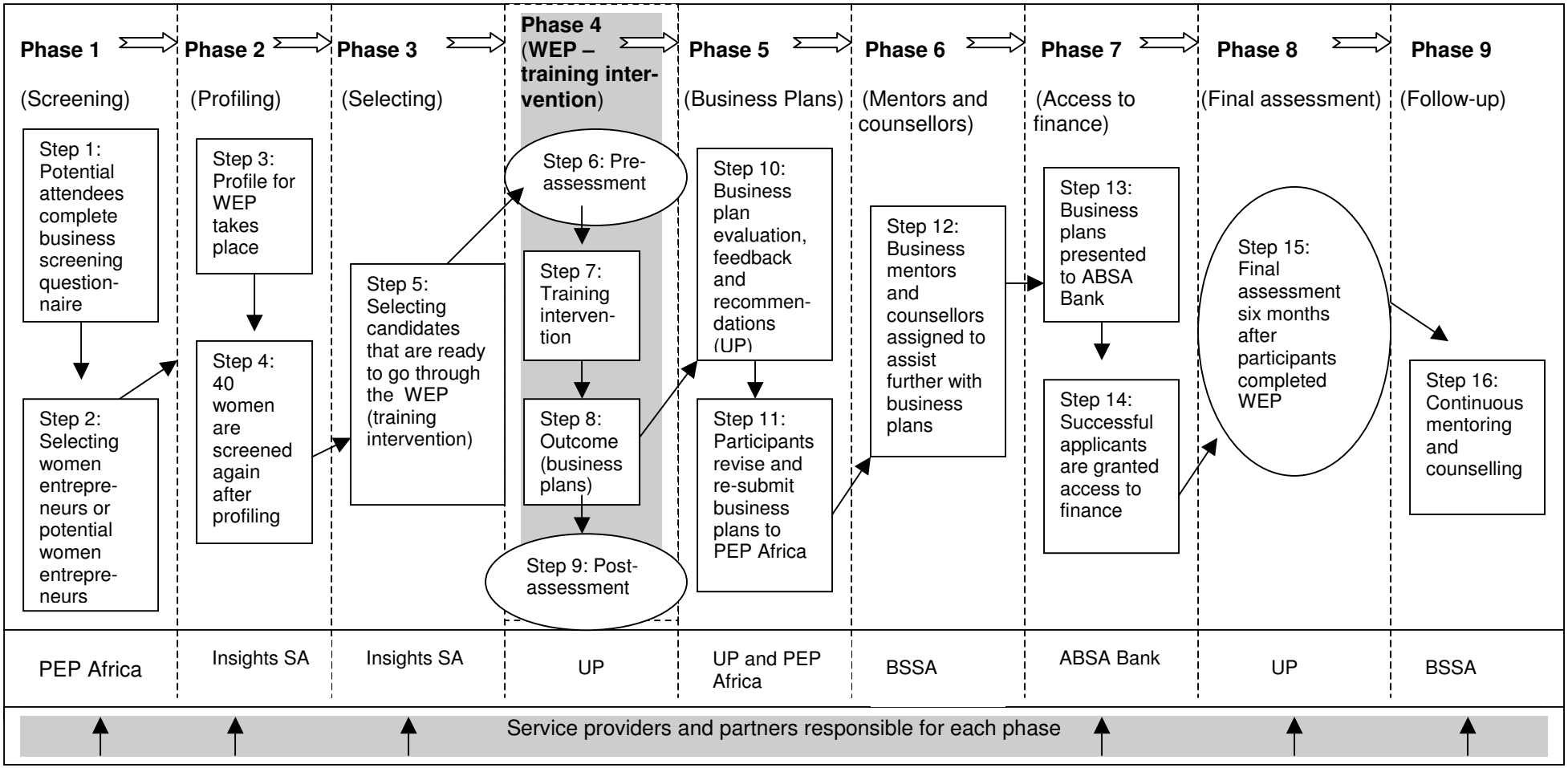
Training Date	Number of participants (116)	Province	Venue
January 2004	15	Gauteng	University of Pretoria, Pretoria
April 2004	19	Gauteng	University of Pretoria, Pretoria
October 2004	19	KwaZulu-Natal	Holiday Inn, Durban
April 2005	19	Western Cape	Cape Milner, Cape Town
June 2005	22	Free State and Northern Cape	Galeshewe Library, Kimberley
September 2005	22	Limpopo and North West	The Ranch, Polokwane

Source: Own compilation

5.3 The WEP design and content

This section explains in detail the design and content of the WEP emphasising that the programme provides not only entrepreneurial training to women entrepreneurs in South Africa but also profiling, mentoring, counselling and various types of assistance. These elements distinguish the WEP from any other entrepreneurial programme and focus on these areas that are important to women. The following illustration provides a graphical layout of all the phases and steps that the participants of the WEP go through before and after training (WEP framework). The WEP service providers and partners are also highlighted and a detailed explanation follows.

Figure 5.2: The WEP phases and steps that participants go through



Source: Own compilation

Figure 5.2 provides the framework necessary to explain the design and contents of the WEP. As seen from the above diagram, it consists of nine phases and 16 steps.

5.3.1 Phase 1: Screening

Step 1: Potential attendees complete business screening questionnaire

A business screening questionnaire was developed for the purpose of selecting women with growing businesses or women who have the potential to create growing businesses. Once an applicant has completed the questionnaire it is evaluated and rated. The reason why the emphasis of this screening tool is so much on growth is that growth distinguishes an entrepreneurial business from a small business venture, as already explained in Chapter 2. The main areas that the business screening questionnaire investigates are:

- Whether applicants have registered businesses or are in the process of registering their businesses;
- Whether the business has shown signs of growth;
- Whether they have a well-established customer and supplier base;
- Whether the market or industry that they are in is growing.

The selection criteria also require that women should have at least matric (grade 12) or a viable business opportunity; understand, speak and write English and have good communication skills that enable participants to take part in group activities and discussions.

Step 2: Selecting women entrepreneurs or potential women entrepreneurs

The business screening questionnaire is used to select the top 40 women who obtain the highest ratings. These women entrepreneurs are selected to go through the Profile for WEP process, explained in the next phase.

5.3.2 Phase 2: Profiling

Step 3: Profile for WEP and
Step 4: Women are screened again after profiling

The Profile for WEP has been adapted from the standard profile programme, which is a proven intervention for assessing business initiatives and calculating market readiness. The intention of Insights Learning and Development South Africa (Pty) Ltd, the company providing the profile for WEP to the candidates, is to screen each potential entrant into the WEP by means of a profile to test her readiness and ability to take a business idea to the market, or to examine with the candidate her current business and its needs. The profile for WEP is available to candidates in all major centres nationwide and focuses on the development of the woman, by giving her greater independence through maximising her potential in an entrepreneurial context. According to Finch (2005: 2), the coordinator and facilitator of the profile for WEP process, the profile includes personal personality profiling and an in-depth assessment of her business needs and where necessary it offers her branding solutions. It also offers her access to tools to assist her to grow her business successfully.

In the initial step of the Profile for WEP, the candidate completes a simple questionnaire comprising 25 questions, from which a 33-page document on the candidate is produced, detailing every aspect of her personality and highlighting where her business strengths lie. It enables accurate placement of the candidate in the business context and underscores her potential management style, her preferred communication methods, her selling abilities and areas for personal development and the suggested methods to achieve this.

With this information the candidate is taken through a two-hour one-on-one feedback and coaching session with a professional coach and facilitator. Agreed suggestions and outcomes are documented so that the candidate will have her 33-page psychological profile document and a one-page business viability or expansion feedback document to keep on completion of the profile process.

5.3.3 Phase 3: Selecting

Step 5: Selecting candidates that are ready to go through the WEP (training intervention)

Through the effective, simple and non-threatening coaching session of Insights SA, only candidates who are really ready will be referred to undertake the WEP (training intervention). Those who are not yet ready will have the detailed business feasibility outline, together with a in-depth personal profile – both of which offer the candidate a strong foundation for her own development and to assist her to understand the areas of her business initiative that still need improvement and foundation work. Out of the 40 women in each province who go through the profile for WEP, 20 women are selected to go through the WEP.

5.3.4 Phase 4: WEP (training intervention)

Step 6: Pre-assessment

A pre-assessment is done with the 20 participants who have been selected to do the WEP. This assessment is done before the actual commencement of training to investigate the participants' level of skills and knowledge on various entrepreneurship and management topics. A questionnaire is used to do this assessment so that measurement can be done when the post-assessment takes place. The main purpose of the pre-assessment is to investigate what the participants' expectations are about the WEP and to identify their business and personal goals and objectives.

Step 7: Training intervention

The WEP as a training intervention was designed using various training models, as discussed in Chapter 3. The identification of women entrepreneurs' training needs, as discussed in Chapter 4, as well as looking at the different stages of the business life cycle, were also used to develop the WEP. The business life cycle model and stages were explained in Chapter 2. The material was designed and developed in order to enable women to take the first steps into self-employment. Material used is relevant to women's lives, with case study experience, and guest visits from businesswomen and female business professionals. Table 5.3 highlights the design and content of the WEP and demonstrates the different stages that an entrepreneurial venture goes through and the content that is covered over the six days.

Table 5.3 is presented on the next page.

Table 5.3: The design and content of the WEP (training intervention)

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
Welcome and registration **Stage 1: Birth** What is entrepreneurship? Which characteristics should she posses? Why should she start her own business? Idea generation Idea versus opportunity How to spot the gap in the market Window of opportunity	**Stage 2: Survival** Guest speaker: ABSA Bank How to obtain financial assistance for your start-up Guest speaker: Successful woman entrepreneur Counselling and Mentoring Using mentors and counsellors Role models Networking opportunities for women	**Stage 3: Success** Why and how to prepare a feasibility study Feasibility check-list	**Stage 3:Success** Financial Plan as part of the Business Plan Financial Management Need for funds Applying for finance	**Hand-in Business plans** **Stage 4: Expansion** How to grow your business Motivation for growth Managing and mismanagement of growth Different ways to grow (growth options) Stages of growth	**Stage 6: Maintenance** Intensive marketing of an own business, products and services Target markets Positioning the business and its products and services Customer service
TEA	**TEA**	**TEA**	**TEA**	**TEA**	**TEA**
How to start your own business Ten simple rules for a successful start-up Understand the reasons for the start-up	**Stage 2 continues…** Creativity and innovation How to be more creative Visualisation Mental barriers Creative problem solving	How to compile a business plan Elements of a business plan Presentation of a business plan What do financial	Financial statements - Income statement - Balance sheet - Cash-flow Break-even analysis Cash budget	**Stage 4 continues...**	**The four p's of marketing** Product Place Price Promotion

Table 5.3 continued…

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
phenomenon Influences on the start-up decision		institutions look for in a business plan			
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
Legal aspects (CIPRO – Guest speakers): Registration of a company/business Registration of patents, logos and trademarks Financial matters	New product/business development Presentation of new products or services developed	Practical exercise and assignment	**Phase 3 continue...** Break-even analysis and practical exercises	**Stage 5: Maturity** How to maintain the competitive advantage Business failure Turnaround measures Harvesting and exiting the venture	**Summary of programme and business plan feedback** **Guest visits from programme sponsors:** **PEP Africa Representative** **ECI AFRICA (SAIBL) Representative**
TEA	**TEA**	**TEA**	**TEA**	**TEA**	**TEA**
Legal aspects continue… Practical exercise (case studies) and summary of day 1	Practical exercise (case studies) and summary of day 2	Summary of day 3	Practical exercise (case studies)	Practical exercise (case studies)	Final remarks and conclusion

Source: Own compilation

It is necessary to briefly explain the different stages of the WEP's business life cycle and the content that is covered during each stage, and the objectives of WEP, as discussed earlier, that are addressed during each stage.

5.3.4.1 Stage 1: Birth (day 1)

During this stage the participants of the WEP are introduced to entrepreneurship and those women who already own their own businesses are taken through the self-evaluation process of what it takes to become a successful entrepreneur. The next part of stage 1 deals with the start-up requirements as well as introducing the women to a representative from CIPRO, explained later in the chapter, who provides information on how to register companies, close corporations, patents, logos and trademarks. The day is concluded by examining case studies of real-life successful entrepreneurs.

Objectives 1, 3, 4 and 12 are met.

5.3.4.2 Stage 2: Survival (day 2)

A female representative from ABSA Bank is invited as a guest speaker to introduce their products and services to the women entrepreneurs and to specify what financial institutions look for in a business plan. The next guest speaker is an established successful woman entrepreneur in the region where the WEP is taking place. She shares her life and success story with the women and serves as a role model who also introduces them to several networking opportunities and organisations in the area. Research in cognitive psychology has demonstrated that learning through observation is one of the most important influences on individuals' perception of their own capabilities. In particular, learning from role models from backgrounds similar to one's own is likely to encourage a positive perception of one's ability to take on new challenges. Arenius *et al.* (2005: 24) agree; they found that there is a strong positive and significant correlation between knowing another entrepreneur and a woman's involvement with starting a new business. This indicates that the existence of role models is a crucial factor in the decision to start a new venture. Stage 2 of the WEP offers many opportunities to the women entrepreneurs to network with the various guest speakers and other participants. Carter (2000: 329) stresses that gender differences in the way networks are created and used have been cited as having an

influence on certain aspects such as enabling improved access to finance and the development of strong relationships with various stakeholders.

The next part of stage 2 introduces the participants to creativity and innovation and provides an enjoyable learning experience. The participants are taught how to be more creative and innovative in their own businesses, how to use creative problem-solving techniques, how to apply methods to change their ideas into feasible opportunities and how to practise memory techniques to remember their customers' names and details. The day is concluded with a break-away session where the women develop their own new products and/or services and present these new products or services in groups in the form of an advertisement.
Objectives 7, 8, 9 and 11 are met.

5.3.4.3 Stage 3: Success (day 3 and 4)

During this stage the essence of the WEP is examined, as the feasibility study and the business plan compilation are studied. The delegates are provided with the information to prepare their own feasibility study in the form of ten steps. These ten steps briefly include: a summary of the business, a list of their goals and objectives for the business, defining their target market and business environment, investigating their infrastructure, preparing a SWOT-analysis (Strengths, Weaknesses, Opportunities and Threats) of the business, describing their marketing mix, looking at a pre-starting checklist and lastly turning all of their goals into a sustainable business. The feasibility study is a study that is done before the actual business plan is prepared in order to test whether the business, products or services are feasible.

The business plan forms an integral part of this training programme and is important not only for gaining financial assistance but in particular for the entrepreneur, herself, as well as employees, customers, suppliers and other stakeholders. Pretorius (2001: 85) states that the reason why the business plan is so important is that the business plan is the integration of all the elements required to determine the future business success, although it is no guarantee for success during the implementation of the plan. The business plan elements are then examined and delegates are given the opportunity to prepare certain elements for their businesses together with the lecturer/facilitator.

The elements of the business plan that are included in the WEP have already been discussed in Chapter 2, Table 2.5. The delegates are also introduced to the main reasons why business plans fail in obtaining funding, and are given the opportunity to review already drawn-up business plans. The next day of this stage deals with the financial plan as a part of the business plan. Delegates are introduced to the term break-even and are taught how to determine the break-even analysis for their own businesses. They are also shown how to compile and understand financial statements and how to formulate budgets and do cash-flow planning.

Objectives 4,6 and 10 are met.

A ten-day break takes place between stages 3 and 4 and days 4 and 5 to give delegates the opportunity to prepare their business plans. They must hand these business plans in when they return to the WEP on day 5.

5.3.4.4 Stage 4: Expansion (day 5)

Delegates are introduced to growth as an objective for their ventures and are shown how to develop their own growth strategies. They look at how growth can be a motivational tool in a business and also identify in which stage of the business life cycle their businesses lie. The participants are given the opportunity to develop growth strategies for their businesses in groups in which they can take part and assist one another.

Objectives 2 and 5 are met.

5.3.4.5 Stage 5: Maturity (day 5)

During this stage delegates are introduced to the signs of failure and trouble in a venture and they get the opportunity to discuss the most significant problems in their businesses in small groups with similar businesses or industries. It is found to be a very successful strategy, as the women network and assist one another at the same time. They again focus on their sustainable competitive advantage and revise it to ensure that their businesses stay out of the decline stage. The day is concluded with a break-away session where groups are formed and case studies are examined.

Objectives 9, 11 and 13 are met.

5.3.4.6 Stage 6: Maintenance (day 6)

The WEP is concluded in the final stage on the final day with marketing. The reason why marketing is discussed on the last day is that any business must be maintained so that it does not go into the decline stage, and therefore effective marketing is needed. This section also deals with self-marketing and confidence building, as many women do not have the confidence to conduct business activities on their own. Arenius *et al.* (2005: 12) state that a woman's perception of environmental opportunities and confidence in her own capabilities are a powerful predictor of her entrepreneurial behaviour. The WEP is therefore dedicated at this stage to giving the women that additional confidence and morale boost to make them successful entrepreneurs.

The business plans that were prepared by the delegates are given back to them with an evaluation and score card. Suggestions, recommendations and feedback are presented on the plans so that they can revise the plans and implement all the changes suggested. The day and programme is completed with a visit from the two main sponsors of the programme, who introduce other services and assistance that they can offer to the delegates.

Objectives 12 and 14 are met.

A summary of the current strengths and weaknesses of WEP is shown in Table 5.4. It illustrates the most significant shortcomings and positive aspects to date.

Table 5.4: Current strengths and weaknesses of the WEP

STRENGTHS	WEAKNESSES
Good networking between the women on the programme	Course material must be made more user friendly
Generally the business plans have improved since the WEP started in 2002	Many participants do not hand in business plans when they must be submitted
The participants are very eager to learn and take in and are well disciplined during training sessions	Some women do not attend all six days of the programme due to various reasons such as work related circumstances and illness

Table 5.4 continued...

STRENGTHS	WEAKNESSES
The creativity session on day 2 is very enjoyable because the participants create new products/services and have to act in an advertisement	Some women do not finish the WEP due to other responsibilities
The catering and venue facilities of previous courses were rated very good	Process of re-submitting business plans to PEP Africa and then ABSA Bank takes extremely long and delegates often have to wait as long as six months for feedback from this financial institution
All outcomes in terms of training are achieved	The duration of the WEP is too short. Participants request more time on the financial section
The participants are generally happy with the two facilitators lecturing on WEP	
They enjoy and learn a lot from the visits from CIPRO, the Business Women's Association and ABSA Bank	

Source: Own compilation

5.3.5 Phase 4: WEP (training intervention) continues

Step 8: Outcome of WEP (Business plans)

As seen from the above discussion on the content of the WEP, the main outcome is for every delegate to prepare her own business plan. It is then submitted to the facilitator of the WEP, whereafter it is evaluated and scored.

Step 9: Post-assessment

The post-assessment is done after the final day of the WEP in order to measure the level of knowledge and skills transfer that took place throughout the WEP. The delegates are presented with a questionnaire with various concepts that they need to explain, as well as stating their general satisfaction with WEP and what they have learned throughout the programme.

5.3.6 Phase 5: Business plans

Step 10: Business plan evaluation, feedback and recommendations

The facilitator evaluates the business plans by making use of an evaluation sheet that lists all the elements of the business plan. Feedback, suggestions and recommendations are made on the plans and then given back to delegates to include those recommendations when they revise their plans.

Step 11: Participants revise and re-submit business plans

The participants have two weeks to modify their plans by implementing all of the changes and recommendations made by the facilitator. After that period they must re-submit their plans to PEP Africa, explained later in the chapter, to get them ready for the next adjudication process.

A summary of the current strengths and weaknesses of the business plans submitted by all the WEP participants to date are shown in Table 5.5 below.

Table 5.5: Current strengths and weaknesses of business plans submitted

STRENGTHS	WEAKNESSES
The executive summary is generally very well prepared and evident in each plan that was submitted	Many participants still struggle with the financial side of the business plan but seem to understand it when the lecturer explains it during the programme
The participants generally know their industries and markets very well and these are well explained in the plan	Many participants have trouble with the time given to prepare the business plan

Table 5.5 continued...

STRENGTHS	WEAKNESSES
After the WEP they are all aware of how many products/services they have to sell per month to break even	The market research section is not well prepared in the plan, due to participants not having time to do it or never having done it before they started their businesses
Marketing plan is well defined in the plan; they know how to advertise and reach customers after the preparation of the business plan	Generally all the participants have never known when their businesses reach the break-even point
The management team is well defined with attached CVs	The design and developmental plan and the operational plan are a general problem for participants as this is the first time that they have come into contact with the concepts
	The financial plan still seem to be a problem, but not as much as before the business plan preparation
	Participants request unrealistic financial assistance amounts from the Bank and have no or limited securities and own contributions

Source: Own compilation

5.3.7 Phase 6: Mentors and counsellors

Step 12: Business mentors and counsellors are assigned to the participants to assist further with the business plans

Business mentors and counsellors are assigned to the participants of WEP to assist them further with their business plans as well as other areas of concern. This has been very effective due to the one-on-one sessions where each participant can discuss her own business problems and get specific assistance on targeted problem

areas. These business mentors often visit the delegates before they have to re-submit their business plans, which makes their help even more effective. According to Arenius *et al.* (2005: 36), mentoring and network support are crucial in boosting women's attitudes to leadership and new venture creation and growth.

5.3.8 Phase 7: Access to finance

Step 13: Business Plans presented to ABSA Bank

The participants are given the opportunity to present their business plans to ABSA Bank to adjudicate and provide feedback from a financial institution's perspective.

Step 14: Successful applicants are granted access to finance

The process of re-submitting the business plans in order for them to be presented to ABSA Bank can take a very long time which contributes to the fact that participants must wait very long to get feedback. It is, however, one of the outcomes of the WEP, that if a business plan is successful, the applicant should receive access to finance.

5.3.9 Phase 8: Final assessment

Step 15: Final assessment six months after participants completed the WEP

The facilitator of the WEP does the final assessment, whereby a questionnaire is distributed to the participants six months after the completion of the programme. The purpose of this final questionnaire is to identify what the delegates have implemented in their businesses based on the skills and knowledge gained from the WEP. The performance of the delegates' businesses are also examined to see whether the WEP had an effect on the success of the business.

5.3.10 Phase 9: Follow-up

Step 16: Continuous mentoring and counselling

The participants of the WEP are monitored on a continuous base and are assigned business mentors for that purpose. Many participants form their own networking

organisations after the WEP and come together on a regular basis to assist and support one another.

5.4 WEP sponsors and partners

Since the beginning of WEP in 2002 many organisations and companies have been involved in the implementation of the WEP. ABSA Bank, APDF (as from 1 July 2005 they are known as PEP Africa of the International Finance Corporation), Ebony Consulting International (hereafter referred to as ECI Africa, SAIBL), DTI and SAWEN (hereafter called the sponsors and partners) joined forces with Insights SA, the University of Pretoria and BSSA to deliver the WEP to growth-orientated women-owned enterprises in South Africa. The main sponsors and partners are briefly discussed below and summarised in Table 5.6. PEP Africa of the IFC and ECI Africa (SAIBL), the two main sponsors, contribute towards two-thirds of the total cost of the WEP and one-third is payable by the delegates themselves. The reason why participants had to pay one-third of the total cost was to ensure that they showed up for the programme; it is also believed that participants put in more effort when they use their own money to pay for the training. The phases that the participants of WEP go through, as seen from the above discussion, are also listed next to the specific partner who is responsible for each phase (information was provided by Dlamini and Motsepe, 2004: 1-20).

5.4.1 The Africa Project Development Facility (APDF) now known as Private Enterprise Partnership for Africa (PEP Africa) – Phases 1 and 5

The Africa Project Development Facility (APDF) is an International Finance Corporation administered multilateral donor-funded agency working with African entrepreneurs to develop viable and competitive businesses in sub-Saharan Africa. It was established in 1986, to bridge the gap in the difficulties experienced by African entrepreneurs in accessing external finance. The APDF is best known for assisting growth-orientated entrepreneurs to verify the feasibility of business concepts and produce viable business and financing proposals. In addition to this the APDF has assisted SMMEs in becoming more profitable by structuring affordable business solution packages, and skills development programmes. For the APDF the WEP

provides an effective avenue to pursue its mission with women entrepreneurs in particular. In its co-ordinating role the APDF undertakes to do the following:

- Oversee the recruitment of the WEP participants and the RSVP process;
- Customer liaison;
- Organise quarterly steering committee meetings and reports;
- Contracting, payment and management of services providers on behalf of the other partners;
- Accounting and billing according to cost-sharing arrangements; and
- Oversee award ceremonies and public relations campaign.

5.4.2 ECI Africa (South African and International Business Linkages, SAIBL)

ECI Africa (SAIBL) is an international economic development consultancy and capacity-building organisation. Founded in 1994 and set up to foster business linkages between South African and American companies, SAIBL has been able to ensure millions of rand's worth of transactions between large and small businesses over the years. The WEP provides SAIBL with the opportunity to access women-owned businesses as well. The current portfolio has very few women-owned businesses on the books. Recently SAIBL started a women section; it expects to grow its women portfolio of clients through the WEP.

5.4.3 ABSA Bank – Phase 7

ABSA is South Africa's leading bank in small business loans (Dlamini and Motsepe, 2004: 18). ABSA Bank is interested in raising its woman empowerment profile, and informing the public of its involvement in South African Women Entrepreneurs Network (SAWEN). ABSA Bank has already set aside funding for SAWEN and intends to channel some of this funding into WEP; as a means of augmenting its Black Economic Empowerment (BEE) portfolio with women-owned enterprises. ABSA expects to find a significant number of viable women-owned businesses to lend to through the WEP.

5.4.4 Insights learning and development South Africa (Pty) Ltd – Phases 2 and 3

Insights South Africa is a training and organisational development company that aims to contribute to the transformation of Africa by releasing the potential in individuals, so that they can achieve personal, team and organisational success.

The company delivers world-class solutions through training, facilitation, accreditation, coaching and consulting services. According to Finch (2005: 2) these activities are supported by providing Discovery Profiles and a wide range of materials. The core offering is the Insights *Discovery* personality profiling system, which provides individuals with a powerful Jung-based report for increasing self-understanding. This also serves as the platform for a wide range of applications from leadership development, team effectiveness and conflict resolution to sales training, change management and business strategy.

Based in Cape Town, South Africa, the company is a joint venture with Insights Learning and Development UK, which is the owner and originator of the Insights Discovery system. Insights' global network extends to 43 countries around the world and Discovery has been translated into 22 languages. This means that support can be offered globally if required and it enjoys a proven track record with some of the most effective and productive organisations worldwide.

5.4.5 Companies and Intellectual Property Registration Office (CIPRO)

CIPRO contributes to WEP through offering presentations to WEP participants on company registrations, intellectual property, patents and other services they offer to enterprises. A CIPRO representative attends each WEP session to make these presentations.

5.4.6 Business Skills South Africa (BSSA) – Phases 6 and 9

BSSA provides the business coaches who assist the WEP participants with business development advice during and after the training. A one-day peer group review session is held with each group, as well as one-on-one sessions.

The participants are able to access one-on-one professional business coaching hours on a "buy one, get one free" basis through WEP, up to the limit of four free hours in between or after the classroom training sessions. The business coaching phase includes a peer review session for the whole group on their revised business plans after they have been evaluated by UP. Only those business plans passed by UP are considered for the next phase of adjudication.

5.4.7 Department of Trade and Industry Woman Empowerment and Gender Unit

The DTI is the South African government's economic and industry growth driver. The gender unit of the DTI pays special attention to the economic empowerment of women. SAWEN is but one of the many woman empowerment initiatives facilitated by this unit. The unit was established in response to the fact that women entrepreneurs continue to face an array of obstacles and barriers in their business operations. The WEP offers the DTI a chance to better penetrate the market with its many empowerment products and incentives. DTI product uptake reviews show that women entrepreneurs have very little access to its suite of enterprise development services and incentive schemes. The WEP offer the DTI a research sample to find out why access is such a problem for many women.

5.4.7.1 SAWEN

Lindiwe Hendricks, the then Deputy Minister of Trade and Industry, formed the South African Women Entrepreneurs Network (SAWEN) in 2002. Through SAWEN, women entrepreneurs can belong to an identifiable organisation that could serve as an organised link between government, corporate business and organisations including donors.

SAWEN was formed to cater for problems such as the:

- Lack of a coherent and systematic approach in dealing with women's development;
- Absence of a vehicle to ensure that skills, expertise and knowledge is shared and further capacity built to expand their businesses;
- Absence of a forum for networking and doing business with each other;
- Fragmented approach in identifying issues affecting them and engaging government and other institutions to influence policy or decisions affecting their businesses; and
- Lack of a common effective strategy of accountability lines to women in general as a result of a national organisation.

SAWEN is a national networking body which mobilises business resources and gives women entrepreneurs who operate in South Africa a voice on the issues of economic participation and development. As its contribution, ABSA Bank is sponsoring the SAWEN members to attend the WEP. SAWEN has over 3 000 member businesses and is represented in every province through a provincial committee. The SAWEN provincial structures will be asked to tell their members about the WEP and facilitate the registration process. The network organisations seek to increase SAWEN's benefit to members and its membership base by participating in the WEP.

5.4.8 Public relations for the WEP

A public relations expert has been contracted by PEP Africa on behalf of all the partners to assist with media exposure for the WEP that will ensure maximum outreach in all provinces. Various interviews were conducted and published with the following: City Press Newspaper, Sowetan Newspaper, Metro FM Radio, P4 Radio, Kaya FM Radio, Enterprise Zone, Motswako and Small Business Television Programme (Vuk'uzenzele) broadcast on SABC 1.

The mentioned WEP sponsors and their roles are summarised in Table 5.6 on the next page.

Table 5.6: The WEP sponsors and their roles

Partner	Roles
ABSA	Business plans adjudication and possibility of access to finance
PEP Africa (APDF)	Project co-ordination, master coaching and PR management
SAIBL	Market linkages
DTI Gender Unit	Business incentives, registrations and marketing
SAWEN	Business networking

Source: Dlamini and Motsepe (2004: 19)

5.5 Measuring the WEP against the improved entrepreneurship training model

The improved entrepreneurship training model was discussed and presented in Chapter 3, where the statement was made that it should form the foundation of the WEP. The design and content of the WEP, as presented in Table 5.3, will now be measured against this model in Table 5.7.

E for E/P = f[aF x bM (cE/S x dB/S) x (eA + fB/P)]

Where:

E for E/P = Education for improved Entrepreneurial Performance
F = Facilitators ability, skills, motivation and experience
M = Motivation
E/S = Entrepreneurial Skills
B/S = Business Skills
A = Approaches of learning used by facilitator(s)
B/P = Business Plan utilisation
a to f = Constants

Table 5.7: The improved entrepreneurship training model measured against the content of the WEP

Entrepreneurial Performance (E/P)	Performance motivation (M)	Entrepreneurial Skills (E/S) and entrepreneurial success themes	Business Skills (B/S)	Facilitator and programme context (F)	Approaches to learning (A)	Business Plan utilisation (B/P)
Establishment of own business (Stage 1 – day 1 and outcome after WEP – those women who are not yet business owners)	Motivation (Stage 2 – day 2)	Risk propensity (Stage 1 – day 1 and stage 5 – day 5)	General management skills (Stage 1 – day 1)	Previous experience of facilitator and participants (All stages by means of practical examples)	Involvement of participant (Last session of all stages and all days – case studies and practical presentations)	Elements (Stage 3 – day 3 and day 4)
Growth in net value of business (Stage 4 – day 5 and outcome after WEP)	Role models (Stage 2 – day 2)	Creativity and Innovation (Stage 2 – day 2)	Marketing skills (Stage 3 – day 3 and stage 6 – day 6)	Outcomes of the programme (Business plans after WEP)	Learning approaches used (All stages, practical application of what participants learned)	Preparation (Between stage 3 and 4 – 10 day break)
Recruitment of employees (Stage 3 – day 3 and stage 6 – day 6 as well as after WEP)	Mentorship (BSSA after WEP)	Opportunity identification (Stage 1 – day 1 and stage 2 – day 2)	Legal skills (Stage 1 – day 1)	Needs analysis of participants (Done before WEP – Chapter 4)		Presentation (After stage 3 – day 4 and again after WEP)
Increasing productivity levels (Outcome after WEP)		Role models (During all stages and after WEP)	Operational skills (Stage 1 – day 1 and stage 3 – day 3)			Evaluation (After stage 3 – day 4 and again after WEP)
Increasing profitability (Outcome after WEP)		Networking (Stage 2 – day 2 as well as during and after WEP)	Human resource management skills (Stage 1 – day 1 and stage 3 – day 3)			
		Leadership (Stage 1 – day 1 and stage 5 day 5)	Communication skills (During all stages)			
		Motivation (During all stages and after WEP)	Financial management (Stage 3 – day 4)			
		Attitude of participant (During all stages and after WEP)	Cash flow management (Stage 3 – day 4)			
		Social skills (Stage 6 – day 6 as well as earlier stages)				
		Start-up skills (Stage 1 – day 1)				

Source: Own compilation as adapted from Antonites (2000: 21)

The most important observations evident from Table 5.7 can be summarised as follows:

- All the concepts of the improved training model are covered before, during the various stages or after the WEP.
- All of the concepts under entrepreneurial performance (E/P) are outcomes that are achieved after the WEP.
- Role models and motivation, as two concepts under performance motivation (M); differ from these two concepts mentioned under entrepreneurial skills (E/S) as the WEP covers the latter as part of learning and the former as an outcome of increased motivation and use of role models after WEP.
- All of the concepts under business skills (B/S) form part of the business plan stage in WEP.
- WEP is so designed that training and learning take place as discussed in Chapter 2, and evaluation of the latter is evident when the participants report back to the facilitator after a practical break-away session.

5.6 Determining and measuring the effectiveness of WEP

To measure the effectiveness of WEP the focus should be on measuring the particular outcomes of WEP. It is therefore necessary to review the objectives of WEP and to measure whether these objectives have been achieved. This will be presented in Chapter 7, together with all the other findings, as well as in Chapter 8 where a conclusion and recommendations regarding WEP will be discussed. The next chapter provides certain levels and key performance measures to determine and assess the effectiveness of the WEP.

5.7 Conclusion

The past 25 years have witnessed an enormous growth in the number of entrepreneurship courses at different educational levels all over the world. This chapter introduces WEP, which can be seen as an experimental intervention that served as a platform for future development and improvement. The major aim of WEP is to formulate ways and means for the kind of training which will equip

participants to start and grow their own businesses – whether they are survival, micro or small. The use of the business plan at all levels is crucial. This chapter addresses topics such as course content, objectives and outcomes and intended results of the WEP. There is a need for much more research on methodologies for measuring entrepreneurship training programme effectiveness for an intervention such as the WEP, which will be addressed in Chapter 6 and 7 of this study.

The main sponsors of the WEP are considering a third phase for the programme in the form of Train-the-Trainer programmes in 2006. This is mainly so that more women entrepreneurs can receive the training in South Africa and even in Africa and abroad. The need to provide WEP to disabled women has also come to light, which will also require further attention and development. The next chapter describes the research methodology and how the effectiveness of the WEP is going to be measured.

Chapter 6: Research design and methodology of the study

"In spite of the impressive proliferation of the entrepreneurial education and training courses in the 1980s and 1990s, little is known about the performance and effectiveness of this training or the extent to which it really matches the needs of target groups. Empirical research in this area remains the exception. Without a stringent feedback about the usefulness of the education programmes, the contents and methods of courses stay to be 'gospel' more than theoretically based teaching."
- Klandt (1993: 37)

6.1 Introduction

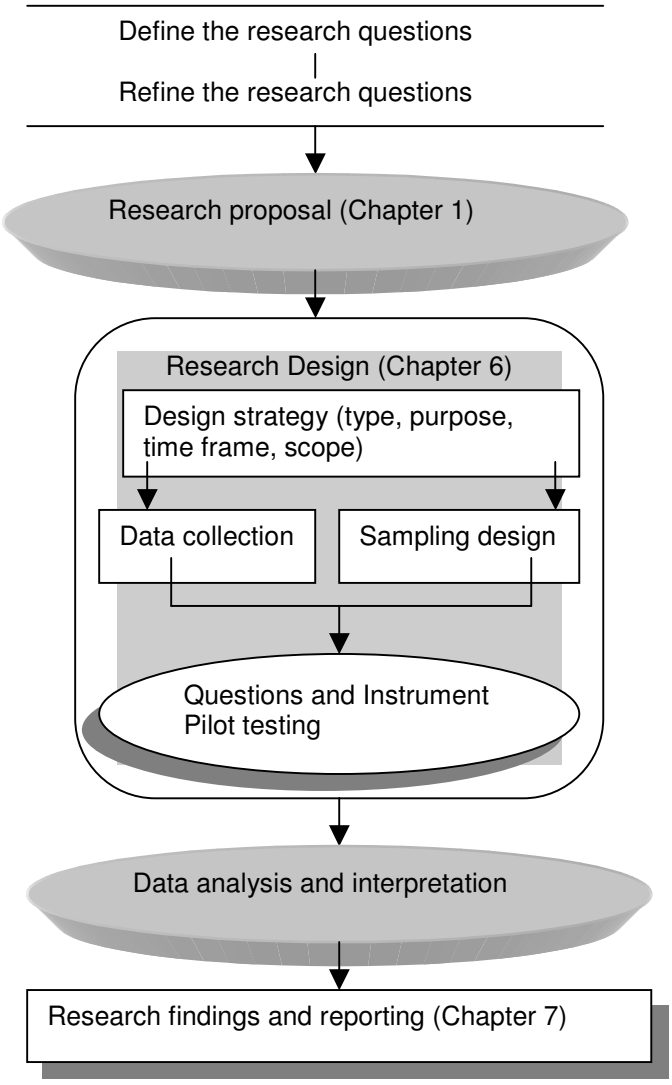
The above statement by Klandt indicates that little is known about the performance and effectiveness of entrepreneurship training programmes. This necessitated a thorough review of the literature. The literature study revealed a need to do empirical research measuring the effectiveness of the WEP as a training intervention for women starting and growing their own businesses. This chapter is concerned with the research methodology and design used to assess the likely success of the WEP as a training intervention for women entrepreneurs in South Africa. Figure 6.1 on the next page illustrates the research process as used throughout this study. The most important objective of the study is to examine whether the WEP is effective in assisting women to start and grow their own businesses.

This study made use of an experimental design, which consists of an independent variable that serves as the manipulated entity. The experimental design of the study involves the treatment of the independent variable as the WEP with an experimental group (women who received entrepreneurial training in the form of the WEP) and a control group (women who did not receive any entrepreneurial training). The time frame when the empirical research was done ranges from 2004 to 2006.

This is a formal study which highlights research problems and hypothesis statements and involves precise procedures and data source specifications. This chapter presents the problem statement, objectives of the study, hypotheses and data collection methods. This chapter also describes how the research questionnaires

were designed and measured to ensure that the researcher obtained valid responses from the respondents. Measurement levels and key performance measures are provided to determine the effectiveness of the WEP. The final section of the chapter concerns the data processing, analysis and characteristics of sound measurement.

Figure 6.1: The research process of the study



Source: Adapted from Cooper and Schindler (2001: 61)

The research proposal was summarised in Chapter 1, in which the research problem and questions were stated. As explained above, this chapter takes an in-depth look at the research design, data collection and sampling design. The data analysis and interpretation of the research findings are presented in Chapter 7.

6.2 The research problem

The research problem was triggered by the study (mentioned in Chapter 1) which was conducted in 2003 by the Chair in Entrepreneurship at the University of Pretoria on 174 women entrepreneurs in South Africa. This study highlighted the lack of training and education as a barrier to women entrepreneurs and how a training programme could solve these problems. As stated at the outset in Chapter 1, while this study is essentially an investigation into the nature and effectiveness of the WEP, its principal aim is to make a valuable contribution to the area of entrepreneurship training programmes.

With this in mind, the study sought to address the following research questions:

- Is the WEP effective in assisting start-up and already established women entrepreneurs to grow their businesses by means of improving their business performance?
- Is the WEP effective in assisting potential women entrepreneurs to start their own businesses?
- Is the WEP effective in assisting start-up and already established women entrepreneurs to start multiple businesses?
- Is the WEP effective in training potential, start-up and established women entrepreneurs?
- Will skills transfer take place after the completion of the WEP?
- Are there significant differences regarding the business performance between the women entrepreneurs who attended and completed the WEP (experimental group) and the women entrepreneurs who did not take part in the WEP (control group)?
- Are there significant differences regarding skills transfer between potential, start-up and established women entrepreneurs?
- Are there significant differences regarding business performance between women entrepreneurs in different provinces in South Africa?
- Does the WEP satisfy the training needs of the experimental group?
- Does the WEP meet the expectations of the experimental group?

6.3 Objectives of the study

The primary and secondary objectives are presented here to illustrate and guide the direction of the research.

6.3.1 Primary objective

The primary objective of the study is to:
Measure the effectiveness of the WEP, as a training intervention, on potential, start-up and established women entrepreneurs in South Africa.

6.3.2 Secondary objectives

The secondary objectives of the study are to:

- Determine whether the training content of the WEP has an effect on women starting their own businesses;
- Determine whether the training content of the WEP has an effect on women entrepreneurs growing their businesses;
- Determine which entrepreneurial, as well as business, skills and knowledge the experimental group learned and gained after they completed the WEP;
- Compare the experimental and control groups approximately six months after the intervention has taken place;
- Determine whether there are significant differences regarding skills transfer between women who already have businesses and those who recently started businesses and those who are potential business owners;
- Determine whether the WEP satisfied the training needs of the experimental group;
- Determine whether the WEP met the expectations of the experimental group;
- Determine whether there are significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

6.4 Hypotheses

In this study it was decided to state hypotheses rather than propositions, due to the fact that several business research authors state that a hypothesis is a testable proposition (Cooper & Schindler, 2001: 47; Lewis, Saunders & Thornhill, 1997: 344). Blumberg, Cooper and Schindler (2005: 36) agree, stating that a proposition is a statement about concepts that may be judged as true or false if it refers to observable phenomena. When a proposition is formulated for empirical testing, it is called a hypothesis. Zikmund (2003: 43) agrees that propositions are statements concerned with the relationships among concepts; an assertion of a universal connection between events that have certain properties. The author adds that a hypothesis is a proposition that is empirically testable. It is an empirical statement concerned with the relationships among variables.

Therefore the hypotheses are stated below and the hypothesis testing is presented in Chapter 7, which indicates that the hypotheses will be tested empirically. Furthermore, the null hypothesis (Ho) indicates that there are no differences between groups or no relationship between measured variables. The alternative hypothesis (Ha) indicates that there is a difference or relationship between measured variables.

The following hypotheses were formulated out of the research objectives:

Null hypothesis (H1o): The WEP, as a training intervention, is not effective in assisting start-up and established women entrepreneurs to grow their own businesses.

Alternative hypothesis (H1a): The WEP, as a training intervention, is effective in assisting start-up and established women entrepreneurs to grow their own businesses.

The following secondary hypotheses were stated for the study:

H2o: The WEP, as a training intervention, is not effective in assisting women entrepreneurs to start their own businesses.

H2a: The WEP, as a training intervention, is effective in assisting women entrepreneurs to start their own businesses.

H3o: There are no significant differences regarding business performance between the experimental and control groups six months after the experimental group completed the WEP.

H3a: There are significant differences regarding business performance between the experimental and control groups six months after the experimental group completed the WEP.

H4o: The experimental group has not gained entrepreneurial, as well as business, skills and knowledge after the completion of the WEP.

H4a: The experimental group has gained entrepreneurial, as well as business, skills and knowledge after the completion of the WEP.

H5o: There are no significant differences regarding skills transfer between potential, start-up and already established women entrepreneurs.

H5a: There are significant differences regarding skills transfer between potential, start-up and already established women entrepreneurs.

H6o: The WEP did not satisfy the training needs of the experimental group.

H6a: The WEP satisfied the training needs of the experimental group.

H7o: The WEP did not meet the expectations of the experimental group.

H7a: The WEP met the expectations of the experimental group.

H8o: There are no significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

H8a: There are significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

6.4.1 Hypotheses testing

The hypotheses testing procedure will be done in Chapter 7 and 8, where the null or alternative hypothesis will be accepted or rejected. According to Zikmund (2003: 500) the significance level is a critical probability in choosing between the null hypothesis and the alternative hypothesis. The statistical significance is presented

later in this chapter in section 6.9.3. The level of significance determines the probability level (0.05 or 0.001) that is to be considered too low to warrant support of the null hypothesis. On the assumption that the null hypothesis being tested is true, if the probability of occurrence of the observed data is smaller than the level of significance, then the data suggests the null hypothesis should be rejected. Table 6.1 indicates that two types of error can be committed in hypotheses testing. Four possible situations can occur when the null hypothesis can be either true or false, and the statistical decision will be either to accept or to reject the null hypothesis.

Table 6.1: Type I and Type II errors in hypotheses testing

State of null hypothesis in the population	Decision	
	Accept Ho	Reject Ho
Ho is true	Correct – no error	Type I error
Ho is false	Type II error	Correct – no error

Source: Zikmund (2003: 504)

6.5 Research methodology

The research methodology which is presented below specifies the methods and procedures for the collection, measurement and analysis of data that the researcher made use of. The research design, used in this study, is explained in section 6.5.1.

6.5.1 The experimental design

According to Cooper and Schindler (2001:136), an experimental design is appropriate when one wishes to discover whether certain variables produce effects in other variables. Experimentation provides the most powerful support possible for a hypothesis of causation.

The empirical study consisted of quantitative research in which three different research questionnaires were used to obtain information from respondents. In terms of evaluating entrepreneurship programmes, it has been suggested that measuring

only quantitative (i.e. economic) results of a programme will fail to provide a full picture of its true value (Henry *et al.,* 2003: 114). Therefore, measurement of the effectiveness of the WEP was done at various levels, as indicated in section 6.8. The first questionnaire was given to respondents, before the actual training took place, to measure the respondents' level of knowledge and skills as well as training expectations and needs (this is referred to as O_1). The second questionnaire was given to respondents to measure their behaviours and attitudes directly after they completed the WEP (this is referred to as O_2) and the third questionnaire measured the respondents' business performance six months after they completed the WEP (this is referred to as O_3).

6.5.2 Classification of experimental designs

Experimental designs vary widely in their power to control contamination of the relationship between independent and dependent variables. According to Cooper and Schindler (2001: 403), the most widely accepted designs are based on this characteristic of control and can be divided into the following four designs:

- Pre-experimental designs;
- True experimental designs;
- Extensions of true experimental designs;
- Field experiments (quasi-experiment).

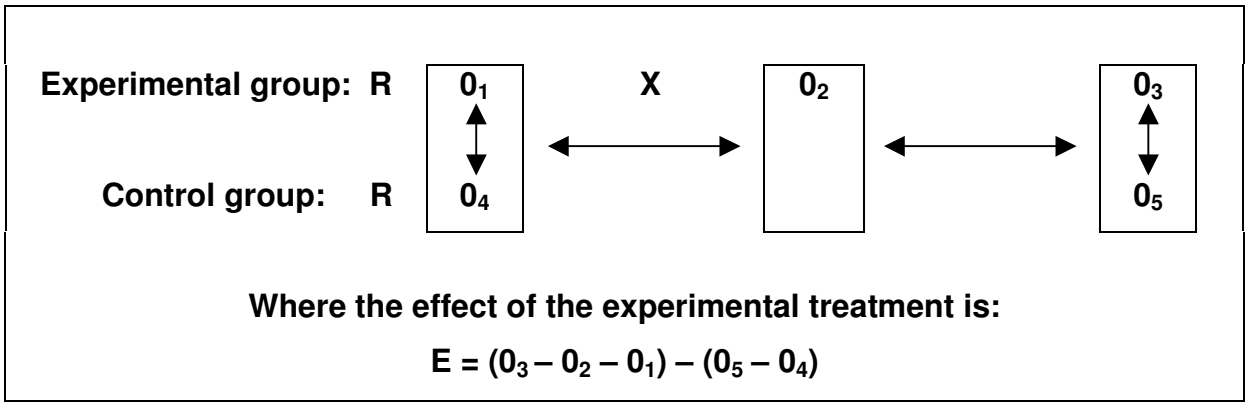
This study was based on a true experimental design which can be classified as the Pretest-Post-Test Control Group Design in which:

R = Randomly assigned group members to a group
X = Exposure of a group to an experimental treatment
0 = Observation or measurement of the dependent variable

Cooper and Schindler (2001: 406) state that the Pretest-Post-Test Control Group design consists of an experimental group and a control group, whereby the experimental group is exposed to a treatment and the control group is not. There was random assignment of women entrepreneurs before the selection and screening

processes, as explained in Chapter 5. Randomisation is the basic method by which equivalence between experimental and control groups is determined (Cooper and Schindler, 2001: 153). In extension of this design, a follow-up observation (six months after the training) was added to strengthen the experimental design and improve the scientific contribution to the field of study.

Figure 6.2: The true experimental design



Source: Own compilation, as adapted from Cooper and Schindler (2001: 406)

The experimental group received the treatment (X) in the form of a training intervention and was observed before the training (O_1), directly after training (O_2) and approximately six months after training (O_3). The control group was observed (O_4) at the same time as the experimental group was observed (O_1) and again approximately six months after that period (O_5). The control group did not receive the treatment (X).

6.5.3 Sampling design and data collection methods

For the selection of the target group out of the population it is important to describe the deciding elements that determine the profile of the selected target group. The determining factors that were taken into consideration when the sample was selected is known as the sampling frame and include the following: Determinant 1 – Already established, start-up or potential women entrepreneurs;

Determinant 2 – Women entrepreneurs with high-growth or potential high-growth ventures;
Determinant 3 – Women whose training needs matched the training content of the WEP.

The sample of the study consisted of 180 women entrepreneurs. The sample included respondents from six different provinces and every ethnic group in South Africa. This was done by running the WEP on six different groups (±20 trainees per group) in the different provinces. One part of the total group consisted of an experimental group (116 respondents), while the other part was the control group (64 respondents). After six months the results of the experimental group were compared with those of the control group. The control group were as far as possible similar to the experimental group in terms of age, experience, skills level and business owners, to name but a few factors. Table 7.1 – 7.10 in Chapter 7 indicates the similarities and differences between the experimental and control groups regarding their personal and business demographics. The *t*-test and chi-square tests were executed to measure the significant differences and similarities between these groups regarding the WEP and are explained in section 7.6.

6.5.3.1 Response rate for the experimental group

Table 6.2 below indicates that a total of 116 women were trained on the WEP from January 2004 to November 2005, all of whom completed and returned the first research questionnaire (O_1). This represents a 100 % response rate. The entrepreneurial learning programme evaluation instrument (O_2) was completed and returned by 106 women after they underwent the six-day WEP. This represents a 91.38 % response rate. Of the 116 women entrepreneurs who were a part of the experimental group, a total of 98 follow-up research questionnaires (O_3) were completed and returned after six months. This represents a 84.48 % response rate. The sample of 98 respondents who completed the follow-up research questionnaires (O_3) was the same respondents that supplied information for questionnaires (O_1 and O_2).

Table 6.2: Experimental group (Time frame: January 2004 – November 2005)

Province	Pre-questionnaire (O_1)	Post-questionnaire (O_2)	Follow-up questionnaire (O_3)
Gauteng group 1	19	18	16
Gauteng group 2	15	13	9
KwaZulu-Natal	19	17	16
Western Cape	19	19	18
Free State, Eastern Cape and Northern Cape	21	18	18
Limpopo and Mpumalange	23	21	21
TOTAL	**116**	**106**	**98**

Source: Own compilation

6.5.3.2 Response rate for the control group

Table 6.3 below indicates that a total of 100 research questionnaires (O_1) were distributed at a women entrepreneurs' meeting in November 2004. A total of 100 questionnaires were returned, of which 64 were usable and could be included in this study, which indicates a 64 % response rate. The 64 women entrepreneurs were contacted by means of personal and telephonic interviews, and 50 completed and returned the follow-up questionnaire (O_3) after the six-month period, in June 2005. This represents a 78.13 % response rate.

Table 6.3: Control group (Time frame: November 2004 – June 2005)

Province	Pre-questionnaire	Post-questionnaire	Follow-up questionnaire
Various Provinces (mainly Gauteng, refer Figure 7.2)	64	-	50
TOTAL	**64**	**-**	**50**

Source: Own compilation

6.5.3.3 Data collection

The method of data collection was based on an interrogation or communication study, in which data was collected by means of personal responses. Primary research was conducted in the form of data collection resulting from the research questionnaires used. Personal and telephonic interviews were conducted with the women entrepreneurs during the follow-up period, after six months. Secondary research was also conducted in the form of a literature review (Chapters 1 to 5) to support the foundation and background of this study.

6.5.4 Sample selection and size

As already indicated, the sample size consisted of 116 (experimental group) and 64 (control group), providing a total of 180 women entrepreneurs. It should be noted that only one respondent from the Eastern Cape Province are included in this sample due to the fact that training was scheduled for that province in 2006. This was unfortunately beyond the time frame of this study and those respondents could not be included in this sample.

Originally the sample was selected by inviting any potential, start-up or established woman entrepreneur to attend the WEP, which meant that each population element had an equal chance of being included in this sample (Probability sampling). Hereafter 40 participants in each province were screened and selected (Chapter 5), therefore non-probability sampling was used. Each population element does not have an equal chance of being included in the sample. For the purposes of this study the sample was restricted, which indicates that each sample element (women entrepreneur) was not drawn individually from the population at large (Cooper & Schindler, 2001: 185). Judgemental sampling was used because the researcher selected sample members who were women entrepreneurs or potential women entrepreneurs in South Africa. According to Zikmund (2003: 392), the advantages of judgemental sampling are that it is useful for certain types of forecasting and the sample is guaranteed to meet specific objectives. A disadvantage may be bias, due to projecting data beyond the scope of the sample. A sample of 180 women entrepreneurs was selected as part of the target population to represent that

population. It can be concluded that the final response rate of this study is 75 % when it is assumed that 40 women out of six different provinces (240 women) were a part of the population at large.

6.5.5 Purpose of the study

The main purpose of the study is causal in nature; there is at least one independent variable and one dependent variable in a causal relationship. In this study the independent variable (IV) is the WEP and the dependent variables (DV) are "starting own businesses" and "growing start-up or established businesses". The purpose of the study is to measure the effectiveness of the WEP on women entrepreneurs and whether it can equip them with the knowledge and skills to start and grow their own businesses. This study will also make agencies, government, financial institutions and other role players aware of the WEP. The main purpose, however, is to inform other women entrepreneurs about the programme which could provide them with training.

6.5.6 The time dimension

The study was based on a mixture of a cross-sectional study and a longitudinal study. Blumberg *et al.* (2005: 130) define a cross-sectional study as one that is carried out once and represents a snapshot of one point in time. The respondents were not measured only once and therefore it is also suggested that this study was based on a longitudinal study, which is one repeated over an extended period. The researcher studied the same women over a period of six months, measuring them at three different points in time. The advantage of this type of study is that it can track changes over time (Cooper & Schindler, 2001: 136). Therefore, longitudinal studies can provide data about past attitudes of women entrepreneurs with reference to entrepreneurial training as well as their future expectations.

6.5.7 The topical scope

The topical scope of this study was based on a statistical study in which the researcher attempts to capture a population's characteristics by drawing inferences

from a sample's characteristics. According to Cooper and Schindler (2001: 137), generalisations about the findings of a statistical study are based on the representativeness of the sample and the validity of the design.

6.5.8 Subjects' perceptions

Cooper and Schindler (2001: 139) emphasise that the usefulness of a design may be reduced when people in a disguised study perceive that research is being conducted. The women entrepreneurs who completed the questionnaires might have perceived deviations as researcher-induced, as they knew research was being conducted.

6.6 Questionnaire design, validity and measurement

According to Sudman and Blair (1998: 300), there is always a chance that some questions could cause problems and questionnaire testing is needed to identify and eliminate these problems. Therefore the next section provides a discussion of the validity of the research questionnaires used in this study.

6.6.1 Validity of the research questionnaires

The research questionnaires (O_1, O_2 and O_3) were first-level pretested on three fellow instrument designers in the Chair of Entrepreneurship in the Department of Business Management at the University of Pretoria. Each specialist examined the questionnaires individually and their comments were then used and the questionnaires were adapted accordingly. This is an example of face (content) validity which refers to the subjective agreement among professionals that a scale logically appears to accurately measure what it is intended to measure (Zikmund, 2003: 302). Face (content) validity and other forms of internal validity are further explained in section 6.7.1.1. The research questionnaires O_1 and O_2 were also pretested in the pilot phase as discussed in Chapter 5, section 5.2.1, by selecting women entrepreneurs from the target population and by simulating the procedures and protocols that had been designated for data collection. The questionnaires were then adapted and some unclear statements were changed or replaced. The validity of the sample was based on the accuracy and precision of the questionnaires.

Although the questions presented in the research questionnaire did not lean in one direction more than another, some respondents did not respond to certain questions asked. These questionnaires were not, however, discarded as they did not affect the validity of the response that the researcher obtained from the respondents. The design of each questionnaire is now explained.

6.6.2 Research questionnaire (O_1) design

This questionnaire (refer Annexure A) was used for the pre-testing of respondents before the actual training took place, and consists of 93 variables. These variables include 15 items dealing with measuring the effectiveness of the WEP. The research questionnaire can be divided into five sections. The first section of the questionnaire collected demographic data on the respondents: age, education, province where their businesses operate, race, language and marital status. The second section of the questionnaire collected data on the respondents' business information: ownership, form of ownership of their businesses, type of industry, annual sales/turnover, value of capital assets, number of employees and customers. The third section collected data on respondents' business success, including profitability, satisfaction of customers, break-even point and business growth indications. The purpose of the fourth section of the questionnaire was to collect data on respondents' entrepreneurial knowledge and skills; they had to rate themselves on several topics. The fifth and final section collected data on the WEP, in terms of what their expectations were, how they rated themselves on certain topics that were going to be covered during the programme, and their entrepreneurial performance. Finally, the last sub-section deals with the business plan, which as seen in earlier chapters plays an important role in the WEP. This research questionnaire (O_1) was completed by both the experimental group (n = 116) and the control group (n = 64); Total = 180.

6.6.3 Entrepreneurial learning programme evaluation instrument questionnaire (O_2) design

This questionnaire (O_2) was distributed directly after the respondents received training (refer Annexure B). This questionnaire consists of 76 variables, including 40 items dealing with the entrepreneurial and management skills and knowledge gained

after the WEP. The research questionnaire can be divided into four sections. The first section of the questionnaire collected data on the respondents' business information: motivational factors to start or grow an own business, and growth plans and strategies. The second section of the questionnaire collected data on respondents' entrepreneurial knowledge and skills, in which they had to rate themselves on several topics. The third section collected data on the WEP, in terms of the respondents' level of satisfaction and whether their expectations of the WEP had been met. The final section of this questionnaire gave the respondents the opportunity to evaluate their level of satisfaction with the facilitator or lecturer. This research questionnaire (O_2) was completed only by the experimental group (n = 106).

6.6.4 Follow-up research questionnaire (O_3) design

The final research questionnaire used in this study is known as the follow-up research questionnaire (O_3) which was used after a six-month period, to measure the effect that the WEP had on the respondents' businesses (refer Annexure C). This questionnaire consists of 75 variables, including 33 items dealing with the measurement of the effectiveness of the WEP. The research questionnaire can be divided into three sections. The first section of the questionnaire collected data on the respondents' business information: annual sales/turnover, value of capital assets, number of employees and customers after six months. The second section collected data on respondents' business success, including profitability, satisfaction of customers, break-even point and business growth indications. The third and final section collected data on the WEP, in terms of how the respondents rated themselves on certain topics covered during the course and what their knowledge of certain business concepts was before and after the WEP. The last sub-section deals with the business plan and what they achieved with the business plan that they prepared during the WEP. This research questionnaire (O_2) was completed by both the experimental group (n = 98) and the control group (n = 50).

6.6.5 Measurement of research questionnaires

The research questionnaires (O_1 and O_3) completed by both the experimental and control groups were adapted to a slight extent when given to the control group due to the fact that they did not receive training in the form of the WEP.

The process structure (response strategies) that was used in the three research questionnaires consisted of the following questions (Table 6.4):

- Dichotomous questions (closed, structured questions);
- Free-response questions (open-ended, unstructured questions);
- 5-point and 4-point Likert scale summated rating question;
  (An even-numbered scale was mostly used in the research questionnaires to avoid the average rating and mid-scores that suggest neutral, average or "don't know" concepts. This enabled the researcher to get usable responses).
- Multiple-choice, single-response questions.

The last mentioned type of question includes multiple options for the respondent, but only one answer is sought and one question can be classified using the multiple-choice, multiple-response scale (also called a checklist).

There are four different types of scales of measurement: nominal scales, ordinal scales, interval scales and ratio scales, as seen in Table 6.4. The nominal data type is used to collect information on gender that naturally or by design can be grouped into male or female categories that are mutually exclusive and collectively exhaustive. This study, however, focused solely on female respondents. According to Diamantopoulos and Schlegelmilch (2002: 25), an ordinal scale establishes an ordered relationship between persons or objects being measured. In ordinal scaling, numbers are used to indicate whether a person, object etc., has more or less of a given characteristic than some other person or object. These authors add that an interval scale possesses all the characteristics of an ordinal scale and, in addition, is characterised by equality of intervals between adjacent scale values. The last scale is the ratio scale, which has all the features of an interval scale plus an absolute zero point (also known as true or natural zero). All of these scales were incorporated in the research questionnaires.

Table 6.4: Characteristics of response strategies used in the questionnaires

Characteristics	Dichotomous	Multiple Choice	Checklist	Free Response	Likert Scale
Type of data generated (measurement scales)	Nominal	Nominal and ordinal	Nominal	Nominal	Interval (pragmatic view) and ordinal (purist view)
Usual number of answer alternatives provided	Two	Three to ten	Ten or fewer	None	Three to seven
Characteristics of data	Classification	Classification and order	Classification	Classification	Classification, order and distance

Source: Cooper and Schindler (2001: 351)

6.7 The characteristics of sound measurement

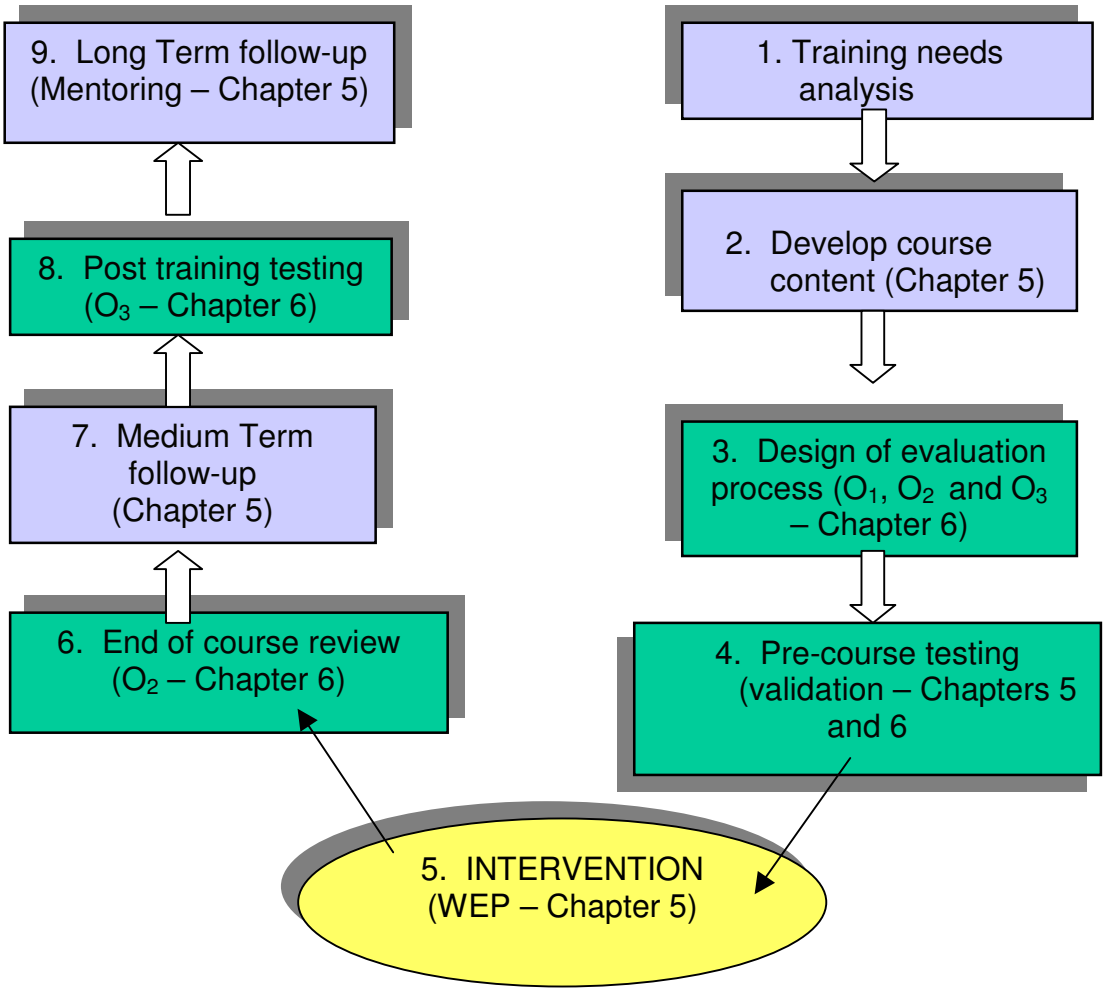
According to Diamantopoulos and Schlegelmilch (2002: 33), the ensuring of validity and reliability is a prerequisite for research data in order to circumvent possible shortcomings and pitfalls in research results. Cooper and Schindler (2001: 210) agree and identify validity and reliability as two characteristics of sound measurement of a research study.

6.7.1 Validity of the training intervention

According to Rae (2002: 88), validation and evaluation are concerned with identifying the change which takes place from the state existing before the training event to that evolving after the training. A number of models of validation and evaluation of training interventions have been put forward. The three principal ones are those

attributed to Kirkpatrick (1967: 98), Hamblin (1976) and Kalleberg and Leicht (1991: 148). Although differing in a number of respects, the first two models are very similar and restrict their coverage to the actual acts of validation and evaluation rather than a complete approach to evaluation. These evaluation models were used in this study to determine the effectiveness of the WEP and will be explained further in section 6.8 of this chapter. Rae's (2002: 6) model of validation and evaluation, shown in Figure 6.2, was used to graphically explain how the WEP was designed as well as provide guidance towards the flow of this study. This model was adapted and used due to the fact that it has been developed, over a number of years of experience in training and development and the practical evaluation of the programmes, as part of a more comprehensive training cycle model (Rae, 2002: 5).

Figure 6.3: Model of validation and evaluation of the study



Source: Own compilation from Rae (2002: 6)

Figure 6.3 illustrates that the WEP and the design thereof took place in several steps:

Step 1: The WEP was designed based on a training needs analysis that was done on the target population (refer to Chapter 4).

Step 2: The programme content was developed based on the training needs of women entrepreneurs (refer to Chapter 5).

Step 3: The design of the evaluation process was done by means of three research questionnaires measuring the respondents at different time periods.

Step 4: The pilot programme took place in 2003 as mentioned in Chapter 5.

Step 5: Six interventions took place in several provinces from January 2004 until November 2005.

Step 6: The respondents were measured directly after the intervention to determine the level of skills transfer that had taken place.

Step 7: The respondents were continuously monitored and mentored after the intervention took place.

Step 8: The respondents were measured again six months after the intervention to determine the effect of the WEP on their businesses.

Step 9: Continuous mentoring and business advising took place.

6.7.1.1 Internal validity

Zikmund (2003: 270) states that in an experimental design, internal validity indicates whether the independent variable was the sole cause of the change in the dependent variable. In other words, was the WEP the sole cause of changes in the women entrepreneurs' businesses?

One widely accepted classification consists of three major forms of validity: content validity, criterion-related validity and construct validity (see Table 6.5). As already mentioned, in this study the principal one that the researcher and trainer encountered is known as content (face) validity – does the research questionnaire reflect the material that is included in the WEP and is it representative of the skill, knowledge or attitude presented in the programme? Rae (2002: 74) indicates that a high content validity for a test will be one in which the majority of items included in the well-balanced programme are included in the test/questionnaire.

Six types of extraneous variables that may influence internal validity negatively are identified by Zickmund (1997: 308). These variables are: History, maturation, testing, instrumentation, selection and experiment mortality. Internal validity may, to a limited extent, be affected due to the unknown background or experience (history) of the delegates (both experimental and control groups). The experimental treatment (training programme) can therefore not be seen as the sole cause of observed changes in the dependent variable. Maturation may also be possible in this study due to the six-month time lapse during which respondents might have forgotten skills gained during the WEP. During this study the same observer was used for all measurements. According to Cooper and Schindler (2001: 401), there can be an instrumentation problem if different observers or interviewers are used for all measurements, yet at the same time they state that using the same observer can also threaten validity.

Table 6.5: Summary of validity estimates

Type	What is measured	Methods
Content	Degree to which the content of the items adequately represents the universe of all relevant items under study.	Judgemental or panel evaluation with content validity ratio
Criterion-related	Degree to which the predictor is adequate in capturing the relevant aspects of the criterion. Concurrent: description of the present, data is available at same time as predictor scores Predictive: prediction of the future, after a passage of time	Correlation
Construct	Attempts to identify the underlying construct(s) being measured and determine how well the test represents it (them).	Judgemental, correlation of proposed test with established one, convergent-discriminant techniques, factor analysis and multitrait-multimethod analysis

Source: Cooper and Schindler (2001: 211)

6.7.1.2 External validity

Cooper and Schindler (2001: 403) state that external validity is concerned with the interaction of the experimental treatment with other factors, and the resulting impact on the ability to generalise to (and across) times, settings, or persons. In other words external validity is concerned with whether the research findings indicate a generalisation of results in this study in order to accept or reject the hypotheses stated in this chapter. Among the major threats to external validity are the following interactive possibilities:

- The reactivity of testing on the experimental stimulus (X). The "before" measurement of the respondents' knowledge about entrepreneurship and management concepts of the WEP might have sensitised the respondents to various experimental communication efforts.
- Interaction of selection and X. The process by which respondents were selected to be included in the experimental study may be a threat to external validity. However in this study this was not the case for the experimental group, due to the fact that respondents were screened to do the WEP and be a part of the study (see Chapter 5, Figure 5.2). For the control group selection this might be a threat to external validity.

6.7.2 Reliability of the measuring instruments

Reliability is concerned with whether the measure is reliable to the degree that it supplies consistent results. In this study, however, when looking at the basic definition of reliability, if a measuring instrument/questionnaire is applied at the start of the WEP and the same constructs are measured at the end, with very similar results, the conclusion could be made that the training had failed by not producing the essential change. According to Rae (2002: 74), in practice the reliability is demonstrated by a significant change, provided the same test/questionnaire is administered under the same sort of conditions to the same group that has followed a common programme. According to Diamantopoulos and Schlegelmilch (2002: 34), if a measure is not reliable then it cannot be valid, but if it is reliable it may or may not be valid; put differently, a measure that is valid is also reliable but the reverse is not necessarily true. Reliable instruments are robust, they work well at different times

under different conditions. This distinction of time and condition is the basis for frequently used perspectives on reliability – stability, equivalence and internal consistency as seen in Table 6.6.

Table 6.6: Summary of reliability estimates

Type	Coefficient	What is measured	Methods
Test-retest	Stability	Reliability of a test or instrument inferred from examinee scores. Same test is administered twice to same respondents.	Correlation
Parallel forms	Equivalence	Degree to which alternative forms of the same measure produce the same or similar results.	Correlation
Split-half, Kuder-Richardson formula 20 (KR20) and Cronbach's alpha	Internal consistency	Degree to which instrument items are homogeneous and reflect the same underlying construct(s).	Specialised correlational formulas

Source: Cooper and Schindler (2001: 216)

Cooper and Schindler (2001: 218) state that reliability can be improved by:

- Minimising external sources of variation;
- Standardising conditions under which measurement occurs (During this study this was attempted by the researcher as the measurement was done under the same conditions and circumstances for both the experimental and control groups);
- Broadening the sample of measurement questions used by adding similar questions to the data collection instrument.

Factor analysis was furthermore executed to confirm the validity and reliability of the measuring instruments (questionnaires) used in this study and is explained below.

6.7.2.1 Factor analysis

The main application of factor analysis techniques is, firstly, to reduce the number of variables and, secondly, to detect structure in the relationship between variables: that is, to classify variables. Therefore, factor analysis is applied as a data reduction or structure detection method; the term factor analysis was first introduced by Thurstone in 1931 (Terre Blanche & Durrheim, 2002: 117). Factor analysis is furthermore executed on variables to strengthen the reliability of the research questionnaires used in this study.

One of the most commonly used measures of reliability is Cronbach's alpha coefficient (α), which provides a measure of internal consistency. It can estimate the proportion of true score variance that is captured by the items by comparing the sum of item variances with the variance of the sum scale. It can compute as follows:

$\alpha = (k / (k - 1))^* [1 - \Sigma (S^2_1) / S^2_{sum}]$

If there is no true score but only error in the items (which is esoteric and unique and therefore uncorrelated across subjects), then the variance of the sum will be the same as the sum of variances of the individual items. Therefore, coefficient alpha will be equal to zero. If all items are perfectly reliable and measure the same thing (true score) then coefficient alpha is equal to 1 (Visser, 2002: 195).

Confirmatory factor analysis and correspondence analysis are further emphasised and mentioned below (Statsoft.com, 2006):

- Confirmatory factor analysis allows researchers to test specific hypotheses about the factor structure for a set of variables, in one or several samples (for example, comparing factor structures across samples).
- Correspondence analysis is a descriptive/exploratory technique designed to analyse two-way and multi-way tables containing some measure of correspondence between the rows and columns. The results provide information which is similar in nature to that produced by factor analysis techniques, and allows one to explore the structure of categorical variables included in the table.

6.8 Determining and measuring the effectiveness of the WEP

The literature review suggested how the effectiveness of a training programme could be determined and measured. The description of the research design, methodology and the design of the research questionnaires has indicated how they were formulated to measure the effectiveness of the WEP.

To measure the effectiveness and impact of a training programme such as the WEP, Kirkpatrick (1967: 98) suggested measurements on four different levels: Reaction measures (do trainees like the programme?); learning measures (do they understand concepts in the programme?); behaviour measures (can they apply skills gained?); and results/success measures (does it make a difference?). In this study assessing training effectiveness was done in line with these suggestions, as indicated in Table 6.7 (Refer Annexures A, B and C).

Table 6.7: Measurement levels used to determine the effectiveness of the WEP

Type of measurement level	Description	Time of evaluation	Research questions (Q) and questionnaires (O)
Reaction measures	Respondents' satisfaction with the WEP (if not satisfied, reasons were asked for).	This evaluation was done directly after the completion of the WEP.	The entrepreneurial learning programme evaluation instrument (O_2) was used (Q6, 10 and 12).
Learning measures	Used to assess whether the respondents gained	This evaluation was done before and directly after the	The research questionnaire (O_1) was used (Q23

Table 6.7 continued..

Type of measurement level	Description	Time of evaluation	Research questions (Q) and questionnaires (O)
	entrepreneurial and business specific skills, whether their knowledge increased and if there were any changes in their attitudes.	completion of the WEP.	and 25). The entrepreneurial learning programme evaluation instrument (O_2) was used (Q5, 7, 11).
Behaviour measures	Assessing the effect of the training on the businesses of the respondents. Finding out whether the participants were able to apply these skills to their own businesses.	Six months after the completion of the WEP.	The follow-up research questionnaire (O_3) was used (Q1 – 47).
Post training success measures	Used to measure training outcomes in terms of economic and growth factors such as profits, costs, productivity, turnover, increases in customers and employees.	Six months after the completion of the WEP and measured against the findings of the control group.	The follow-up research questionnaire (O_3) was used (Q4 – 11).

Source: Own compilation

To measure the effectiveness of the WEP even further, this study also made use of the key performance measures that were adopted from Kalleberg and Leicht (1991: 148). Table 6.8 illustrates how these key performance measures were used to determine the effectiveness of the WEP in this study (Refer Annexures A, B and C).

Table 6.8: Key performance measures used to determine the effectiveness of the WEP

Key performance measures	Indicators	Time of evaluation	Research questions (Q) and questionnaires (O)
Primary performance measures	Growth in number of employees, number of customers, sales turnover and value of capital assets. Growth in innovation and listing strategic objectives.	This measurement was done before commencement of training and six months after the completion of the WEP.	The research questionnaire (O_1) was used (Q11 – 21). The follow-up research questionnaire (O_3) was used (Q4 – 11).
Proxy performance measures	Geographical range of markets – national versus international markets, formal business and VAT registration.	This measurement was done before the respondents attended the WEP.	The research questionnaire (O_1) was used (Q1, 9 and 10).
Subjective measures	The ability of the business to meet business and domestic needs – confidence in running a business.	This measurement was done before, directly after and six months after the completion of the WEP.	All three research questionnaires [O_1 (Q15, 17 and 22), O_2 (Q11 and 12) and O_3 (Q8, 10, 12 – 28)] were used.
Entrepreneurial performance	The desire to start a business or the	This measurement was done before	The research questionnaire (O_1) was

Key performance measures	Indicators	Time of evaluation	Research questions (Q) and questionnaires (O)
measures	desire for growth, the ownership of multiple businesses.	and directly after the completion of the WEP.	used (Q7, 19 – 21). The entrepreneurial learning programme evaluation instrument (O_2) was used (Q1 – 4).

Source: Own compilation

Chapter 8, Tables 8.2 and 8.3, will highlight the findings of the above measures and determinants of effectiveness of the WEP.

6.9 Data processing and analysis

Data processing generally begins with the editing and coding of data. According to Zikmund (2003: 72), editing involves checking the data collection forms for omissions, legibility and consistency in classification. Thereafter the questionnaires were processed by the Department of Statistics at the University of Pretoria. The SPSS statistical package of the SAS was used to compile the descriptive and inferential statistics. Data analysis usually involves reducing accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques. Scales responses on questionnaires and experimental instruments often require the analyst to derive various functions, as well as to explore relationships among variables (Cooper & Schindler, 2001: 82).

6.9.1 Descriptive statistics

In quantitative research, data analysis is normally used to refer to the process of breaking down collected data into constituent parts in order to obtain answers to research questions. Descriptive statistics is the method used to describe characteristics of a population or a sample. It therefore aims at describing data by

investigating the distribution of scores for each variable and by determining whether the scores on different variables are related to each other (Terre Blanche & Durrheim, 2002: 105).

6.9.2 Inferential statistics

Inferential statistic is the method used to draw conclusions about the population itself. In other words, while the descriptive analysis allows the researcher to generalise from the sample to the population, inferential analysis allows the researcher to draw conclusions about the population on the basis of data obtained from samples (Terre Blanch & Durrheim, 2002: 101). Based on the distribution of the descriptive statistics obtained from the study, the following techniques were used to perform the inferential analysis: frequency distribution, cross-frequency tabulation, factor analysis, chi-square test, *t*-test, Wilcoxon test, Mann-Whitney test and the Kruskal-Wallis (K-W) One-Way Analysis of Variance (ANOVA). Table 6.9 illustrates the statistical techniques by measurement level as used during this study. During this study two sample cases (related and independent samples) and k-sample cases (independent samples) were measured.

Table 6.9: Statistical techniques by measurement level and testing situation

Measurement level	Two-Sample Case		K-Sample Case
	Related Samples	Independent Samples	Independent Samples
Nominal	-	X^2 Two-samples test	-
Ordinal	Wilcoxon matched-pairs test	Mann-Whitney test	Kruskal-Wallis one-way ANOVA
Interval and ratio	*t*-test for paired samples	*t*-test	-

Source: Adapted from Blumberg *et al.* (2005: 664)

6.9.2.1 Chi-square test

The chi-square test (x^2) is used to test for significant differences between observed distribution of data among categories and the expected distribution based on the null hypothesis (Cooper & Schindler, 2001: 499). The chi-square was used in this study for two independent samples (experimental and control groups) to test for differences between the samples. The chi-square test used in this study can be calculated as follows:

$$x^2 = \sum_i \sum_j \frac{(Oij - Eij)^2}{E_{ij}}$$

in which

0_{ij} = Observed number of cases categorised in the ijth cell.

E_{ij} = Expected number of cases under Ho to be categorised in the ijth cell.

According to Blumberg *et al.* (2005: 671), for chi-square to operate properly, data must come from random samples of multinomial distributions and the expected frequencies should not be too small. The traditional caution is that expected frequencies below 5 should not compose more than 20 % of the cells, and no cell should have an E_i of less than 1.

6.9.2.2 *t*-test

According to Zikmund (2003: 524), the *t*-test may be used to test a hypothesis stating that the mean scores on some variable will be significantly different for two independent samples or groups. To use the *t*-test for difference of means, it is assumed that the two samples are drawn from normal distributions. The null hypothesis about differences between groups is normally stated as $\mu_1 = \mu_2$ or $\mu_1 - \mu_2 = 0$. In most cases comparisons are between two sample means ($\overline{X}_1 - \overline{X}_2$). A verbal expression of the formula for *t* is:

$$t = \frac{\text{Mean 1} - \text{Mean 2}}{\text{Variability of random means}}$$

Thus, the t-value is a ratio with the information about the difference between means (provided by the sample) in the numerator and the random error in the denominator. To calculate *t*, the following formula is used:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{S_{\bar{x}_1 - \bar{x}_2}}$$

Where:

$\overline{X}_1$ = mean for group 1

$\overline{X}_2$ = mean for group 2

$S_{\bar{x}_1 - \bar{x}_2}$ = pooled, or combined, standard error of difference between means

Zikmund (2003: 525) states that a pooled estimate of the standard error is a better estimate of the standard error than one based on the variance from either sample. It requires the assumption that variances of both groups (populations) are equal. The following formula is used to calculate the pooled standard error of the difference between means of independent samples:

$$S_{\bar{x}_1 - \bar{x}_2} = \sqrt{\left(\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \right) \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}$$

Where:

S_1^2 = variance of group 1

S_2^2 = variance of group 2

n_1 = sample size of group 1

n_2 = sample size of group 2

The Mann-Whitney test was also carried out in this study and is an alternative to the t-test for two independent samples when assumptions about normality are violated and/or the sample sizes are small (Diamantopoulos & Schlegelmilch, 2002: 181).

The paired sample *t*-test is a parametric test where two related samples are tested and concerns those situations in which persons, objects or events are closely matched or the phenomena are measured twice (Blumberg *et al.*, 2005: 673). This test is done when persons were randomly assigned to groups and given pre-tests and post-tests. In the following formula, the average difference, $\overline{D}$, corresponds to the normal distribution when the α difference is known and the sample size is sufficient. The statistic *t* with (n – 1) degrees of freedom is defined as:

$$t = \frac{\overline{D}}{S_D / \sqrt{n}}$$

Where

$$\overline{D} = \frac{\sum D}{n}$$

$$S_D = \sqrt{\frac{\sum D^2 - \frac{\left(\sum D\right)^2}{n}}{n-1}}$$

The observed significant level for the calculated *t* value is 0.005.

6.9.2.3 Wilcoxon matched-pairs test

Blumberg *et al.* (2005: 577) state that when both direction and magnitude of difference between carefully matched pairs can be determined, the Wilcoxon matched-pairs test must be used. This test has excellent efficiency and can be more powerful than the *t*-test in cases where the latter is not particularly appropriate. Cooper and Schindler (2001: 740) agree and mention that the mechanics of the calculation are also quite simple. Find the difference score (d_i) between each pair of values and rank-order the differences from smallest to largest without regard to sign. The actual signs of each difference are then added to the rank values and the test statistic *T* is calculated. *T* is the sum of the ranks with the less frequent sign.

According to Zikmund (2003: 542), a common situation is the "before/after" experiment, where the same subjects are measured twice.

The formula for the test is:

$$z = \frac{T - \mu_T}{\sigma_T}$$

Where:

$$\text{Mean} = \mu_T = \frac{n(n+1)}{4}$$

$$\text{Standard deviation} = \sigma_T \sqrt{\frac{n(n=1)(2n=1)}{24}}$$

6.9.2.4 Kruskal-Wallis (K-W) One-Way Analysis of Variance (ANOVA)

According to Diamantopoulos and Schlegelmilch (2002: 183), the K-W One-way ANOVA tests the same null hypothesis as the Mann-Whitney *U* test but across three or more independent groups rather than two groups. Zikmund (2003: 544) states that this test may be thought of as a nonparametric equivalent of analysis of variance. However, as with all nonparametric tests, the assumptions are less restricting: if there are three groups, the null hypothesis is that population 1 equals population 2, which equals population 3. In other words, the Kruskal-Wallis test is a technique to determine if the three populations have the same distribution shape and dispersion. Blumberg et al. (2005: 582) agree and suggest that the K-W one-way ANOVA is used to rank all scores in the entire pool of observations from smallest to largest. The rank sum of each sample is then calculated with ties being distributed. The value of *H* is computed as follows:

$$H = \frac{12}{N(N+1)} \sum_{j=l}^{k} \frac{T_j^2}{n_j} - 3(N+1)$$

Where

T_j = Sum of ranks in column *j*

n_j = Number of cases in *j*th sample

$N = \alpha w_j$ = Total number of cases

K = Number of samples

When there are a number of ties, it is recommended that a correct factor (*C*) be calculated and used to correct the *H* value as follows:

$$C = 1 - \left\{ \frac{\sum_{i}^{G} \left(t^3{}_i - t_i \right)}{N^3 - N} \right\}$$

Where

G = Number of sets of tied observations

T_i = Number tied in any set *i*

H = H/C

6.9.3 Statistical significance

The hypotheses that were stated earlier in this chapter will be tested in Chapter 7 and will be accepted or rejected in Chapter 8. Since any sample will almost certainly vary somewhat from its population, it must be judged whether these differences are statistically significant or insignificant (Cooper & Schindler, 2001: 486). A method of presenting the results of a statistical test reports the extent to which the test statistic disagrees with the null hypothesis. This method has become very popular because analysts want to know what percentage of the sampling distribution lies beyond the sample statistic on the curve and most report the results of statistical tests as probability values (*p* values). The *p* value is compared to the significance level (α) and on that basis the null hypothesis is either rejected or not rejected. If the *p* value is less than the significance level (0.05 or 0.001), the null hypothesis is rejected. If p is greater than or equal to the significance level, the null hypothesis is not rejected (refer section 6.4.1).

6.10 Conclusion

This chapter provided a description of the methodology applied in this study. In summary this chapter focuses on the research question posed: Whether the WEP is effective in training potential, start-up and established women entrepreneurs to start and grow their own businesses. The data collection was primarily based on personal responses and was conducted in the form of the research questionnaires (O_1, O_2 and O_3). The data processing and analysis attempt to answer the research question through the research findings which are presented in the following chapter. The measurements and determinants of the effectiveness of the WEP are highlighted in the chapter which provides a foundation for the descriptive statistics discussed in the next chapter.

The explanation of the statistical techniques preceded the actual tests carried out and presented in Chapter 7. These techniques included the t-test, chi-square test, Wilcoxon matched-pairs test, Mann-Whitney U test and Kruskal-Wallis One-Way ANOVA. The next chapter explains and interprets the most significant results as found by executing the above techniques.

Chapter 7: Research findings

"Even if an entrepreneurship training programme includes the best knowledge and skills (content) about new venture creation and business growth as its outputs, there is no guarantee that participants will start businesses or improve their business performance indicators (profit and turnover) unless their mindset, willingness to take risks, confidence, attitudes and behaviour have been influenced as well."
- Pretorius *et al.* (2005: 424)

7.1 Introduction

The literature study revealed the need for an entrepreneurship training programme specifically for women, and that it is necessary to measure the effectiveness of such a programme. The key motivation behind this study was to identify whether the WEP, as a training intervention, is effective in training women to start and grow their own businesses, and to investigate any notable differences or similarities between the experimental and control groups. This chapter focuses on summarising and interpreting the research findings and descriptive statistics, based on the responses from the respondents who completed the quantitative research questionnaires.

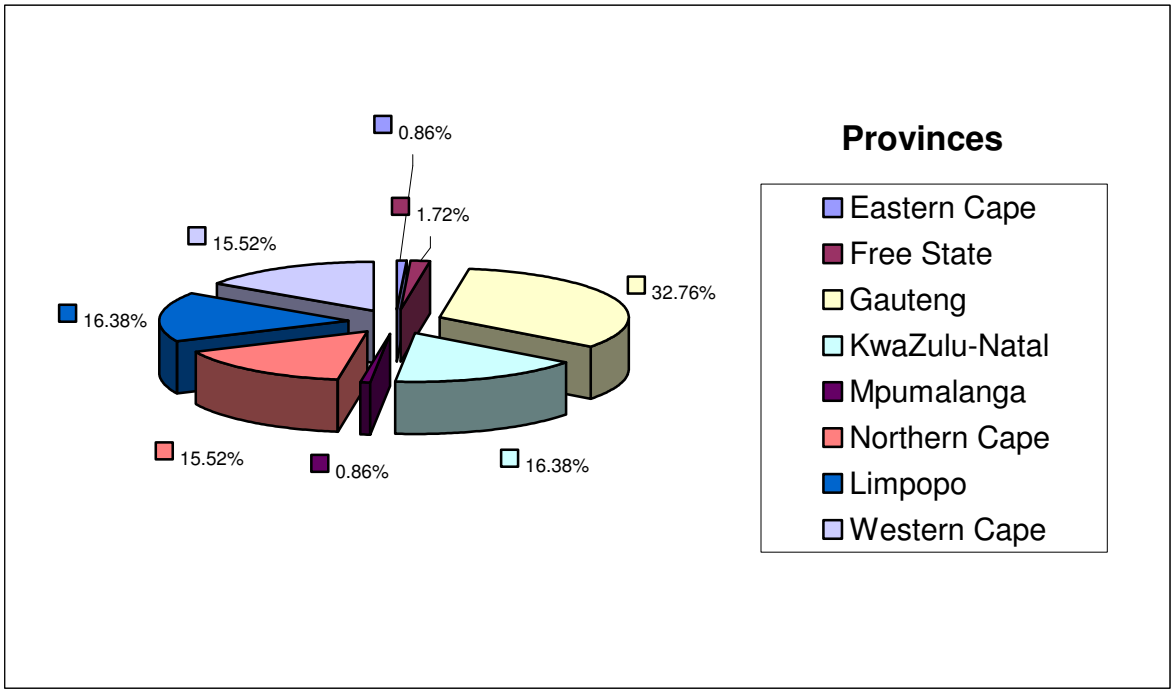
The first section of this chapter reports on the demographic profile of the experimental (116 respondents) and control (64 respondents) groups. The experimental group which attended the WEP was discussed in Chapter 5, Table 5.2. There are six different groups from various provinces in South Africa within this experimental group. The control group were women entrepreneurs chosen from different industries who mainly operated their businesses in the Gauteng province. The second section focuses on the business demographics of the respondents and examines all essential business information that was reported before the experimental group received the treatment (training intervention). The next section focuses on describing the respondents' satisfaction with the WEP as well as their expectations about the WEP before they attended the programme and whether those expectations had been met after the programme. Fourthly, the results of the factor analysis are presented to illustrate the reliability and validity of the measuring

instruments that were used in this study. The next section focuses on the significant differences between the experimental and control groups, and the *t*-tests, Chi-square tests and Kruskal-Wallis One-Way Analysis of Variance (ANOVA) are presented. The fifth section of this chapter comprises the statistical techniques used to measure the effectiveness of the WEP, specifically regarding the business performance indicators. The final section of this chapter focuses on providing general comments on open-ended questions from the respondents regarding the effectiveness of the WEP.

7.2 Personal demographics of the sample

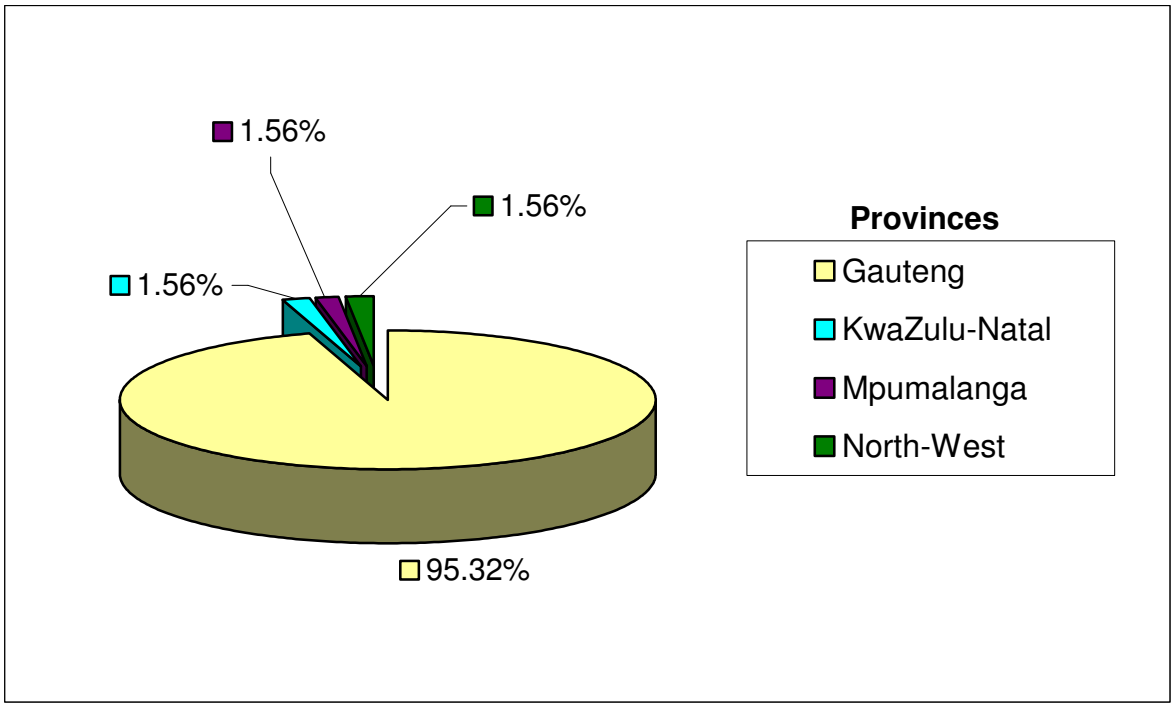
Many researchers, such as Antonites (2003: 178) and Friedrich *et al.* (2003: 9), who have worked with control and experimental groups, agree that the control and the experimental groups must exhibit the same demographic characteristics as far as possible. As mentioned in the literature study the gender of all the respondents (both experimental and control groups) are female. The other personal demographics of the experimental and control groups are presented in the tables and figures that follow.

Figure 7.1: The geographical distribution of the experimental group by province



The experimental group comprised women from the provinces indicated in Figure 7.1. The majority of the experimental group are situated in Gauteng province, probably due to the fact that two groups were trained in Gauteng, while in the remaining provinces only one group per province was trained. Mpumalanga and the Eastern Cape provinces were not included in this sample and this explains why there is only one respondent from each of these provinces.

Figure 7.2: The geographical distribution of the control group by province



The control group comprised women from the provinces indicated above in Figure 7.2. The majority of the respondents in the control group are situated in Gauteng province, whereas only one respondent came from KwaZulu-Natal, Mpumalanga and the North-West Province, respectively. The reason for this is that the control group were measured at a women's meeting in Gauteng.

The average age of the respondents is indicated in Table 7.1, where the mean as well as the standard deviation are presented. The arithmetic mean ($\overline{X}$) is also referred to as the arithmetic average and can be defined as the sum of a set of values divided by their number (Diamantopoulos and Schlegelmilch, 2002: 97).

According to Cooper and Schindler (2001: 475) the standard deviation (s) shows the variation about the average of the data, in other words it summarises how far away from the average the data values typically are.

Table 7.1: Average age of respondents (experimental and control groups)

Measured groups	Frequency (n)	Minimum age	Maximum age	Mean	Standard deviation	Frequency missing
Experimental group	113	24	60	41.78	7.82	3
Control group	60	25	64	43.17	7.46	4

Although the experimental group has more respondents than the control group, there is no significant age difference between the two groups. The minimum and maximum ages and the average age (mean) of the respondents for both the experimental and the control groups are almost identical. The standard deviation for both groups is relatively large, which implies that the variability of the dataset is sufficient to continue with parametric tests.

The other personal demographics, including highest level of qualification, home language, racial composition and marital status, are presented in Tables 7.2 – 7.5. These tables indicate the frequency and percent age of the experimental and control groups as well as the frequency and percent age of the total sample.

Table 7.2 is presented on the next page.

Table 7.2: Highest level of qualification of the total sample

Variable	Experimental group		Control group		Total sample	
	n	%	n	%	n	%
Less than matric (Grade 12)	23	19.83	20	31.25	43	23.89
Matric (Grade 12)	26	22.41	26	40.63	52	28.89
National Diploma (3 years)	31	26.72	8	12.50	39	21.67
Baccalaureus Degree (3 years)	18	15.52	4	6.25	22	12.22
Post-graduate tertiary education	18	15.52	6	9.37	24	13.33
Total	**116**	**100**	**64**	**100**	**180**	**100**

n = Frequency

% = Percent

The majority of the experimental group are well educated. More than half (57.76 %) of the respondents have a national diploma and/or other tertiary qualification. This is probably because when the experimental group was screened for inclusion to attend the WEP, they had to either have matric (Grade 12) or a higher qualification and/or a viable business opportunity (if they were not business owners). The majority (40.63 %) of the control group have only matric (Grade 12). Although it is evident that the experimental group is on average more educated than the control group, respondents with less than matric (Grade 12) were also included in the sample if they owned their own businesses or had the potential to be a business owner.

Table 7.3 is presented on the next page.

Table 7.3: Home language of the total sample

Variable	Experimental group		Control group		Total sample	
	n	%	n	%	n	%
Zulu	24	20.69	17	28.33	41	23.30
English	25	21.55	4	6.67	29	16.48
Xhosa	17	14.66	4	6.67	21	11.93
South-Sotho	7	6.04	14	23.33	21	11.93
Tswana	10	8.62	4	6.67	14	7.95
Ndebele	1	0.86	0	0.00	1	0.57
Tsonga/ Shangaan	9	7.76	3	5.00	12	6.82
North-Sotho/ Sepedi	16	13.79	9	15.00	25	14.20
Afrikaans	6	5.17	2	3.33	8	4.55
Venda	1	0.86	3	5.00	4	2.27
Total	**116**	**100**	**60**	**100**	**176**	**100**

Frequency missing = 4 (control group)

The respondents in the experimental group are mostly English- and Zulu-speaking, probably due to the fact that most of the respondents live in Gauteng and KwaZulu-Natal Provinces and many of the respondents were trained in Gauteng. The respondents in the control group are mostly Zulu and South-Sotho speaking, because many of the respondents live in the Gauteng province and data was gathered in this province.

Table 7.4: Racial composition of the total sample

Variable	Experimental group		Control group		Total sample	
	n	%	n	%	n	%
Black	91	78.45	59	92.19	150	83.33
Coloured	20	17.24	3	4.69	23	12.78
Indian	1	0.86	0	0.00	1	0.56
Caucasian	4	3.45	2	3.13	6	3.33
Total	**116**	**100**	**64**	**100**	**180**	**100**

Although all racial groups are included in the sample, the majority of the respondents in the experimental and control groups are black (83.33 %) and a few coloured (12.78 %).

Table 7.5: Marital status of the total sample

Variable	Experimental group		Control group		Total sample	
	n	%	n	%	n	%
Never married	25	21.55	13	20.31	38	21.11
Married	69	59.48	32	50.00	101	56.11
Divorced	14	12.07	12	18.75	26	14.44
Widowed	6	5.17	3	4.69	9	5.01
Living together	2	1.73	4	6.25	6	3.33
Total	**116**	**100**	**64**	**100**	**180**	**100**

The majority of the respondents in both groups are married (56.11 %). There are no significant differences regarding the race composition and marital status between the experimental and control groups.

7.3 Business demographics of the sample

The business demographics report information about the respondents' businesses. The experimental and control groups had to have similar business biographical characteristics, as far as possible, before the experimental group received the treatment. The reason for this is to enable the groups to be compared against each other and to be representative of the population at large. The first section investigates the ownership of own businesses for both the experimental and control groups. The age of business, industry/sector of main business, annual sales/turnover, value of the capital assets, number of employees and customers of the respondents' businesses are presented. These variables, as well as the successfulness, profitability and break-even point of the respondents' businesses, will be used in section 7.7 as business performance indicators to measure the effectiveness of the WEP.

Table 7.6: Business ownership of the total sample

Variable	Experimental group		Control group		Total sample	
	n	%	n	%	n	%
Own a business	101	87.07	60	93.75	161	89.44
Do not own a business	15	12.93	4	6.25	19	10.56
Total	**116**	**100**	**64**	**100**	**180**	**100**

It is evident that the majority of the experimental and control groups were business owners (89.44 %), whereas only 19 (10.56 %) respondents (15 experimental and four control group) did not own businesses. The group who were not business owners were seen as potential women entrepreneurs, as already discussed in the literature study. They were included in this study due to the screening stage (Chapter 5) which indicated that they had the potential to start an own business and had a viable business opportunity. Of the 19 potential women entrepreneurs, seven respondents (five – experimental group and two – control group) indicated that they would like to start a business within six months after they were measured the first time.

The potential women entrepreneurs within the experimental group were then asked whether they wanted to start their own businesses directly after the WEP, and all 15 indicated that they wanted to start a business within six months from that point.

The actual situation after six months revealed that five (33.33 %) out of the possible 15 respondents from the experimental group had actually started their own businesses. Only four respondents had not started their own businesses, while the other six were not available for follow-up after the six-month period. Out of the start-up and already established women entrepreneurs, 36 respondents (33.96 %) from the experimental group started another business after the WEP. Three respondents (75 %) from the control group started their own businesses within six months and none of these start-up and already established women entrepreneurs started multiple businesses. After six months, all of the start-up and already established respondents in the experimental group owned the same business that they had owned before WEP, whereas two respondents (4 %) from the control group did not own a business any more after six months.

Data on the form of business ownership was collected but is not presented, as it does not contribute to the research findings. Therefore it can only be mentioned that the majority of the experimental (67.96 %) and control (96.72 %) groups stated that their form of business ownership was Close Corporations (CC).

Table 7.7: Year when respondents started their businesses

Category	Variable	Experimental group		Control group		Total sample	
		n	%	n	%	n	%
Already established	1985 – 1995	9	8.91	4	6.78	13	8.13
	1996 – 1999	14	13.86	11	18.64	25	15.62
	2000	8	7.92	3	5.08	11	6.88
	2001	12	11.89	4	6.79	16	10.00
Start-up	2002	26	25.74	6	10.17	32	20.00
	2003	13	12.87	5	8.47	18	11.25
	2004	11	10.89	26	44.07	37	23.12
	2005	8	7.92	0	0.00	8	5.00
	Total	**101**	**100**	**59**	**100**	***160**	**100**

*** Frequencies missing (experimental group = 15 and control group = 5) - respondents were not business owners (potential women entrepreneurs).**

The respondents who owned their own businesses were asked to provide an indication of the year when they started their businesses and these results indicate the age of the business that was reported in this study. As seen from the Table 7.7, these respondents can be categorised as either already established or start-up women entrepreneurs (refer section 1.4 in Chapter 1) and the data can be summarised as follows:

- **Experimental group**

  Potential women entrepreneurs = 15 (12.93 %)

  Start-up women entrepreneurs (2002 – 2005) = 58 (50.00 %)

  Already established women entrepreneurs (older than 2002) = 43 (37.07 %)

  Total – 116

- **Control group**

  Potential women entrepreneurs = 4 (6.35 %)

  Start-up women entrepreneurs (2002 – 2005) = 37 (58.73 %)

  Already established women entrepreneurs (older than 2002) = 22 (34.92 %)

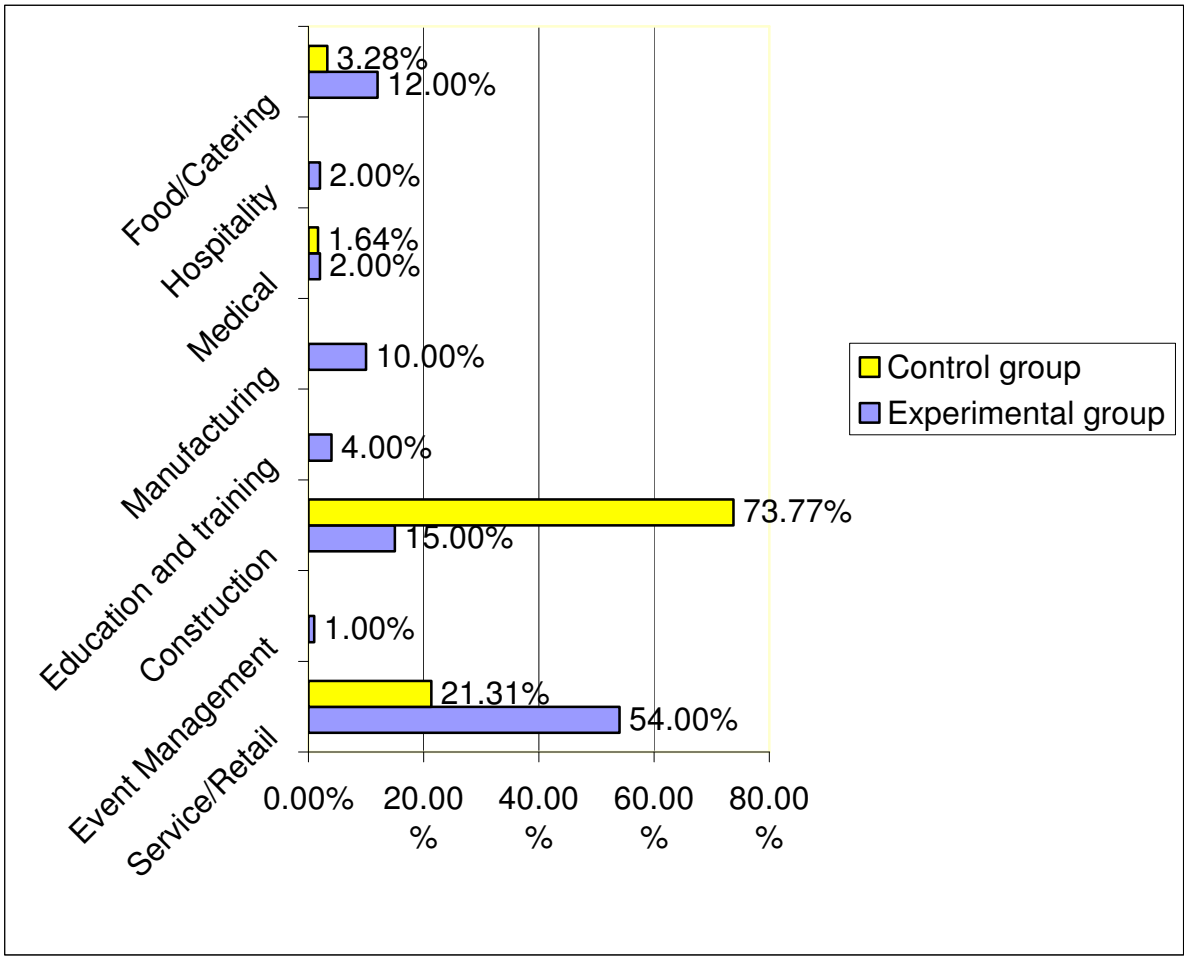
  Total – 63 (one respondent did not indicate)

The number of years in existence was similar for the experimental and control groups, as can be seen from Table 7.7. This finding also testifies to the fact that the experimental and control groups had to have the same characteristics, opinions and perceptions before the WEP.

Most of the respondents from the experimental group started their businesses in 2002 or between 1996 and 1999, whereas most respondents from the control group started their businesses in 2004 or between 1996 and 1999. It is interesting to note that there is a difference between the experimental and control groups regarding business start-up in 2004. There were no business start-ups recorded for the control group in 2005 due to the fact that the data was collected from these respondents in 2004.

Figure 7.3 on the next page illustrates the sectors/industries into which most of the respondents' businesses fell.

Figure 7.3: Experimental and control groups' distribution per sector/industry



The majority of the respondents in the experimental group indicated that their businesses were categorised in the service/retail industry, the construction industry and the food/catering industry. The majority of the respondents in the control group indicated that their businesses fell into the construction industry, the service/retail industry and the food/catering industry. This was not due to sampling, as sector/industry was not a parameter of interest as part of the sampling design. It is interesting to find that many women are entering the construction and manufacturing sectors (73.77 % of the respondents in the control group).

The following business performance indicators are reported as an indication of how the business profile appeared before the WEP. The annual sales/turnover and value of the capital assets for both groups was reported before the experimental group received the WEP. The results are tabled and presented in Tables 7.8 – 7.10.

Table 7.8: Annual sales/turnover of the total sample

Variable	Experimental group		Control group		Total sample	
	n	%	n	%	n	%
0 – R150 000	58	57.43	31	50.82	89	54.94
R150 001 – R250 000	7	6.93	12	19.67	19	11.73
R250 001 – R500 000	12	11.88	7	11.48	19	11.73
R500 001 – R1 million	13	12.87	7	11.48	20	12.35
R1 million – R2.5 million	8	7.92	1	1.64	9	5.55
More than R2.5 million	3	2.97	3	4.92	6	3.70
Total	**101**	**100**	**61**	**100**	***162**	**100**

*** Frequencies missing - respondents were not business owners.**

Although the majority of the respondents indicated that their annual sales/turnover was in the 0 – R150 000 interval, it is evident that there is a good distribution between the remaining intervals. Note that frequencies are missing due to the fact that potential women entrepreneurs could not complete this question, as they did not own a business.

Table 7.9: Value of capital assets of the total sample

Variable	Experimental group		Control group		Total sample	
	n	%	n	%	n	%
0 – R100 000	60	59.41	37	63.79	97	61.00
R100 001 – R250 000	19	18.81	8	13.79	27	16.98
R250 001 – R2 million	21	20.79	11	18.98	32	20.13
R2 million – R5 million	1	0.99	1	1.72	2	1.26
R5 million – R10 million	0	0.00	1	1.72	1	0.63
Total	**101**	**100**	**58**	**100**	***159**	**100**

*** Frequencies missing - respondents were not business owners.**

Although the biggest percentage of the respondents indicated that their value of capital assets was in the 0 – R100 000 interval, it is evident that there is a good distribution between the remaining intervals.

Table 7.10:Respondents' average number of employees and customers/clients

Measured group	n	Minimum employees	Maximum employees	Mean	Std. Deviation	*Frequency missing
Average number of employees						
Experimental group	100	0	130	8.75	14.63	16
Control group	55	1	50	9.25	10.39	9
Average number of customers per month						
Experimental group	93	0	1 000	78.03	193.56	23
Control group	41	1	420	14.83	65.50	23

***Respondents were not business owners or did not answer the question.**

Although the experimental group has on average more employees per business and more customers per month than the control group, the standard deviation for both groups is very large, which indicates that there is substantial variability in the dataset. The significance of this variability will be tested in section 7.7 and the influence of a small number of respondents will be taken into consideration.

The experimental group has now been compared with the control group concerning the following variables: geographic composition, age, education, home language, race, marital status, business ownership, age of business, sector/industry, annual sales/turnover, value of capital assets, number of employees and customers/clients. The differences and similarities between the measured groups will further be investigated in section 7.6.

7.4 Respondents' satisfaction and expectations regarding the WEP

The appropriate Chi-square test was executed on the relevant satisfaction and expectations' variables and did not indicate any significant differences between the before, after and six months after the WEP measurement. This was due to the data not showing a discrepancy between the before, after and six months after the WEP measurement. However, the following descriptive statistics are presented to show the experimental group's satisfaction and expectations regarding the WEP. The respondents were given a list of expectations that they could agree or disagree with and the list was based on the needs analysis already explained in Chapter 4, section 4.6.1. The control group also had the opportunity to provide their expectations from such a training intervention if they should get the opportunity to do the programme.

7.4.1 Respondents' satisfaction with the WEP

The responses recording the experimental group's satisfaction with the WEP were gathered directly after they attended and completed the WEP and are described in Table 7.11.

After the completion of the WEP, the experimental group were asked whether the WEP content could be useful to them in starting and/or growing their own businesses and 105 respondents (99.06 %) indicated yes; only one respondent did not answer the question.

104 respondents (98.11 %) indicated that they would recommend the WEP to a friend or colleague.

Table 7.11 is presented on the next page.

Table 7.11: The experimental group's satisfaction with the WEP

Variable	Level of satisfaction							
	Highly satisfied		Fairly satisfied		Dissatisfied		Highly dissatisfied	
	n	%	n	%	n	%	n	%
General satisfaction with the content of the WEP	97	91.52	7	6.60	1	0.94	1	0.94
Preparing a business plan	101	95.28	4	3.78	1	0.94	0	0.00
Presenting the business plan to peers, facilitator and financial institutions	85	80.95	17	16.19	3	2.86	0	0.00
General satisfaction with the facilitators	98	92.45	6	5.67	1	0.94	1	0.94
The facilitators' attitudes and enthusiasm	102	96.23	3	2.83	1	0.94	0	0.00
The facilitators' practical business experience	98	92.45	6	5.67	1	0.94	1	0.94
The facilitators' ability to encourage interaction and participation	99	93.40	7	6.60	0	0.00	0	0.00

Note that if the sample was less than 106 for certain questions, some respondents did not complete the question. Generally, the majority of the respondents were satisfied with the WEP in terms of the variables listed in Table 7.11. The two respondents that stated that they were dissatisfied with the WEP indicated that the reason was that they needed more information on financial elements of a business. A possible reason why the respondents' level of satisfaction in terms of the presentation of the business plans to peers and financial institutions is lower than that for the other variables, is that the respondents waited extremely long for feedback from the financial institutions with the adjudication of the business plans.

7.4.2 Respondents' expectations regarding the WEP

Table 7.12 indicates the experimental groups' expectations regarding the WEP before they attended the programme and whether those expectations had been met directly after the WEP and then again six months after they attended the programme. The respondents had to indicate whether they agreed or disagreed that the WEP would assist them or have assisted them with regard to the variables listed in Table 7.12. As mentioned previously, it is obvious that before, directly after and six months after the WEP responses, did not vary enough to indicate significant differences between the means, therefore this section is only described.

Table 7.12 is presented on the next page.

Table 7.12: The experimental group's expectations regarding the WEP

Variables (Expectations)	Before the WEP (n = 116)				Directly after the WEP (n = 106)				Six months after the WEP (n = 98)			
	Disagree		Agree		Disagree		Agree		Disagree		Agree	
	n	%	n	%	n	%	n	%	n	%	n	%
To start your own business	3	2.68	109	97.32	3	3.03	96	96.97	11	11.96	81	88.04
To grow your own business	3	2.68	109	97.32	3	3.03	96	96.97	2	2.06	95	96.94
To compile a business plan	4	3.51	110	96.49	3	2.83	103	97.17	0	0.00	98	100.00
To be more creative	4	3.45	112	96.55	2	1.90	103	98.10	4	4.12	93	95.88
To develop new products/services within your business	6	5.41	105	94.59	1	0.95	104	99.05	6	6.19	91	93.81
Networking with other women entrepreneurs	1	0.88	113	99.12	2	1.90	103	98.10	2	2.08	94	97.92
Financial and cash-flow planning	1	0.86	115	99.14	3	2.83	103	97.17	2	2.04	96	97.96
To market your products/services/business	1	0.88	113	99.12	2	1.92	102	98.08	2	2.06	95	96.94
Growth in net value of your business	2	1.79	110	98.21	2	1.92	102	98.08	8	8.25	89	91.75
Recruitment of employees	18	16.67	90	83.33	6	5.83	97	94.17	15	17.65	70	82.35
Increasing productivity levels	1	0.90	110	99.10	3	2.88	101	97.12	6	6.12	92	93.88
Increasing profitability	2	1.79	110	98.21	1	0.96	103	99.04	8	8.16	90	91.84

It is remarkable to find that the majority of the respondents indicated that their expectations were met directly after the WEP and six months after they attended the programme. However, some respondents disagreed that the programme assisted them to start their own businesses, as the majority of the respondents already had their own businesses. The following variables showed a slight deviation in terms of the actual situation: growth in net value of business, recruitment of employees, increasing productivity levels and increasing profitability. This might be due to the fact that with regard to these variables, respondents probably needed a significant time to actually perceive what the effect of the training intervention was. However, it should be noted that there were positive responses after the short six-month period.

The control group were also asked what their expectations were about such a training programme if they should get an opportunity to do the programme, and their responses are highlighted in Table 7.13.

Table 7.13: The control group's expectations about the WEP

Variables (Expectations)	Frequency - N = 50 (Percent)			
	Disagree		Agree	
	n	%	n	%
To start your own business	10	20.83	38	79.17
To grow your own business	2	4.08	47	95.92
To compile a business plan	2	4.17	46	95.83
To be more creative	3	6.25	45	93.75
To develop new products/services within your business	5	10.00	45	90.00
Networking with other women entrepreneurs	2	4.00	48	96.00
Financial and cash-flow planning	4	8.16	45	91.84
To market your products/services/business	5	10.00	45	90.00
Growth in net value of your business	3	6.00	47	94.00
Recruitment of employees	4	8.00	46	92.00
Increasing productivity levels	4	8.00	46	92.00
Increasing profitability	3	6.12	46	93.88

The majority of the control group had their own businesses, which is why they did not expect the WEP to assist them to start a business. It is interesting to find that both the experimental and control groups' expectations were high in terms of the above-mentioned variables.

A needs analysis was also done on the control group, who did not attend the WEP. The control group were asked, if they should get the opportunity to attend the programme, which business topics they would like to learn more about. As this was an open-ended question, the most frequently mentioned topics were:

- How to manage and run a business;
- Financial planning and how to obtain financial assistance;
- Compiling a business plan;
- Marketing of the business;
- Networking with other business people;
- Customer service; and
- How to grow a business.

It is worth mentioning that all the business topics cited by the control group are covered during the six-day WEP. This again testifies to the fact that the experimental and control groups had the same opinions, expectations and perceptions before the former attended the programme.

7.5 Validity and reliability of the measuring instruments

To confirm the validity and reliability of the measuring instruments, factor analysis was executed. As mentioned in Chapter 6, 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; 604).

Factor analysis was done on variables from all three research questionnaires used in this study in which respondents answered the questions the first time. The variables

were sorted and rotated to illustrate the different factors. The values are presented from the highest to the lowest, as evident in Tables 7.14, 7.17 and 7.18.

Table 7.14: Rotated factor analysis of respondents' entrepreneurial characteristics, orientation and business knowledge before the WEP

Variable no.	Description of Variable	Loadings		
		Factor 1	Factor 2	Factor 3
V46	Persistence and determination	**0.802**	0.000	0.000
V48	Need for achievement	**0.799**	0.000	0.000
V49	Leadership abilities	**0.767**	0.000	0.000
V51	Good communication skills	**0.684**	0.000	0.000
V47	Being independent and in control	**0.675**	0.000	0.000
V50	Knowledge of competitors	**0.567***	0.000	0.258
V39	Taking advantage of an opportunity	**0.303**	0.000	0.000
V42	Enthusiasm	0.000	**0.817**	0.000
V43	Performance motivation	0.000	**0.771**	0.000
V41	Commitment to business	0.000	**0.636**	0.000
V40	Product knowledge	0.000	**0.382**	0.000
V45	Running a business	0.000	0.000	**0.831**
V44	Business planning	0.000	0.000	**0.676**

*Note: Knowledge of competitors (V50) was rejected due to the high double loading and is not included as part of factor one in the statistical tests that follow.

The eigenvalues, which determine the number of factors when factor loading is done, are: Factor 1 = 6.01185, Factor 2 = 1.36281 and Factor 3 = 1.00010. The eigenvalue has to be greater or equal to one in order to be included as a factor when loading is done on variables. The original factor analysis was ranked from the

highest, 0.831, to the lowest value, 0.303, as factors one to three. The rows have been rearranged so that for each successive factor loadings greater than 0.600 appear first and loadings less than 0.250 have been replaced by zero.

The above table illustrates the three factors and the following labels were given:

Factor 1: Entrepreneurial characteristics

Factor 2: Entrepreneurial orientation

Factor 3: Business knowledge

According to Athayde (2003: 10), there is some debate about what constitutes an acceptable alpha score. A summary of over 800 articles of empirical studies using Cronbach alphas found that reported coefficients ranged from 0.600 to 0.999. Athayde (2003: 10) quotes Nunnally (1978) as recommending 0.500 as an acceptable threshold, while he points out that Malhtra (1993) and Tull and Hawkins (1993) recommend 0.600 and Churchill (1997), on the other hand, recommends 0.700. In this study, 0.600 was used as the benchmark.

Table 7.15: Cronbach alpha results

Factor	Description	Cronbach Alpha value
Factor 1	**Entrepreneurial characteristics**	0.8528
Factor 2	**Entrepreneurial orientation**	0.8294
Factor 3	**Business knowledge**	0.8012

From the 13 items, posed on a 5-point Likert scale, the derived three factors delivered excellent Cronbach Alpha results. A value of 0.9019 was obtained for all the variables used.

Table 7.16: Factor correlation for rotated factors

Factor	Factor 1	Factor 2	Factor 3
Factor 1	1.000		
Factor 2	0.618	1.000	
Factor 3	0.487	0.493	1.000

Although the correlations between factors one, two and three are high, it was decided that the factor structure was stable enough for them to be used as separate factors. These three factors explained 55.27 % of the variance.

Table 7.17: Rotated factor analysis of respondents' entrepreneurial and business skills before the WEP

Variable no.	Description of variable	Loadings
		Factor 1
V69	Drawing up financial statements	**0.768**
V77	Human resource management	**0.763**
V71	Business failure signs and causes	**0.759**
V78	Financial and cash-flow management	**0.748**
V68	Break-even analysis	**0.747**
V79	Risk orientation	**0.746**
V74	General management	**0.742**
V75	Marketing of business/products/services	**0.738**
V70	Managing growth of the business	**0.737**
V81	Opportunity identification	**0.734**
V67	Sustainable competitive advantage	**0.734**
V66	Compiling a business plan	**0.731**
V65	Compiling a feasibility study	**0.730**
V80	Creativity and innovation	**0.709**
V63	Creative problem solving	**0.708**
V76	Legal aspects – business forms and registration	**0.674**
V82	Using role models for support and assistance	**0.671**
V61	Using mentors and counsellors	**0.670**
V62	Making use of networking opportunities	**0.665**
V60	Ability to obtain financial assistance for the business	**0.640**

Factor analysis was done on one, two and three factors, which resulted in unsatisfactory loadings and eigenvalues as well as too high correlations between the factors. A decision was taken to rerun the factor analysis, resulting in one

acceptable factor to increase the validity and reliability of the measuring instrument. It could have been expected that the eigenvalue for factor one is 10.8915, the Cronbach alpha value is 0.9558 and this factor explained 52.07 % of the variance. This is merely an indication of the validity of individual variables.

The above table illustrates one factor and the following label was given: **Entrepreneurial and business skills.**

The three factors generated in Table 7.14 and one factor evident in Table 7.17 will from this point onwards be labelled as the **four skills transfer factors** for all the statistical techniques that follow. These four factors were used to determine whether skills transfer took place and can be seen in Table 7.27.

Table 7.18: Rotated factor analysis of respondents' business systems and strategies, financial indicators and change orientation before the WEP

Variable no.	Description of Variable	Loadings		
		Factor 1	Factor 2	Factor 3
V32	Improving systems in business (general)	**0.836**	0.000	0.000
V30	Allocation of resources	**0.756**	0.000	0.000
V34	Communication in business (general)	**0.692**	0.000	0.000
V36	Management roles and responsibilities	**0.544**	0.000	0.000
V26	Ability to do long-term planning	**0.535**	0.000	0.000
V28	Positioning your business against competitors	**0.507**	0.000	0.000
V38	Expansion (growth) of business	**0.455**	0.000	0.000
V24	Having record-keeping systems	**0.313**	0.000	0.000

Table 7.18 continued..

Variable no.	Description of Variable	Loadings		
		Factor 1	Factor 2	Factor 3
V18	Increasing turnover	0.000	**0.920**	0.000
V16	Making a profit	0.000	**0.768**	0.000
V22	Return on investment	0.000	**0.766**	0.000
V20	Increasing assets	0.000	**0.723**	0.000
V44	Change in attitude	0.000	0.000	**0.974**
V46	Change in culture	0.000	0.000	**0.757**
V48	Change in management style	0.000	0.000	**0.712**
V42	Change in business processes	0.000	0.000	**0.644**

The eigenvalues are: Factor 1 = 6.58098, Factor 2 = 2.11727 and Factor 3 = 1.23911. The original factor analysis was ranked from the highest 0.974, to the lowest value 0.313 as factors one to three. The rows have been rearranged so that for each successive factor, loadings greater than 0.600 appear first and loadings less than 0.250 have been replaced by zero.

The above table illustrates the three factors and the following labels were given:

Factor 1: Business systems and strategies

Factor 2: Financial indicators

Factor 3: Change orientation

Table 7.19: Cronbach alpha results

Factor	Description	Cronbach Alpha value
Factor 1	**Business systems and strategies**	0.8440
Factor 2	**Financial indicators**	0.8783
Factor 3	**Change orientation**	0.8839

From the 16 items, posed on a 4-point Likert scale, the derived three factors delivered excellent Cronbach Alpha results. A value of 0.9020 was obtained for all the variables used.

Table 7.20: Factor correlation for rotated factors

Factor	Factor 1	Factor 2	Factor 3
Factor 1	1.000		
Factor 2	0.403	1.000	
Factor 3	0.661	0.360	1.000

Although the correlation between factors one and three is very high, the decision was taken to use these three factors instead of only two factors, as the factor structure was stable. These three factors explained 54.66 % of the variance.

The three factors generated in Table 7.18 will now be labelled as the **three business improvement factors** for all statistical techniques that follow.

7.6 Testing the statistical and substantive significance

The two-sample chi-square (x^2) test is presented to indicate the significant differences between the experimental and control groups concerning various variables. Furthermore the *t*-test for independent samples and *t*-test for paired samples was carried out by using all the factors that were identified in the factor analysis. Furthermore, the Wilcoxon matched-pairs test was executed on the individual variables as included in the **four skills transfer factors** (Tables 7.14 and 7.17), and on the **three business improvement factors** (Table 7.18). Finally, the Kruskal-Wallis One-way Analysis of Variance (ANOVA) was performed on the **four skills transfer factors.**

7.6.1 The chi-square (x^2) test

This test was performed on the experimental and control groups before the former received the experimental treatment (WEP) and also to improve the reliability and validity of the measuring instruments used.

Table 7.21 presents the chi-square values for each variable where the experimental and control groups had to provide their opinions about the importance of certain business success concepts. As mentioned in section 7.4.2, the experimental and control groups had to have the same opinions before the WEP and it will now be tested statistically. A 5-point Likert scale was used, ranging from 1 = not important at all, to 5 = very important.

Table 7.21: Insignificant differences between the experimental and control groups concerning the business success concepts

Variables (business success concepts)	Frequency		Chi-Square value	P-value
	Experimental group	Control group		
Excellent product/service	113	62	0.3161	0.8538
Providing customer care	115	59	0.6157	0.7350
High quality	115	60	5.0989	0.0781
Sufficient capital	110	58	4.0498	0.2561
Training and acquiring skills (entrepreneur)	116	63	0.5862	0.4439
Training and acquiring skills (employees)	115	63	1.5352	0.4641

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

The high chi-square value and p-value greater than 0.05 indicated that there is no statistical difference between the experimental and control groups concerning the variables listed in Table 7.21. The majority of the respondents in the experimental

and control groups stated that the following variables were very important and could contribute towards business success:

- Excellent product/service
- Providing customer care
- High quality products/services
- Sufficient capital
- Training and acquiring skills (entrepreneur)
- Training and acquiring skills (employees)

It was to be expected that there would be no statistical differences between the two groups concerning the above business success concepts before the WEP. This finding confirms that the experimental and control groups held the same opinions regarding the business success concepts before the training intervention.

Table 7.22: Significant and insignificant differences between the experimental and control groups' expectations about the WEP

Variable	Frequency		Chi-Square value	P-value
	Experimental group	Control group		
Growth in net value of business	112	57	0.7643	0.6824
Increasing productivity	111	56	1.5826	0.4533
Increasing profitability	112	58	1.1313	0.7695
Recruitment of employees	108	57	10.6960	0.0135***

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

As the control group did not receive the intervention, they were asked, if they should get the opportunity to do the WEP, what they would expect from the programme.

The high chi-square value and p-value greater than 0.05 indicate that there is no statistical difference between the experimental and control groups concerning the

variables listed in Table 7.22. The majority of the experimental and control groups stated that they strongly agreed that they expected the WEP to assist them with the following variables to improve the performance of their businesses:

- Growth in net value of business
- Increasing productivity levels
- Increasing profitability

The only variable in which there is a statistical difference between the experimental and control group concerning the respondents' expectations of whether the WEP would assist them in improving the performance of their businesses, is the recruitment of employees. It is interesting to find that there are respondents in the experimental group who did not expect the WEP to assist them with the recruitment of employees, whereas all the respondents in the control group expected the programme to assist them with the recruitment of employees.

Table 7.23: Insignificant difference regarding written business plans between the experimental and control groups

Variable	Frequency		Chi-Square value	P-value
	Experimental group	Control group		
Written business plan			1.8642	0.3937
Yes	46	25		
No	70	39		
Total (n = 180)	116	64		

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) **$\alpha < 0.001$ (99 % confidence level)**

The high chi-square value and p-value greater than 0.05 indicate that there is no statistical difference between the experimental and control groups concerning whether they had written business plans or not. The majority of the respondents (both groups) had not written a business plan before the experimental group received the treatment (WEP).

Ninety percent (90 %) of the respondents in the experimental group had a written business plan after the training intervention. After the six-month period, 13 respondents (13.27 %) of the experimental group received financial assistance with the business plans that they had prepared for the WEP. Of these, 6 respondents (6.12 %), received financial assistance from ABSA Bank. Thirty-five (35.71 %) of the respondents did not apply for finance at the time when measured, whereas 10 (10.2 %) of the respondents stated that they did not apply as they did not need financial assistance. Only one respondent who applied for finance was rejected due to credit issues.

The Chi-square tests confirmed that the experimental and control groups were similar regarding various variables before the WEP. This makes the comparison between the groups in the next section valid and the results that much more reliable and representative of the total population.

7.6.2 *t*-test for independent samples

The *t*-test was executed on the experimental and control groups by comparing whether there were significant differences between the mean scores of the variable categorised in the **four skills transfer factors** as well as the **three business improvement factors**. The Mann-Whitney (or ranked-sum) test was also carried out and the values are provided in Table 7.24. This test is an alternative to the *t*-test for independent samples and allows for testing group differences when the populations are not normally distributed or when it cannot be assumed that the samples are from populations that are equal in variability (Zikmund, 2003: 543).

Section 7.5 identified the variables included in the four skills transfer factors:

Entrepreneurial characteristics

Persistence and determination, need for achievement, leadership abilities, good communication skills, being independent and in control and taking advantage of an opportunity.

Entrepreneurial orientation

Enthusiasm, performance motivation, commitment to business and product knowledge.

Business knowledge

Running a business and business planning.

Entrepreneurial and business skills

Drawing up financial statements, human resource management, business failure signs and causes, financial and cash-flow management, break-even analysis, risk orientation, general management, marketing of business/products/services, managing growth of the business, opportunity identification, sustainable competitive advantage, compiling a business plan, compiling a feasibility study, creativity and innovation, creative problem solving, legal aspects – business forms and registration, using role models for support and assistance, using mentors and counsellors, making use of networking opportunities, and finally the ability to obtain financial assistance for the business.

Table 7.24: Independent *t*-test: Comparison of the experimental and control groups before the WEP on the four skills transfer factors

Factor	Mean		Std. Deviation		Mann-Whitney***
	Experimental group	Control group	Experimental group	Control group	
Entrepreneurial characteristics	4.3118	4.0161	0.5218	0.7914	0.0095***
Entrepreneurial orientation	4.3922	4.2016	0.5308	0.8271	0.1040
Business knowledge	3.6077	3.8548	0.9036	0.8702	0.0773
Entrepreneurial and business skills	2.3254	2.4234	0.6234	0.7715	0.3912

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) **$\alpha < 0.001$ (99 % confidence level)**

It is interesting to find that the only significant difference between the means of these two groups is in the entrepreneurial characteristics factor. The reason for this may be due to the fact that the experimental group knew that they were going to receive the training, which encouraged them and influenced them positively. This furthermore gave them a higher need for achievement than the control group at that point. There is no significant difference between the means of these two groups for the remaining factors. This is to be expected, due to the fact that the experimental and control groups had to have the same entrepreneurial characteristics, skills, orientation and business skills and knowledge, as far as possible, before the training intervention took place.

Table 7.25 highlights the comparison between the experimental and control groups regarding the **three business improvement factors** that were identified after the experimental group attended the WEP. Note that this test was carried out after the experimental group received the treatment and that differences between the experimental and control groups are now to be expected. These findings will indicate whether the WEP had an effect on the experimental group's businesses.

Section 7.5 identified variables included in three business improvement factors:

Business systems and strategies

Improving systems in business (general), allocation of resources, communication in business (general), management roles and responsibilities, ability to do long-term planning, positioning your business against competitors, expansion (growth) of business and having record-keeping systems.

Financial indicators

Increasing turnover, making a profit, return of investment and increasing assets.

Change orientation

Change in attitudes, change culture, change in management styles, change in processes.

Table 7.25: Independent *t*-test: Comparison of the experimental and control groups after the WEP on the three business improvement factors

Factor	Mean		Std. Deviation		Mann-Whitney***
	Experimental group	Control group	Experimental group	Control group	
Business systems and strategies	1.4133	0.2729	0.4816	0.4661	< 0.0001***
Financial indicators	1.4748	0.2733	0.7413	0.5345	< 0.0001***
Change orientation	1.6449	0.2283	0.6665	0.4829	< 0.0001***

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

From the above table it is evident that the means of the **three business improvement factors** were much higher for the experimental group than for the control group. This illustrates that the experimental group improved more than the control group regarding their business systems and strategies, financial indicators and change orientation. Due to the fact that this measurement was done after the experimental group received the training intervention it is obvious that the experimental group improved significantly after they attended and completed the programme. It is worth mentioning that the WEP did not have only a psychological effect (change orientation factor) on the respondents, but they also indicated that their physical business operations (business systems and strategies and financial indicators factors) had improved six months after the training intervention took place.

7.6.3 Paired sample *t*-test

According to Diamantopoulos and Schlegelmilch (2002: 195), this test is the related measure equivalent to the two-sample *t*-test for differences in means (it is also known as the t_r-test to distinguish it from the conventional *t*-test). It lends itself nicely to

comparisons of two-interval or ratio-level measures, the null hypothesis being that the means difference in the population is zero.

This test was carried out on the experimental group to measure the differences, if any, in their entrepreneurial skills and knowledge before and after the WEP. A 5-point Likert scale, ranging from 1 = very poor to 5 = excellent was used to register opinions. The *t*-test was further done on variables that were measured on a 4-point Likert scale ranging from 1 = no knowledge whatsoever to 4 = sufficient knowledge. The tests that follow were carried out before and six months after the WEP and any differences between the before and after measurement can be seen as related to the training intervention that took place.

Table 7.26: Paired sample *t*-test: Comparison of the experimental group before and after the WEP on the four skills transfer factors

Factor	Mean		Std. Deviation		t-statistic	P-value
	Before WEP	After WEP	Before WEP	After WEP		
Entrepreneurial characteristics	4.2804	4.434	0.5220	0.4170	2.99	0.0035***
Entrepreneurial orientation	4.3846	4.5024	0.5362	0.4274	2.18	0.0318***
Business knowledge	3.5529	4.0673	0.9215	0.6612	5.39	< 0.0001***
Entrepreneurial and business skills	2.3104	3.5283	0.6481	0.4165	19.14	< 0.0001***

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

It is valuable to note that there are statistical differences between the means before and after the WEP of the experimental group for **all the skills transfer factors** identified. This indicates that skills transfer took place successfully and that the

experimental group gained entrepreneurial and business skills and knowledge after the completion of the WEP. These findings emphasise that the content of the WEP is effective in improving the entrepreneurial and business knowledge and skills of women entrepreneurs. This confirms the WEP as a national benchmark that can be used by other organisations and institutions against which to measure the content of their entrepreneurial programmes.

7.6.4 Wilcoxon matched-pairs test

The paired sample *t*-test was carried out on the **four skills transfer factors** as well as the **three business improvement factors** that were generated from the factor analysis. Further testing is now necessary and therefore the Wilcoxon matched-pairs test was performed on various individual variables included in each **skills transfer factor.** These tests were only performed on the experimental group, to test their before and after the WEP responses. A 5-point Likert scale ranging from 1 = very poor to 5 = excellent was used to register responses regarding the respondents opinions about their entrepreneurial characteristics.

Table 7.27: Wilcoxon matched-pairs test: Comparison of the experimental group before and after the WEP on entrepreneurial characteristics

Factor	Variable	Mean		Std. Deviation		Wilcoxon***
		Before WEP	After WEP	Before WEP	After WEP	
Entrepreneurial characteristics	Taking advantage of an opportunity	4.2500	4.2885	0.7445	0.5858	0.4535
	Persistence and determination	4.2672	4.4038	0.7502	0.5997	0.0261***
	Being independent and in control	4.3879	4.5192	0.7433	0.6071	0.0362***
	Need for achievement	4.3966	4.5385	0.7087	0.6220	0.0251***

Table 7.27 continued..

Factor	Variable	Mean		Std. Deviation		Wilcoxon***
		Before WEP	After WEP	Before WEP	After WEP	
	Leadership abilities	4.2845	4.4135	0.8000	0.6771	0.0702
	Good communication skills	4.2845	4.4423	0.7780	0.6802	0.0212***

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

It is interesting to find that there are statistical differences between the means before and after the WEP of the experimental group for the following variables: Persistence and determination, being independent and in control, need for achievement and good communication skills.

The literature study (Chapter 3) revealed:

- High persistence and determination leads to a high need for achievement and motivation. The fact that the respondents improved after the WEP indicated that their need for achievement, goals and motivation is much higher after the WEP and will influence their businesses positively.
- The respondents' locus of control is very high after the WEP which indicates that they are more independent and in control of their businesses.
- Lastly, good communication skills will improve the respondents' ability to negotiate with stakeholders and network with other entrepreneurs.

There were no statistical differences for the variables taking advantage of an opportunity and leadership abilities; this may be due to the fact that the majority of the respondents rated themselves very high on these variables before the WEP as well as after the WEP.

Table 7.28 indicates the mean and standard deviation on the variables included in the entrepreneurial orientation factor before and after the WEP. A 5-point Likert scale ranging from 1 = very poor to 5 = excellent was used to register responses regarding the respondents opinions' about their entrepreneurial orientation.

Table 7.28: Wilcoxon matched-pairs test: Comparison of the experimental group before and after the WEP on entrepreneurial orientation

Factor	Variable	Mean		Std. Deviation		Wilcoxon***
		Before WEP	After WEP	Before WEP	After WEP	
Entrepreneurial orientation	Product knowledge	4.1724	4.3173	0.7943	0.6116	0.0705
	Commitment to business	4.5345	4.6635	0.6650	0.5326	0.0193***
	Enthusiasm	4.5776	4.5769	0.6997	0.6025	0.8557
	Performance motivation	4.3448	4.4519	0.6991	0.6809	0.1478

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

The only variable that indicates that there is a statistical difference before and after the WEP is: commitment to business. The mean after the WEP is higher, which indicates that respondents had a higher rating or opinion of their commitment to their businesses after the WEP. This indicates that the WEP motivated the experimental group to be more committed to their businesses, which led to a higher need for achievement. However, it is contradictory to find that there are no statistical differences between the enthusiasm and performance motivation of the respondents after the WEP, as these concepts relate very closely to the commitment to business variable.

Table 7.29 indicates the statistical differences on the variables included in the business knowledge factor before and after the WEP. A 5-point Likert scale ranging from 1 = very poor to 5 = excellent was used to register responses regarding the respondents opinions' about their business knowledge.

Table 7.29: Wilcoxon matched-pairs test: Comparison of the experimental group before and after the WEP on business knowledge

Factor	Variable	Mean		Std. Deviation		Wilcoxon***
		Before WEP	After WEP	Before WEP	After WEP	
Business knowledge	Business planning	3.4310	3.9135	1.0486	0.8374	< 0.0001***
	Running/ operating a business	3.7759	4.2212	0.9239	0.6379	< 0.0001***

***** Statistically significant difference**

α < 0.05 (95 % confidence level) **α < 0.001 (99 % confidence level)**

It is interesting to note that the respondents' business knowledge improved significantly after the WEP. This indicates that the respondents are now able to draw up an adequate business plan for their businesses, as well as apply it practically to their businesses. This finding further illustrates that the WEP is also effective in improving the respondents' operations of their businesses, which also leads to better general management.

The Wilcoxon matched-pairs test was further done on the variables included in the entrepreneurial and business skills factor. Respondents were asked what their knowledge was about various entrepreneurial and business concepts before and after the WEP. A 4-point Likert scale was used ranging from 1 = no knowledge whatsoever to 4 = sufficient knowledge.

Table 7.30 is presented on the next page.

Table 7.30: Wilcoxon matched-pairs test: Comparison of the experimental group before and after the WEP on entrepreneurial and business skills

Factor	Variable	Mean		Std. Deviation		Wilcoxon***
		Before WEP	After WEP	Before WEP	After WEP	
Entrepreneurial and business skills	Ability to obtain financial assistance for your business	2.4224	3.5000	0.8356	0.5896	< 0.0001***
	Using mentors and counsellors	2.2414	3.2170	0.9835	0.7685	< 0.0001***
	Making use of networking opportunities	2.6121	3.6981	0.8421	0.5195	< 0.0001***
	Creative problem solving	2.5948	3.6226	0.7573	0.6392	< 0.0001***
	Compiling a feasibility study	2.0862	3.5660	0.8999	0.6175	< 0.0001***
	Compiling a business plan	2.2845	3.1632	0.8925	0.5785	< 0.0001***
	Sustainable competitive advantage	2.0690	3.6698	0.8206	0.5810	< 0.0001***
	Break-even analysis	1.9224	3.4906	0.8861	0.6934	< 0.0001***
	Drawing up financial statements	1.9828	3.2925	0.9508	0.6896	< 0.0001***
	Managing growth	2.0862	3.6415	0.8296	0.5886	< 0.0001***
	Business failure signs and causes	2.0689	3.7075	0.8917	0.5850	< 0.0001***
	General management	2.6724	3.5943	0.7997	0.6730	< 0.0001***

Table 7.30 continued..

Factor	Variable	Mean		Std. Deviation		Wilcoxon***
		Before WEP	After WEP	Before WEP	After WEP	
	Marketing of business/products/ services	2.6034	3.7170	0.9220	0.6288	< 0.0001***
	Legal aspects – company/business registration	2.5431	3.4717	0.9903	0.7710	< 0.0001***
	Human resource management	2.4310	3.2642	0.9346	0.7964	< 0.0001***
	Financial and cash-flow management	2.3190	3.3208	0.9288	0.7628	< 0.0001***
	Risk orientation	1.9655	3.2642	0.8938	0.7964	< 0.0001***
	Creativity and innovation	2.5259	3.6981	0.9460	0.5719	< 0.0001***
	Opportunity identification	2.6207	3.6698	0.9104	0.6432	< 0.0001***
	Using role models for guidance	2.4569	3.5472	0.9362	0.6919	< 0.0001***

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

All the individual variables included in the entrepreneurial and business skills factor showed statistically significant differences before and after the WEP. This finding is an indication that the experimental group's knowledge and skills about entrepreneurship and business management improved extensively after they attended the programme. This is probably the most valuable finding and it is therefore necessary to discuss each individual variable:

- The first variable, ability to obtain financial assistance for your business, signifies that the WEP improved the respondents' knowledge of how and where they can obtain financial assistance. This finding illustrates that the training intervention

addressed one of the most severe barriers, namely a lack of access to finance, facing women entrepreneurs, as seen in Chapter 4 of the literature study.

- The WEP is effective in teaching respondents to make use of mentors, counsellors and role models. This is attributable to the fact that the programme supplied after-course training and services in the form of mentors and counsellors as explained in Chapter 5.
- Networking opportunities is another variable that made this programme unique and contributes towards the effectiveness of the WEP regarding improved communication skills.
- The WEP is also effective in teaching women entrepreneurs to make use of creative problem-solving techniques that can help them to solve problems more efficiently in the future.
- The variables compiling a feasibility study and business plan improved significantly after the WEP, which is attributable to the fact that all the delegates had to prepare their own business plans. The importance of a business plan was discussed in Chapter 5.
- The improvement in the respondents' sustainable competitive advantage variable contributes towards the success of their businesses. Although it is only an assumption, it should be mentioned that none of the respondents could identify a sustainable competitive advantage for their businesses before they attended the WEP.
- The WEP contributed towards improving the respondents' knowledge about the financial elements of a business. These elements include: the break-even analysis, cash-flow management and drawing up of and understanding their own financial statements.
- The WEP is effective in improving the following business skills: general management, managing growth, marketing, legal aspects, human resource management and financial management. All of these skills contribute towards better business management and will improve their business performances.
- The WEP improved respondents' skills about business failure signs and causes, which could prevent them from failing in the future. This is extremely important for start-up and potential women entrepreneurs at different stages of their

business's life cycle, as it can prevent them from failing within the first three years of their of operating a business.

- Lastly, as noted earlier, the WEP is effective in improving the entrepreneurial skills of respondents such as risk orientation, creativity and innovation and opportunity identification (refer Chapter 3 for the importance of these skills).

Table 7.31 shows a comparison between the experimental group regarding the three business improvement factors before and after the WEP.

Table 7.31: Wilcoxon matched-pairs test: Comparison of the experimental group before and after the WEP on the three business improvement factors

Factors	Mean		Std. Deviation		Wilcoxon***
	Before WEP	After WEP	Before WEP	After WEP	
Business systems and strategies	1.7956	3.2089	0.4144	0.5245	< 0.0001***
Financial indicators	1.6432	3.1181	0.5114	0.8032	< 0.0001***
Change orientation	1.8854	3.5304	0.4644	0.6539	< 0.0001***

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

It is apparent that there were statistical differences between the before and after measurement of the experimental group regarding the three business improvement factors. This shows that the respondents did improve regarding their business systems and strategies, financial indicators and change orientation after they attended the WEP. The improvement of the business systems and strategies factor illustrates the fact that the experimental group were able to improve their systems in their businesses and facilitate strategies for improvement in the future. It should also be noted that the respondents' financial indicators: turnover, profit, return of investment and assets, increased significantly after the six-month period (refer Table 7.33). This is unexpected, as six months is a very short period and improvement was

only expected 12 to 18 months after the training intervention. The improvement of the last factor, change orientation, indicated that the entrepreneurs' attitude, management style and outlook were more positive after the WEP.

It can now be concluded that the experimental group improved after they attended the WEP on all seven factors identified in the factor analysis in section 7.5.

7.6.5 Kruskal-Wallis One-Way Analysis of Variance (ANOVA)

The research problem was stated in Chapter 6, section 6.2 which indicated the need to determine whether there were significant differences between the types of women entrepreneurs included in the experimental group. The Kruskal-Wallis ANOVA is used to determine significant differences between the various groups. This test was performed on the **four skills transfer factors** to measure significant differences between the potential, start-up and already established women entrepreneurs within the experimental group. These three terms have already been defined and explained in Table 7.7.

Table 7.32 is presented on the next page.

Table 7.32: K-W One-way ANOVA: Comparison of the potential, start-up and already established women entrepreneurs before and after the WEP on the four skills transfer factors

Factor	Mean						Std. Deviation						Kruskal-Wallis***
	PT		SU		AE		PT		SU		AE		
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
Entrepre-neurial charac-teristics	4.0641	4.3718	4.3105	4.5065	4.1325	4.3625	0.6256	0.4312	0.4876	0.4041	0.5259	0.4235	0.2417
Entrepre-neurial orientation	4.2500	4.4808	4.3775	4.4804	4.4375	4.5375	0.4564	0.4728	0.5531	0.4467	0.5423	0.3945	0.6171
Business knowledge	3.1538	3.8846	3.5980	4.0784	3.6250	4.1125	0.9439	0.6176	0.8603	0.7306	0.9789	0.5827	0.7065
Entrepre-neurial and business skills	1.9077	3.5423	2.3103	3.5255	2.4413	3.5275	0.6973	0.2597	0.6066	0.3772	0.6473	0.5065	0.0876

***** Statistically significant difference $\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)**

PT = Potential women entrepreneurs (n = 15); SU = Start-up women entrepreneurs (n = 58);

AE = Already established women entrepreneurs (n = 43)

It is noteworthy that there are no statistical differences regarding the **four skills transfer factors** between the potential, start-up and already established women entrepreneurs. It might have been expected that the potential and start-up women entrepreneurs gained more skills after WEP as they are new to business, whereas the already established women entrepreneurs are more experienced; this, however, was not the case. These results indicate that the WEP is effective in transferring entrepreneurial and business skills to all types of women entrepreneurs. This is an interesting finding, as it proves that the WEP is effective for all women entrepreneurs, regardless of the stage of business life cycle in which they find themselves. Although no entrepreneurship training programme is perfect, it is evident that no adaptations need to be made when training different types of women entrepreneurs in South Africa.

7.7 Statistical techniques used to measure the effectiveness of the WEP

Various statistical techniques were used to measure the effectiveness of the WEP at various levels, as explained in Chapter 6, section 6.8. Some of these levels have already been measured and discussed during the previous section of this chapter. Therefore this section exclusively deals with the business performance indicators of the respondents businesses. The chi-square test, *t*-test and Kruskal-Wallis One-way ANOVA were used to measure the business performance indicators before and six months after the experimental group attended the WEP. The experimental group was further compared with the control group and the statistical significant differences are presented. The business performance indicators of the respondents' businesses include:

- Annual sales/turnover
- Value of capital assets
- Number of employees working in the businesses
- Number of customers per month
- Success of the businesses
- Profitability of the businesses
- Satisfaction of the customers
- Break-even point (Marginal income covers expenses)

Table 7.33: Chi-square test: Comparison between the before and after measurement of the experimental group regarding business performance indicators

Variable	Frequency (n)	Chi-Square value	P-value
Annual sales/turnover	88	98.9070	< 0.0001***
Value of capital assets	89	52.5964	< 0.0001***
Success of the businesses	88	22.7349	0.0068***
Profitability of the businesses	87	29.8625	0.0005***
Break-even point	77	38.9736	< 0.0001***
Satisfaction of the customers	88	12.1906	0.2028

P * Statistically significant difference**

α < 0.05 (95 % confidence level) α < 0.001 (99 % confidence level)

The Chi-square test was used for all the variables that were categorical (ordinal) data and the Wilcoxon matched-pairs test was used for the ratio/interval data.

Table 7.34: Wilcoxon matched-pairs test: Comparison between the before and after measurement of the experimental group regarding business performance indicators

Factor	Mean		Std. Deviation		Wilcoxon***
	Before WEP	After WEP	Before WEP	After WEP	
Number of employees	8.8256	19.7558	15.3961	60.3242	< 0.0001***
Number of customers	88.7564	104.5000	208.7524	224.8285	0.0201***

***** Statistically significant difference**

α < 0.05 (95 % confidence level) α < 0.001 (99 % confidence level)

Note that respondents had to complete the before and after questions relevant to the above data in order for them to be included in this measurement. The reason for this

is that one can only see whether improvement has taken place once the before and after measurement is compared. It is interesting to find that there are statistically significant differences regarding all the above business performance indicators, between before and after the respondents attended the WEP, except for the satisfaction of the respondents' customers. The reason for this is that the majority of the respondents stated before the WEP that their customers were satisfied with the service and/or products that they received from their businesses. Eighty-seven point eighty-eight percent (87.88 %) of the respondents stated that their customers were satisfied before the WEP, and 94.57 % of the respondents stated that their customers were satisfied six months after the WEP. One shortcoming of the chi-square test as a statistical technique is that it does not measure finely enough to bring out small but significant differences. However, all the other business performance indicators improved significantly, though the satisfaction of the customers did not improve as radically. This is a remarkable finding, as it was expected that the relatively short six-month time period would not have time to show improvement regarding the business performance indicators. This in actual fact proves that the WEP assisted the experimental group to grow their businesses. The degree of improvement will be explained in Table 7.37.

Table 7.35: Chi-square test: Comparison between the before and after measurement of the control group regarding business performance indicators

Variable	Frequency (n)	Chi-Square value	P-value
Annual sales/turnover	47	64.9359	< 0.0001***
Value of capital assets	42	36.4654	0.0003***
Success of the businesses	43	16.7143	0.0534
Profitability of the businesses	43	13.4618	0.1428
Break-even point	44	8.5699	0.4779
Satisfaction of the customers	45	6.6205	0.6766

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) **$\alpha < 0.001$ (99 % confidence level)**

The Chi-square test was used for all the variables that were categorical (ordinal) data and the Wilcoxon matched-pairs test was used for the ratio/interval data.

Table 7.36: Wilcoxon matched-pairs test: Comparison between the before and after measurement of the control group regarding business performance indicators

Factor	Mean		Std. Deviation		Wilcoxon***
	Before WEP	After six months	Before WEP	After six months	
Number of employees	9.8158	7.4474	11.6291	9.7778	0.4239
Number of customers	4.0000	3.2692	6.5054	3.3771	1.0000

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) **$\alpha < 0.001$ (99 % confidence level)**

The annual sales/turnover and value of capital assets are the two variables in which statistically significant differences occurred before and after the six month period. It can be concluded that these findings were not caused by the WEP because the control group did not attend the programme. This occurrence could be due to various reasons, such as the favourable economic situation in South Africa, inflation, seasonality of businesses and the fact that the majority of the control group fell in the construction industry (73.77 %).

According to Statistics South Africa (2006: 2) the seasonally adjusted GDP at market prices for the fourth quarter of 2005 increased by an annualised rate of 3.3 %, compared with that in the third quarter of 2005. The corresponding real annualised economic growth rates for the first three quarters of 2005 were 4.6 %, 5.4 % and 4.2 % respectively. These figures indicate that the real annual GDP at market prices for 2005 increased by 4.9 %, compared with 2004 when the real annual economic growth rate was 4.5 %. Furthermore the construction industry in 2004 and 2005 was seen as a major contributor to the economic growth in those years (Monama, 2006:

1). This author quotes economist Lumkile Mondi, who says: "The construction sector will play the lead role and will create the most significant number of jobs; the government has committed R320 billion to upgrading the country's infrastructure which will have a positive impact on the economy". The respondents' degree of improvement or deterioration after the six month period is now presented in Table 7.37.

Table 7.37: Business performance indicators: Experimental and control groups' degree of improvement or deterioration

Variable	Experimental group (n = 84 - 93)						Control group (n = 39 - 50)					
	No change		Improved		Deteriora-ted		No change		Improved		Deteriora-ted	
	N	%	n	%	n	%	n	%	n	%	n	%
Annual sales/ Turnover	40	43.48	43	46.74	9	9.78	29	58.00	12	24.00	9	18.00
Value of capital assets	55	59.14	32	34.41	6	6.45	25	52.08	17	35.42	6	12.50
Number of employees	12	13.19	58	63.74	21	23.08	10	21.74	23	50.00	13	28.26
Number of customers	9	10.71	52	61.90	23	27.38	9	23.08	22	56.41	8	20.51
Success of the businesses	38	41.76	49	53.85	4	4.40	24	48.00	18	36.00	8	16.00
Profitability of the businesses	32	35.16	51	56.04	8	8.79	18	36.00	26	52.00	6	12.00
Satisfac-tion of the customers	34	36.96	41	44.57	17	18.48	15	30 00	17	34.00	18	36.00
Break-even point	38	42.22	37	41.11	15	16.67	18	36.00	22	44.00	10	20.00

Table 7.37 is presented to demonstrate whether the respondents improved or deteriorated in terms of the above business performance indicators after the six month period. For the experimental group, improvement took place in all the above-mentioned variables, except the value of capital assets and the break-even point, where the majority of the respondents stayed the same. For the control group, improvement took place in the number of employees and customers as well as the profitability and break-even point of their businesses. Satisfaction of their customers was the variable where deterioration took place radically for the control group.

The significant differences in the experimental group will now be compared with the control group with regard to the business performance indicators.

Table 7.38: Chi-square test: Comparison of the experimental and control groups regarding their business performance indicators

Variable	Frequency		Chi-Square value	P-value
	Experimental group	Control group		
Annual sales/turnover	92	50	7.4561	0.0240***
Value of capital assets	93	48	1.6480	0.4387
Success of the businesses	91	50	7.5547	0.0229***
Profitability of the business	91	50	0.4376	0.8035
Satisfaction of the customers	92	50	5.3746	0.0681
Break-even point	90	50	0.5748	0.7502

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

The Chi-square test was used for all the variables that were categorical (ordinal) data and the Wilcoxon matched-pairs test was used for the ratio/interval data.

Table 7.39: Mann Whitney U test: Comparison of the experimental and control groups regarding their business performance indicators

Factor	Mean		Std. Deviation		Mann-Whitney***
	Experimental group	Control group	Experimental group	Control group	
Number of employees	8.8256	9.8158	15.3961	11.6291	0.0024***
Number of customers	88.7564	4.0000	208.7524	6.5053	0.0424***

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) **$\alpha < 0.001$ (99 % confidence level)**

The four variables that indicated statistically significant differences between the experimental and control groups were: Annual sales/turnover, success of the business, number of employees and number of customers. These findings are interesting yet contradictory in view of the previously indicated tables in which there were significant differences between the before and after six-months measurement within the experimental group. This indicates that the control group also improved to a certain degree with regard to the value of their capital assets, profitability of the businesses and break-even point.

The tables that follow present comparisons of various groups within the experimental group regarding their business performance indicators. Tables 7.40 and 7.41 give a comparison between the start-up and already established women entrepreneurs and Table 7.42 shows a comparison between the various provinces within the experimental group.

Table 7.40 is presented on the next page.

Table 7.40: Chi-square test: Comparison between the start-up and established women entrepreneurs regarding their business performance indicators

Variable	Frequency		Chi-Square Value	P-value
	SU	AE		
Annual sales/turnover	37	50	0.0326	0.8568
Value of capital assets	38	50	0.1764	0.6744
Success of the businesses	38	49	3.1398	0.0764
Profitability of the business	38	49	1.2029	0.2727
Satisfaction of the customers	38	50	0.0007	0.9787
Break-even point	37	49	6.2851	0.0122***

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) **$\alpha < 0.001$ (99 % confidence level)**

SU = Start-up women entrepreneurs

AE = Already established women entrepreneurs

The start-up and already established women entrepreneurs were compared by indicating which of them improved, deteriorated or stayed the same regarding their business performance indicators after the WEP. The potential women entrepreneurs could not be included in this comparison as they did not own businesses before the WEP and could not complete the business performance indicators section before the training intervention. It should be noted that the Chi-square test, for this particular comparison, did give warnings of data missing due to the fact that too small a percentage of women deteriorated after the WEP.

Table 7.41: Mann-Whitney U test: Comparison between the start-up and already established women entrepreneurs regarding their business performance indicators

Factor	Mean		Std. Deviation		Mann-Whitney***
	Start-up	Already established	Start-up	Already established	
Number of employees	6.5833	16.8918	22.4904	96.0107	0.3528
Number of customers	28.1332	-1.1562	269.9324	134.8424	0.3384

***** Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) **$\alpha < 0.001$ (99 % confidence level)**

It is interesting to find that there was only one statistically insignificant difference between the start-up and already established women entrepreneurs. It was expected that the already established women entrepreneurs would improve more than the start-up women entrepreneurs due to various reasons such as business growth, experience and the stage of the business life cycle. This was not however the case, as both groups improved significantly. The only variable where there was a significant difference between the groups was the break-even point, where the start-up women entrepreneurs improved more than the already established women entrepreneurs. This might be due to the fact that the majority of the already established women entrepreneurs had reached break-even before they attended the WEP.

Table 7.42 is presented on the next page.

Table 7.42: Chi-square test: Comparison of various provinces within the experimental group regarding their business performance indicators

Variable	Frequency					Chi-Square Value	P-value
	G	KZN	NC	LP	WC		
Annual sales/turnover	25	17	15	17	15	5.3894	0.2496
Value of capital assets	26	17	15	17	15	11.9462	0.0178***
Success of the	25	17	14	17	15	2.1817	0.7024
Profitability of the Business	25	17	14	17	15	2.7946	0.5928
Satisfaction of the customers	25	17	15	17	15	3.1714	0.5296
Break-even point	24	17	15	17	14	7.8280	0.0981

P * Statistically significant difference**

$\alpha < 0.05$ (95 % confidence level) $\alpha < 0.001$ (99 % confidence level)

G = Gauteng; KZN = KwaZulu-Natal; NC = Northern Cape; LP = Limpopo Province; WC = Western Cape

The only statistically significant difference between the provinces can be found in the value of capital assets. The most significant difference is that the respondents from the Northern Cape Province did not improve at all regarding the value of their capital assets. One could have expected that the respondents from the Gauteng province would improve the most, but only 30.77 % of them improved, whereas 61.54 % of them stayed the same. The respondents from the Limpopo Province improved the most (52.94 %) regarding increasing the value of their capital assets.

It can only be mentioned that the Kruskal-Wallis One-Way ANOVA test was performed on the variables: number of employees and number of customers, and it also indicated statistically insignificant differences between the provinces. The p-value for the variables: number of employees and number of customers were 0.1673 and 0.0649 respectively.

The assumption can now be made that the WEP had an equal effect on start-up and already established women entrepreneurs, as well as on women from the various provinces in South Africa. These findings contribute towards the statement made earlier that the WEP can be seen as a national benchmark and that every type of woman entrepreneur, regardless of the stage of business life cycle or province, can improve after this training intervention.

7.7.1 General comments of respondents

The respondents were given an open-ended question at the end of the third and final research questionnaire. The experimental group were asked, six months after the WEP, whether the programme had had an effect on their businesses and 96 respondents (97.96 %) responded that it had an effect and several reasons were given. The most significant reasons were:

- Assisted them to expand or grow their businesses (33 respondents)
- Improved the management and operations of their businesses (32 respondents)
- It was a motivation and confidence booster (26 respondents)
- Assisted with financial and cash-flow elements within the business (21 respondents)
- Assisted them to start a new business (15 respondents)
- Networking (15 respondents)
- Assisted them to create the perfect business plan (12 respondents)
- Improved marketing of business (7 respondents)

The experimental group were also asked which knowledge and information they gained after the WEP that they would not have had if they had not attended the programme and the following responses were provided:

- Understanding financial statements and break-even analysis (39 respondents)
- Compiling a perfect and viable business plan (37 respondents)
- Market analysis and positioning (10 respondents)
- Marketing strategies (8 respondents)
- Methods for starting and developing a business (7 respondents)
- Growth and failure stages and signs (6 respondents)

- The importance of a sustainable competitive advantage (5 respondents)
- How to network as a business person (5 respondents)
- All of the above (35 respondents)

(Note that respondents could provide more than one answer as it was an open-ended question).

In the follow-up research questionnaire, the control group were asked to provide an indication of how their businesses had grown over the six-month period and their responses were:

- No growth, no profit, business is failing (23 respondents)
- Growth in employees and equipment (12 respondents)
- Gained more customers and projects (9 respondents)
- Average, slight growth (9 respondents)

7.8 Conclusion

During the course of this chapter relevant information was obtained and explained by means of descriptive and inferential statistics. Relevant data was captured and provided in tabular and figure format. The various statistical techniques and methods as discussed within the scope of Chapter 6 (Research design and methodology of the study) were practically applied within Chapter 7.

The personal demographic information of the respondents (experimental and control groups) was presented as well as their business demographic information. The experimental group's satisfaction and expectations regarding the WEP were captured as well as the control group's expectations about the WEP, if they should get an opportunity to attend the programme.

Factor analysis confirmed **four skills transfer factors,** namely **entrepreneurial characteristics, entrepreneurial orientation, business knowledge and entrepreneurial and business skills. Three business improvement factors** were also generated, namely **business systems and strategies, financial indicators**

and change orientation. The factor analysis indicated relatively high construct validity of the measuring instruments as evidenced by the high Cronbach alphas.
The chi-square test, *t*-test, Mann-Whitney test, and Wilcoxon matched-pairs test were executed to present the statistical differences between the experimental and control groups. The final section of this chapter focused on illustrating the statistical techniques used to measure the effectiveness of the WEP. The section mainly highlighted which of the respondents' business performance indicators improved after the WEP. The Kruskal-Wallis One-Way ANOVA test was also executed to illustrate statistical differences between various groups within the experimental group.

Attention will be paid in the next chapter to the conclusions and most important recommendations. The objectives and hypotheses of the study will be revisited. The information obtained will be applied within the boundaries and limitations of this particular study.

Chapter 8: Conclusion and recommendations

"The most valuable findings from a study that focuses on the effectiveness of an entrepreneurial training programme, are to provide a 'profile' or set of expectations for other entrepreneurship programmes as well as presenting a benchmark against which programme performance can be measured."

- Henry *et al.* (2003: 198)

8.1 Introduction

While research in the area of entrepreneurship education and training is growing, one aspect into which little research has been conducted is that of assessing the effectiveness of educational and training initiatives. It was noted that this was surprising, given the fact that the development and running of courses and programmes is potentially expensive in terms of time and money, for both participants and sponsors. Indeed, many training initiatives do not actually appear to address the real needs of entrepreneurs. Therefore a framework for future entrepreneurship training programmes is provided and discussed.

In the previous chapter the research findings of the study were discussed. This chapter provides an overview of the literature study, while the research objectives and hypotheses are revisited and interpreted. The hypotheses are furthermore accepted or rejected based on the statistical techniques executed in Chapter 7. The WEP targets that were set by the main sponsors in Chapter 5 are revisited to indicate whether those targets were met. The contribution to the science and limitations of the study are mentioned, together with the recommendations and a path for further research into this field. The chapter ends with a summary and conclusion to the study.

8.2 Overview of the literature study

The literature review was covered from Chapters 2 to 5. The following is a short overview of the literature:

This study began with a discussion on the role and importance of entrepreneurship and new business creation to both the economy and society in general. There is strong evidence to show that entrepreneurship is not only important, but also critical to the development and growth of a healthy economy. This study also revealed that entrepreneurship education and training is crucial for the development and creation of entrepreneurs. While there has been much debate in the literature (Chapter 2) as to whether entrepreneurship can be taught, most commentators believe that at least some elements associated with the subject can be developed and enhanced via training programmes.

Two entrepreneurship training models were identified and discussed in Chapter 3, the first being the Entrepreneurial Performance Education Model (E/P model), which includes the constructs: entrepreneurial performance; motivation; entrepreneurial skills; and business skills. The second model, the Entrepreneurial Education Model (E/E model), includes the constructs: entrepreneurial education for start-ups; facilitators' skills, knowledge and motivation; approaches used by the facilitator(s); business plan utilisation; entrepreneurial success themes and knowledge; and business skills and knowledge. The two models were compared and integrated, which generated the Education for Improved Entrepreneurial Performance Model (E for E/P model). An improved entrepreneurship training model resulted from the E for E/P model and is presented in Table 8.1. All the improved and added constructs are highlighted in blue.

Table 8.1: The improved entrepreneurship training model

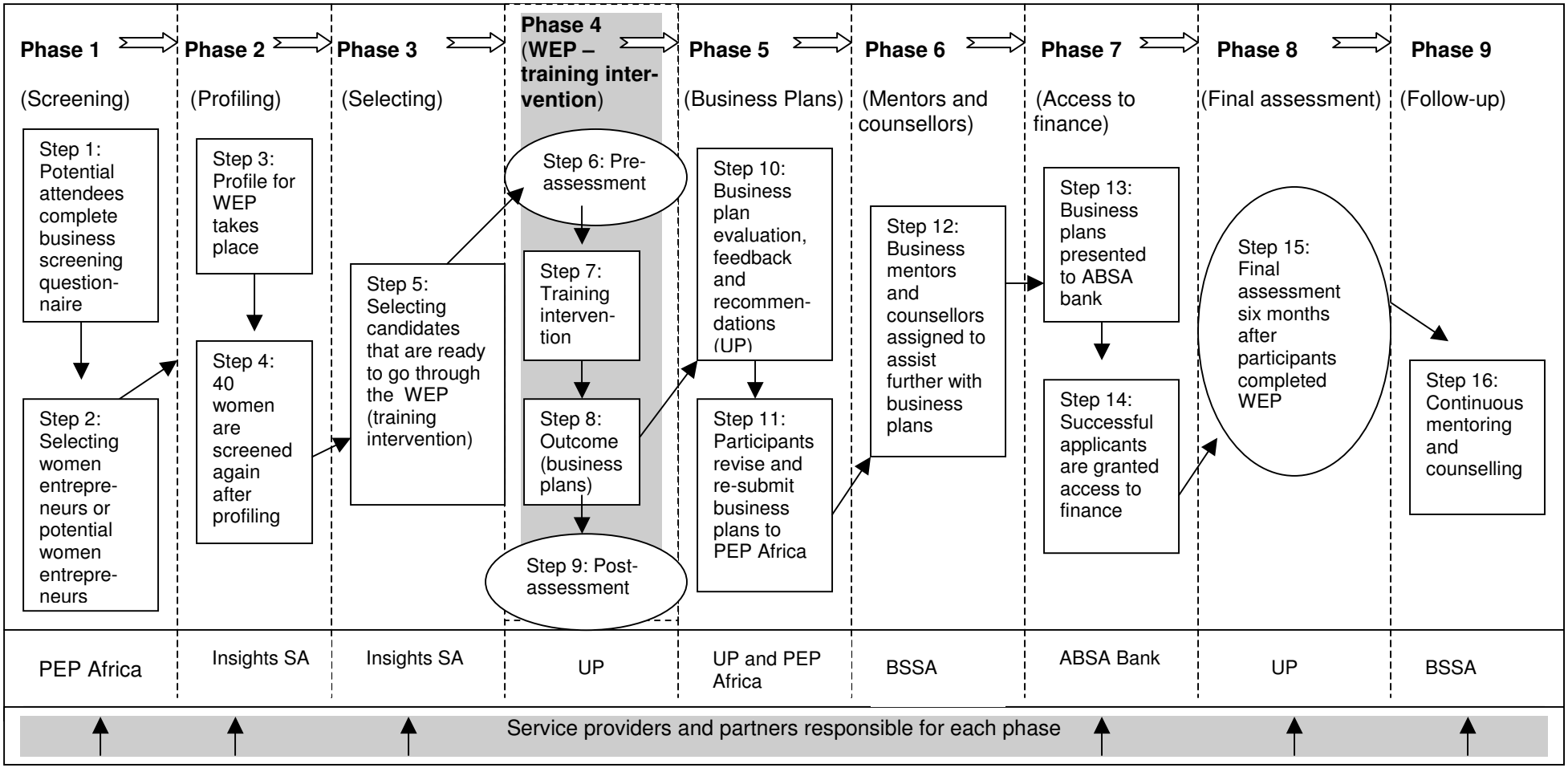
Entrepreneurial Performance (E/P)	Performance Motivation (M)	Entrepreneurial Skills (E/S) and entrepreneurial success themes	Business Skills (B/S)	Facilitator and programme context (F)	Approaches to learning (A)	Business Plan utilisation (B/P)
Establishment of own business	Motivation	Risk propensity	General management skills	Previous experience of facilitator and participants	Involvement of participant	Elements
Growth in net value of business	Mentorship	Creativity and Innovation	Marketing skills	Outcomes of the programme	Learning approaches used	Preparation
Recruitment of employees	Role models	Opportunity identification	Legal skills	Needs analysis of participants		Presentation
Increasing productivity levels		Role model analysis (success factor)	Operational skills			Evaluation
Increasing profitability		Networking	Human resource management skills			
		Leadership	Communication skills			
		Motivation	Financial management			
		Attitude of participant	Cash flow management			
		Social skills				
		Start-up skills				

Source: Own compilation as adapted from Antonites (2000: 21)

A content analysis was done on various entrepreneurship programmes in South Africa and internationally to investigate the main areas of training that trainers and facilitators need to focus on. Despite an increase in the amount of research conducted in the area of entrepreneurship education and training, there is little consensus as to how best to design and develop appropriate courses and programmes. Indeed, great diversity exists with regard to determining the learning outcomes, content, structure, delivery mode and target audience of entrepreneurship training programmes. Given the lack of uniformity in this area, as highlighted in Chapter 3, a framework for the development of future entrepreneurship training programmes is provided (Figure 8.1).

This study furthermore focused exclusively on women entrepreneurs. The background and literature on women entrepreneurs were provided in Chapter 4. This chapter highlighted the challenges that women entrepreneurs face, support structures available to them, factors motivating them to start businesses, and finally compared them with male entrepreneurs. The literature revealed the need for an entrepreneurship training programme that focuses specifically on the training needs of women. The WEP focuses on areas that are normally neglected in other entrepreneurship programmes and includes topics such as networking and support, the use of role models, confidence-building, and post-care training in the form of mentors and counsellors. It places more emphasis on the marketing and financial aspects of a business, as these aspects are seen as the two most important topics to be included in an entrepreneurship training programme. Figure 8.1 illustrates the framework of the WEP, as presented in Chapter 5, and highlights all the phases and steps that the participants go through. The WEP objectives, outcomes and possible contributions to women entrepreneurs were mentioned. The WEP sponsors and partners were identified; the targets set by the main sponsors (PEP Africa of the IFC) will be revisited in section 8.5. The final section of the literature study measured the improved entrepreneurial training model against the content of the WEP (refer Table 5.7). This measurement showed that the content of the WEP incorporated all the training areas as set out in Table 8.1.

Figure 8.1: The WEP: A framework for entrepreneurship training



Source: Own compilation

The main aim of the study was to measure the effectiveness of the WEP, and this was done on several measurement levels, as introduced by Kirkpatrick (1967: 98). These measurement levels were: reaction measures, learning measures, behaviour measures and post-training success measures. The WEP was further measured by making use of the key performance measures as introduced by Kalleberg and Leicht (1991: 148), which were: primary performance measures, proxy performance measures, subjective measures and entrepreneurial performance measures.

The additional measure of employing a control group, against which the participants of the WEP were measured, allows the effects and benefits of the WEP to be examined in a completely different situation, hence widening the debate surrounding the rationale for interventions of this nature.

The literature review assisted the researcher in particular to structure the measuring instruments (research questionnaires) and the questions and statements in respect of the WEP.

8.3 Research objectives revisited

The primary and secondary objectives of the study are revisited and presented below.

8.3.1 Primary objective revisited

The primary objective of the study was to measure the effectiveness of the WEP, as a training intervention, on potential, start-up and established women entrepreneurs in South Africa.

The primary objective of the research was achieved, as the effectiveness of the WEP was measured on various levels as indicated in Tables 8.2 and 8.3.

Table 8.2: Measurement levels used to determine the effectiveness of the WEP on the experimental group

Type of measurement level	Findings
Reaction measures (respondents' satisfaction)	104 (98.12 %) respondents were satisfied with the WEP and indicated that they would recommend the programme to a friend or colleague.
Learning measures (gained entrepreneurial and business skills)	Factor analysis confirmed **four skills transfer factors,** namely **entrepreneurial characteristics, entrepreneurial orientation, business knowledge** and **entrepreneurial and business skills.** The p-value for all four factors (0.0035***, 0.0318***, <0.0001*** and <0.0001***, respectively) confirmed statistically significant differences between the before and after measurement (Table 7.26).
Behaviour measures (behavioural change/improvement and ability to apply skills in practice)	Factor analysis confirmed **three business improvement factors,** namely **business systems and strategies, financial indicators** and **change orientation.** The Wilcoxon statistic for all three factors was p <0.0001***, respectively (Table 7.31). The respondents applied and improved various skills in their businesses, of which improving the management and operations of their businesses and improving motivation and confidence were the most frequently mentioned areas.
Post-training success measures (business performance indicators)	The Wilcoxon statistic for **all three business improvement factors** was p <0.0001***, respectively (Table 7.31). The p-values for the following business performance indicators were (Tables 7.33 and 7.34): annual sales/turnover (<0.0001***); value of capital assets (<0.0001***); number of employees (<0.0001***); number of customers per month (0.0201***); success of the businesses (0.0068***); profitability of the businesses (0.0005***); satisfaction of the customers (0.2028); and break-even point (<0.0001***).

P * Statistically significant difference**

Table 8.3 illustrates how the key performance measures were used to determine the effectiveness of the WEP in this study (Refer Annexures A, B and C).

Table 8.3: Key performance measures used to determine the effectiveness of the WEP on the experimental group

Key performance measures	Findings
Primary performance measures (business performance indicators)	Refer post-training success measures (Table 8.2)
Proxy performance measures (selection criteria of respondents)	Determinant 1 – Already established (37.07 %), start-up (50.00 %) or potential (12.93 %) women entrepreneurs Determinant 2 – Women entrepreneurs with high-growth or potential high-growth ventures (screening stage – Chapter 5) Determinant 3 – Women whose training needs matched the training content of the WEP (pilot test and Chapter 4 – needs analysis)
Subjective measures (behavioural change)	**Change orientation factor** ($p < 0.0001$***). There was a statistically significant difference in the respondents' behaviour before and after the WEP.
Entrepreneurial performance measures (start a business or multiple businesses)	Five (33.33 %) potential women entrepreneurs started a business and 36 (33.96 %) start-up and already established women entrepreneurs started multiple businesses.

P * Statistically significant difference**

From Tables 8.2 and 8.3 it is evident that the WEP, as a training intervention, was effective when measured according to the above measurement levels.

8.3.2 Secondary objectives revisited

The secondary objectives of the study were to:

- Determine whether the training content of the WEP has an effect on women starting their own businesses;
- Determine whether the training content of the WEP has an effect on women entrepreneurs growing their businesses;
- Determine which entrepreneurial, as well as business, skills and knowledge the experimental group learned and gained after they completed the WEP;
- Compare the experimental and control groups approximately six months after the intervention has taken place;
- Determine whether there are significant differences regarding skills transfer between women who already have businesses and those who recently started businesses and those who are potential business owners;
- Determine whether the WEP satisfied the training needs of the experimental group;
- Determine whether the WEP met the expectations of the experimental group;
- Determine whether there are significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

The first three secondary objectives were met (as indicated in Tables 8.2 and 8.3):

- The training content of the WEP had an effect on women starting their own businesses (refer Table 8.3, entrepreneurial performance measures);
- The training content of the WEP had an effect on women entrepreneurs growing their businesses (refer Table 8.2, post-training success measures);
- The entrepreneurial, as well as business, skills and knowledge that the experimental group learned and gained after they completed the WEP were identified in Table 8.2 (learning measures) and Tables 7.26 – 7.30 in Chapter 7.

The other secondary objectives were met as follows:

- The experimental group was compared with the control group before the former attended the WEP and again after the six-month period. The personal and business demographics, expectations, perceptions, and opinions of respondents were measured before the WEP and the results showed that the experimental

and control groups had the same characteristics as far as possible. The only differences could be seen in terms of education and number of employees and customers. Although the experimental group were representative of more provinces than the control group, the majority of the respondents (both groups) came from the Gauteng province. The **four skills transfer factors: entrepreneurial characteristics, entrepreneurial orientation, business knowledge** and **entrepreneurial and business skills** were compared before the WEP, and the only statistically significant difference between the groups was the **entrepreneurial characteristics factor.** This again showed that the respondents' skills and knowledge levels were almost similar before the WEP.

The respondents were then compared after the WEP and statistically significant differences between the groups would now prove that the WEP had an effect on the experimental group. The following was revealed after six months: five (33.33 %) out of the possible 15 respondents from the experimental group actually started their own businesses. Out of the start-up and already established women entrepreneurs 36 respondents (33.96 %) from the experimental group started another business after the WEP. After six months, all of the start-up and already established respondents in the experimental group owned the same business that they had before the WEP, whereas two respondents (4 %) from the control group did not own a business any more after six months.

The three business improvement factors: business systems and strategies, financial indicators and **change orientation** showed statistically significant differences between the two groups after the experimental group attended the WEP. The two groups were also compared regarding their business performance indicators after six months, and there were statistically significant differences between the two groups regarding the following variables: annual sales/turnover, success of the business, number of employees and number of customers.

- Furthermore, the potential, start-up and already established women entrepreneurs were compared to determine whether there were statistically significant differences regarding skills transfer between these groups. It was revealed that there are no statistical differences regarding the **four skills transfer**

factors between the potential, start-up and already established women entrepreneurs.

- Generally, the majority of the experimental group were satisfied with the WEP in terms of general satisfaction with the content of the WEP; preparing a business plan; presenting the business plan to peers, facilitator and financial institutions; general satisfaction with the facilitators; the facilitators' attitudes and enthusiasm; the facilitators' practical business experience; and the facilitators' ability to encourage interaction and participation.

- The experimental groups were asked what their expectations had been before they attended the WEP, and whether those expectations had been met directly after the WEP, as well as six months after they attended the WEP. The following expectations were given:
  - How to start your own business;
  - How to grow your own business;
  - How to compile a business plan;
  - How to be more creative;
  - How to develop new products/services within your business;
  - Networking with other women entrepreneurs;
  - Financial and cash-flow planning;
  - Marketing your products/services/business;
  - Growth in net value of your business;
  - Recruitment of employees;
  - Increasing productivity levels; and
  - Increasing profitability.

  It was remarkable to find that the majority of the experimental group (80 – 100 %, for the various variables) indicated that their expectations were met directly after the WEP and six months after they attended the programme.

- The experimental group was categorised into smaller groups regarding the provinces where they operated their businesses. The various provinces were compared regarding their business performance indicators, and the value of

capital assets was the only statistically significant difference between the provinces. The respondents from the Limpopo province improved the most (52.94 %) regarding increasing the value of their capital assets.

From the above it is clear that the primary and secondary objectives of the study as outlined within the scope of Chapter 1 were met.

8.4 Hypotheses revisited

Null hypothesis (H1o):	The WEP, as a training intervention, is not effective in assisting start-up and established women entrepreneurs to grow their own businesses.
Alternative hypothesis (H1a):	The WEP, as a training intervention, is effective in assisting start-up and established women entrepreneurs to grow their own businesses.

On the basis of the empirical results, the null hypothesis is rejected and the alternative hypothesis accepted. The Wilcoxon matched-pairs test illustrated in Table 7.31 that the **three business improvement factors** showed statistically significant differences before and after the WEP, where the p-value for each factor, respectively, was $p < 0.0001$.

These factors were labelled as:

Factor 1: Business systems and strategies

Factor 2: Financial indicators

Factor 3: Change orientation

In Tables 7.33 and 7.34 in Chapter 7, the Chi-square and Wilcoxon matched-pairs tests indicated that seven out of the possible eight business performance indicators that were measured improved after the WEP (refer Table 8.2 for p-values). These indicators are directly associated with business growth, and Table 7.37 indicated the degree of improvement of the business performance indicators. The start-up and already established women entrepreneurs were compared regarding their business performance indicators, and only the break-even point variable showed a statistically significant difference between these two groups (refer Tables 7.40 and 7.41). This

finding indicated that the WEP was effective in assisting both the start-up and the established women entrepreneurs to grow their businesses.

The descriptive statistics highlighted furthermore that 95 respondents (96.94 %) stated that the WEP had assisted them to grow their businesses, when measured six months after the training intervention (refer Table 7.12 for other growth expectations that were met). Finally, 96 respondents (97.96 %) indicated that the WEP had some or other effect on their businesses (refer section 7.7.1 for effects/reasons provided by respondents). After the completion of the WEP, the experimental group were asked whether the WEP content would be useful to them in starting and/or growing their own businesses, and 105 respondents (99.06 %) indicated that it would be useful to them.

H2o: The WEP, as a training intervention, is not effective in assisting women entrepreneurs to start their own businesses.

H2a: The WEP, as a training intervention, is effective in assisting women entrepreneurs to start their own businesses.

Based on the empirical results, the null hypothesis is rejected and the alternative hypothesis accepted. The descriptive statistics showed that five (33.33 %) potential women entrepreneurs started businesses and 36 (33.96 %) start-up and already established women entrepreneurs started multiple businesses due to the WEP.

H3o: There were no significant differences regarding business performance between the experimental and control groups six months after the experimental group completed the WEP.

H3a: There were significant differences regarding business performance between the experimental and control groups six months after the experimental group completed the WEP.

Based on the statistical techniques executed on the various factors and variables, the null hypothesis is rejected and the alternative hypothesis accepted. The Chi-square

test (Table 7.38) and Mann Whitney U test (Table 7.39) showed that there were statistically significant differences between the experimental and control groups regarding the following variables: value of capital assets ($p < 0.0240$); success of the businesses ($p < 0.0229$); number of employees ($p < 0.0024$); and number of customers ($p < 0.0424$). However when the before and after measurement for each group was done individually, the control group (Tables 7.35 and 7.36) only showed significant differences regarding two variables: annual sales/turnover; and value of capital assets, whereas the experimental group showed significant differences for seven variables. Table 7.37 highlighted the degree of improvement for both groups, where the experimental group showed improvement for all the variables, except the satisfaction of their customers. The control group showed improvement for the following variables: profitability; break-even point; number of employees; and number of customers. Deterioration was shown in their satisfaction of their customers, whereas the experimental group showed no deterioration in any variables.

The independent *t*-test (Mann Whitney U test) brought to light that all **three business improvement factors** ($p < 0.0001$ for all factors) showed statistically significant differences between the experimental and control groups.

H4o: The experimental group has not gained entrepreneurial, as well as business, skills and knowledge after the completion of the WEP.

H4a: The experimental group has gained entrepreneurial, as well as business, skills and knowledge after the completion of the WEP.

Based on the descriptive statistics as well as the empirical results, the null hypothesis is rejected and the alternative hypothesis accepted. The p-value for all **four skills transfer factors** were: 0.0035, 0.0318, <0.0001 and <0.0001, respectively. This confirmed statistically significant differences between the before and after measurement. The individual variables within each skills transfer factor were furthermore tested and are presented in Tables 7.26 – 7.30. It is noteworthy that the **business knowledge**; and **entrepreneurial and business skills factors** indicated that all the individual variables included in these factors showed a p-value of

<0.0001. The descriptive statistics also indicated that the experimental group gained skills and knowledge after the WEP; these are presented in section 7.7.1.

H5o: There are no significant differences regarding skills transfer between potential, start-up and already established women entrepreneurs.
H5a: There are significant differences regarding skills transfer between potential, start-up and already established women entrepreneurs.

Based on the empirical results the null hypothesis is accepted. The Kruskal-Wallis One-way ANOVA indicated that there are no statistically significant differences regarding the **four skills transfer factors** between the potential, start-up and already established women entrepreneurs. Table 7.32 showed values greater than 0.05 for **all four skills transfer factors**. These results indicate that the WEP is effective regarding the skills transfer factors for all types of women entrepreneurs, and no discrimination between the groups could be detected.

H6o: The WEP did not satisfy the training needs of the experimental group.
H6a: The WEP satisfied the training needs of the experimental group.

The appropriate Chi-square test was executed on the relevant variables and no statistically significant difference could be found. However, on the basis of the descriptive statistics the null hypothesis is rejected and the alternative hypothesis accepted. As can be seen from Table 7.11, the majority of the experimental group were satisfied with the WEP in terms of general satisfaction with the content of the WEP (98.12 %); preparing a business plan (99.06 %); presenting the business plan to peers, facilitator and financial institutions (97.14 %); general satisfaction with the facilitators (98.12 %); the facilitators' attitudes and enthusiasm (99.06 %); the facilitators' practical business experience (98.12 %); and the facilitators' ability to encourage interaction and participation (100.00 %).

H7o: The WEP did not meet the expectations of the experimental group.
H7a: The WEP met the expectations of the experimental group.

The appropriate Chi-square test was executed on the relevant variables and no statistically significant difference could be found. However, on the basis of the descriptive statistics the null hypothesis is rejected and the alternative hypothesis accepted. Table 7.12 indicated that the majority of the experimental group (80 – 100 % for the various variables) indicated that their expectations were met, both directly after the WEP and six months after they attended the programme.

H8o: There are no significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

H8a: There are significant differences regarding business performance between women entrepreneurs in different provinces in South Africa.

Based on the empirical results the null hypothesis is rejected and the alternative hypothesis accepted. The Chi-Square and Kruskal-Wallis One-way ANOVA tests indicated that the value of capital assets was the only business performance indicator that showed a statistically significant difference between the various provinces in this study. Although there is only one statistically significant difference, one has to reject the null hypothesis to prevent the Type I error occurring.

8.5 WEP targets revisited

The objectives and hypotheses of the study have now been revisited, therefore it is necessary to revisit the WEP targets as determined by the sponsors of the programme and as set out in Chapter 5 and Table 8.4.

Table 8.4: The WEP targets revisited

Indicator	Targets set before the WEP	Targets revisited six months after the WEP
Number of enterprises screened and profiled	240	**240**
Number trained	120	**116**
Number qualified	90	**70**

Indicator	Targets set before the WEP	Targets revisited six months after the WEP
Number financed	36	**13**
Increase in turnover	5% (average)	**46.74 % of respondents improved**
Increase in jobs	5% (average)	**63.74 % of respondents improved**

Source: Dlamini and Motsepe, 2004: 13

As can be seen from Table 8.4, the following targets were met:

- 240 women were screened and went through the profiling phase before the WEP.
- 120 women were selected to attend the WEP; 116 respondents showed up for the scheduled training. The facilitator did not have any control over the four women who did not show up.
- The Chi-square tests indicated that 46.74 % of the respondents increased their turnover after six months. This was determined by measuring the turnover interval where the respondents placed themselves before and after the WEP. The average exceeded 5 %, as one interval to the next improved interval (based on the midpoint) was far more than 5 %.
- The Wilcoxon matched-pairs test indicated that 63.74 % of the respondents increased the number of employees working in their businesses. The average of 5 % was again exceeded, as only 13.19 % of the respondents employed the same number of employees after the WEP.

The following two targets were not fully met:

- Only 70 respondents (60.34 %) obtained a successfully completed certificate from the University of Pretoria, as to do so they had to receive 50 % or more for the business plans that they submitted. However, 90 % of the respondents in the experimental group had business plans after the training intervention.
- After the six month period, 13 respondents (13.27 %) of the experimental group received financial assistance with the business plans that they prepared for the WEP. Thirty-five respondents (35.71 %) had not applied for finance at the time when measured, whereas 10 respondents (9.8 %) stated that they did not apply as they did not need financial assistance.

8.6 Contribution to the science

The WEP, as a training intervention, addressed the following deficiencies, as found in the literature, regarding entrepreneurship education and training:

- The WEP focused on training the entrepreneur and not the traditional manager.
- South African entrepreneurs' most severe barrier, a lack of education and training (Orford, *et al.*, 2003: 17) was addressed by providing a training programme.
- The WEP focused on women, as they are seen as under-represented as entrepreneurs in many countries, including South Africa (Carter, 2000: 328).
- Various support and networking organisations were introduced to women entrepreneurs.
- The intervention was effective in training potential business owners as well as start-up and established entrepreneurs and can therefore be seen as a training programme for any type of entrepreneur, regardless of the stage of business life cycle in which they find themselves.
- The WEP was based on a needs analysis done on women entrepreneurs and therefore addressed the training needs of the target market directly.
- The use of a control group strengthened the findings of this study and is necessary to measure the true effectiveness of a training intervention (Friedrich, 2003: 4).
- A framework for measuring the effectiveness of entrepreneurship training programmes was provided, as this is seen as a limitation for many training interventions (Henry, et al. (2003: 23).
- This study will offer entrepreneurship educators and trainers a platform for future development in the field of entrepreneurship education and training.
- Based on the effectiveness of the WEP, the most valuable output from this study has been the development of a framework for entrepreneurship training. Such a framework for entrepreneurship training programmes would be of benefit to designers, providers and funders of entrepreneurship programmes. For example, first-time programme providers could implement this framework in the absence of their own. In addition, experienced programme providers could compare the WEP framework with their own and make amendments accordingly. This is a contribution to the field, due to the fact that this study statistically proved that the

WEP is effective in training entrepreneurs. Furthermore, this study could be used to point out to potential funders and sponsors the benefits and values of providing funding for such a training intervention.

- The WEP framework that was suggested is comprehensive, incorporating pre, during and post programme elements, with built-in programme evaluation. The inclusion of the profiling phase, as indicated in Chapter 5, will significantly improve the quality of application received by the programme providers, and will give the programme delegates an indication of how they can expect to benefit from the programme. One of the most novel aspects of the framework developed from this research is the much-needed post-programme follow-up support. While this is excluded from most programmes due to budget constraints, such follow-up support need not be expensive.

8.7 Limitations of the study

Although the study aimed at measuring various levels of effectiveness of the training intervention, it was only a starting point and it is therefore acknowledged that further research is required. Cooper and Schindler (2001: 616) emphasise that all research studies have their limitations and the sincere investigator recognises that researchers need aid in judging the study's validity. Given the experimental nature of the research, the reader should be aware of the following limitations of the study, namely:

- The novel nature of the field of entrepreneurship and likewise the content of training models in context.
- For future research the sample size should be increased to fully explain the population's characteristics and to limit the chance of a sampling error occurring. The sample size for each province must also be increased to get a full representation from all the provinces in South Africa. Judgement sampling has a weakness in that it gives no assurance that this sample is representative of every woman entrepreneur in South Africa.
- The respondents were aware that research was being conducted and thus the usefulness of the research design might be reduced. The main interference was that some delegates did not finish the WEP due to illness, work-related

circumstances or a lack of transport and could not complete the programme. The researcher struggled to get hold of the experimental group respondents after six months, for many did not want to respond to the questionnaire if their businesses were not performing well. Many respondents did not have the same contact details as given to the researcher six months ago when they underwent the WEP.

- The six-month period after the training intervention took place is too short to fully measure the impact of the WEP on the delegates' businesses. It was not practically possible to widen the timeframe of the study due to budget and time constraints.
- One could make the criticism that the changes and improvements that occurred within the respondents' attitudes and behaviours, as well as the growth of their businesses, were not due to the WEP only. It can be suggested that these occurrences could have been influenced by other external factors such as a favourable economic situation or the entrepreneur's personal life.

8.8 Recommendations and further research

Measuring the effectiveness of a training intervention on women entrepreneurs has a very clear importance and further research in respect of training programmes and women entrepreneurs is still required. This study has contributed results and research approaches that could stimulate further research on these important issues. The following opportunities and recommendations were identified during the course of this study, namely:

- More studies of effectiveness with the use of control groups and included longitudinal designs are needed so that findings from research such as this can have greater external validity.
- The ideal situation would be to measure the experimental group again after 18 months and again after three years to really determine the impact that the WEP had on the experimental group's businesses. A longitudinal study in which the same respondents are measured four or five times would make a valuable contribution to the field of entrepreneurship training interventions.
- Furthermore, it is suggested that effectiveness studies that make use of longitudinal designs should incorporate a co-variance model within the study.

The purpose of such a model is to keep all external factors, such as the economy, inflation, and seasonality, constant in order for the researcher to determine that the changes in respondents' businesses were due to the training programme and not due to other factors.

- In addition, issues such as the impact on effectiveness of different pedagogical methods used to deliver entrepreneurship programmes, as well as the particular entrepreneurial experience of the trainers/facilitators involved, also need to be considered.
- The control group could receive the training intervention and be measured in the same manner as the experimental group. The results found in this study could then be compared with the results found in the control group study.
- The WEP framework, as introduced in this study, could be used as a basis for other entrepreneurship training programmes to train both genders at the same time to see whether the programme is effective on male entrepreneurs as well. A comparative study between men and women entrepreneurs could then be done to measure their skills transfer factors and business performance indications after such an intervention.
- Women entrepreneurs from a specific industry could attend the WEP to determine whether industry-specific entrepreneurs have different training needs. The content of the WEP should be adapted, if required, to meet the specific target groups' needs.
- Finally, based on fact that the WEP was statistically proven to be effective, developers of entrepreneurial training programmes should include the following concepts in their programmes (refer Table 8.1 and Figure 8.1):
  - Entrepreneurial performance;
  - Entrepreneurial motivation;
  - Entrepreneurial skills (focusing on the use of role models, social skills and change orientation);
  - Business skills;
  - Needs analysis of participants;
  - Facilitators' experience and participation;
  - Approaches to learning;
  - Business plan utilisation; and

- Using business mentors and counsellors.

8.9 Summary and conclusion

The literature review introduced various important elements within the field of entrepreneurship and specifically in the context of education and training programmes. During this chapter the framework for other entrepreneurship training programmes was provided and the objectives revisited, which showed that the objectives of the study were met. Furthermore, the hypotheses and WEP targets were revisited and explained.

The findings from the empirical part of this study have helped to highlight the benefits derived by the WEP delegates as well as the new skills and knowledge gained. This study has shown that entrepreneurship programmes can help create new businesses, grow existing ones and generate new jobs. More specifically, such programmes can assist potential entrepreneurs by providing useful new business contacts and by teaching them a range of skills and knowledge relevant to setting up a business.

This study has also demonstrated that delegates will gain new skills and knowledge relevant to running a business; increase their confidence in their entrepreneurial abilities, improve their employability, turnover, profit and so on. Therefore it can be noted that the WEP, as a training intervention, is effective in training potential, start-up and established women entrepreneurs in South Africa. The effectiveness of the WEP was measured and proved at all the levels as introduced by Kirkpatrick (1967: 98) and Kalleberg and Leicht (1991: 148). Hopefully the identification of the WEP framework and measurement of levels of effectiveness in this study, as well as the recommendations suggested, will contribute towards the development of effective entrepreneurship training programmes.

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Annexure A

RESEARCH QUESTIONNAIRE (O_1)

Pages 317 - 325 marked (1- 8)

Annexure A

Universiteit van Pretoria
University of Pretoria

Chair in Entrepreneurship

Department of Business Management

RESEARCH QUESTIONNAIRE

PLEASE NOTE: This questionnaire must only be completed by **women** entrepreneurs or potential **women** business owners

All information will be treated as **STRICTLY CONFIDENTIAL** and will only be used for academic purposes. Please feel free to contact the researcher if you need any information concerning the questionnaire.

Researcher: Melodi Botha
Tel (012) 420 4774
Fax (012) 362 5198
E-mail: melodi@postino.up.ac.za

Instructions for completion:

1. Please answer the questions as objectively and honestly as possible.

2. Place a cross (x) in the space provided after each question which reflects your answer the most accurately.

3. Where asked for comments or to express own opinion, keep answers short and to the point.

4. Please answer all questions applicable to you, as this will provide more information to the researcher so that an accurate analysis and interpretation of data can be made.

5. Please note: **Potential** Women Entrepreneurs do not complete questions 8 – 21.

6. **Already established** Women Entrepreneurs complete all the questions.

7. Please remember your respondent and group numbers on the next page for future use.

PART A: DEMOGRAPHIC DETAILS

FOR OFFICE use only

1. Please indicate the province where your head office/main business is situated — Respondent V1 ☐☐☐ 1-3

OR

where you intend on locating your business — Group V2 ☐☐ 4-5

Eastern Cape	1	Northern Cape	6
Free State	2	Northern Province	7
Gauteng	3	Northwest province	8
Kwazulu-Natal	4	Western Cape	9
Mpumalanga	5		

V3 ☐ 6

2. What is your age?
…….years — V4 ☐☐ 7-8

3. What is the highest level of education you are in possession of?

Less than matric	1
Matric (Grade 12)	2
National Diploma (3 years)	3
Baccalaureus Degree (3 years)	4
B Tech Degree (4 years)	5
Honours Degree	6
Masters Degree	7
Doctors Degree	8
Other ……..	9

V5 ☐ 9

4. Home language…… V6 ☐☐ 10 -11

5. Race

Black	1
Coloured	2
Indian	3
White (Caucasian)	4
Other (specify)……..	5

V7 ☐ 12

6. What is your marital status?

Never married	1
Married	2
Divorced	3
Widowed	4
Living together	5

V8 ☐ 13

PART B: BUSINESS INFORMATION

7. Do you own your own business?

Yes	1
No	2
No, but intend on starting my own business. When? (eg. Six months from now)……	3

IF YOU ANSWERED NO, GO TO QUESTION NUMBER 22

V9 ☐ 14

Note: This part must only be completed by those women who already own their own businesses

8. When did you start your business?

Month	Year

V10 ☐☐☐☐ 15-18

V11 ☐☐ 19-20

V12 ☐☐☐☐ 21-24

9. Indicate the form of business ownership

Sole proprietor	1
Partnership	2
Close Corporation	3
Company (Public)	4
Company (Private)	5
Business Trust	6
Non-profit organisation	7
Other (specify)……	8

V13 ☐ 25

10. In which sector does the main focus of your business lie? *(E.g. Service, Retail, Manufacturing, Food, Education, Medical, Beauty)*

……..

V14 ☐☐ 26-27

11. Annual sales/turnover

0 – R150 000	1
R150 001 – R250 000	2
R250 001 – R500 000	3
R500 001 – R1 Million	4
More than R1 Million – R2,5 Million	5
More than R2,5 Million	6

V15 ☐ 28

12. Provide an indication of the value of your capital assets

R0 – R100 000	1
R100 001 - R250 000	2
R250 001 – R2 million	3
R2 million – R5 million	4
R5 million – R10 million	5
R10 million – R50 million	6

V16 ☐ 29

13. Number of employees working in your business……

V17 ☐☐☐ 30-32

14. Average number of customers per month……..

V18 ☐☐☐ 33-35

Please rate your business enterprise in terms of:

15. How successful is your business (successful = achieve business goals)?

V19 ☐ 36

1	2	3	4
Unsuccessful (not achieving business goals)	Somewhat successful (achieve some business goals)	Mostly successful (mostly achieving all business goals)	Highly successful (always achieving all business goals)

16. How profitable is your business?

V20 ☐ 37

1	2	3	4
Regularly not covering fixed costs	Mostly covering fixed costs only	Profitable (mostly have surplus money left after covering costs)	Highly profitable (always have surplus money left after covering costs)

17. How satisfied do you think your clients/customers are?

V21 ☐ 38

1	2	3	4
Highly satisfied (exceed customer expectations)	Somewhat satisfied (meet customer expectations)	Do not know	Highly dissatisfied (do not meet customer expectations at all)

18. How long did it take your business to break-even (Marginal income = expenses)?

V22 ☐ 39

1	2	3	4
Not yet	3 – 6 Months	7 months to one year	Longer than one year

19. Give an indication of how your business has grown in terms of:
Increase in employees and/or turnover since you started your business.

V23 ☐☐ 40-41

……
……
……
……

V24 ☐☐ 42-43

V25 ☐☐ 44-45

20. Where would you like your business to be six months from now?

V26 ☐☐ 46-47

…Employees: ……
…Turnover: ……
…Profit: ……..

V27 ☐☐ 48-49

21. How do you plan to achieve that?

……..
……..
……..

V28 ☐☐ 50-51
V29 ☐☐ 52-53

Note: To be completed by all the participants

22. Indicate how important you think the following factors are/will be for your business success

	Factor	1	2	3	4	
		Not important at all	**Fairly unimportant**	**Fairly important**	**Very important**	
1	Location					V30 ☐ 54
2	Product/ Service					V31 ☐ 55
3	Customer care					V32 ☐ 56
4	Low prices					V33 ☐ 57
5	Good quality					V34 ☐ 58
6	Sufficient parking					V35 ☐ 59
7	Capital					V36 ☐ 60
8	Your level of training and acquiring skills					V37 ☐ 61
9	Your employees' level of training and acquiring skills					V38 ☐ 62

23. How would you rate yourself on the following items?

	Item	1	2	3	4	5	
		Very poor	**Poor**	**Average**	**Good**	**Excellent**	
1.	Taking advantage of an opportunity						V39 ☐ 63
2.	Product knowledge						V40 ☐ 64
3.	Commitment to business						V41 ☐ 65
4.	Enthusiasm						V42 ☐ 66
5.	Performance motivation						V43 ☐ 67
6.	Business Planning						V44 ☐ 68
7.	Running a business						V45 ☐ 69

Item		1	2	3	4	5
		Very poor	**Poor**	**Average**	**Good**	**Excellent**
8.	Persistence and determination					
9.	Being independent and in control					
10.	Need for achievement					
11.	Leadership abilities					
12.	Knowledge of competitors					
13.	Good communication skills					

V46 ☐ 70
V47 ☐ 71
V48 ☐ 72
V49 ☐ 73
V50 ☐ 74
V51 ☐ 75

PART C: WOMEN ENTREPRENEURSHIP PROGRAMME

24. What do you expect from the Women Entrepreneurship Programme?

	Strongly Disagree	Disagree	Agree	Strongly agree
	1	**2**	**3**	**4**
To start/grow a business				
To compile a business plan				
To be more creative				
To develop new products				
Networking with other women entrepreneurs				
Financial and cash flow planning				
To market my products and business				
Other (please specify)……				

V52 ☐ 76
V53 ☐ 77
V54 ☐ 78
V55 ☐ 79
V56 ☐ 80
V57 ☐ 81
V58 ☐ 82
V59 ☐☐ 83-84

25. How would you rate yourself in terms of your knowledge and skills about the following?

Item		1	2	3	4
		No knowledge whatsoever	**Some knowledge**	**Some knowledge but need more knowledge**	**Sufficient knowledge**
1.	Ability to obtain financial assistance for your business				
2.	Using mentors and counsellors				
3.	Making use of networking opportunities				

V60 ☐ 85
V61 ☐ 86
V62 ☐ 87

Item		1	2	3	4
		No knowledge whatsoever	**Some knowledge**	**Some knowledge but need more knowledge**	**Sufficient knowledge**
4.	Creative problem solving				
5.	Compiling a Feasibility study				
6.	Compiling a Business Plan				
7.	Sustainable competitive advantage				
8.	Break-even analysis				
9.	Drawing up financial statements				
10.	Managing growth				
11.	Business failure signs and causes				
12.	Conducting market research				
13.	Cash flow management				
14.	General management				
15.	Marketing of business/products/services				
16.	Legal aspects – company/Business registration				
17.	Human Resource management				
18.	Financial management				
19.	Risk orientation				
20.	Creativity and innovation				
21.	Opportunity identification				
22.	Using role models for guidance				

V63 ☐ 88
V64 ☐ 89
V65 ☐ 90
V66 ☐ 91
V67 ☐ 92
V68 ☐ 93
V69 ☐ 94
V70 ☐ 95
V71 ☐ 96
V72 ☐ 97
V73 ☐ 98
V74 ☐ 99
V75 ☐ 100
V76 ☐ 101
V77 ☐ 102
V78 ☐ 103
V79 ☐ 104
V80 ☐ 105
V81 ☐ 106
V82 ☐ 107
V83 ☐ 108
V84 ☐ 109
V85 ☐ 110

Entrepreneurial Performance

26. Please indicate with which of the following you would like the Women Entrepreneurship Programme/workshop to assist you.

	Strongly disagree	**Disagree**	**Agree**	**Strongly agree**
	1	**2**	**3**	**4**
Growth in net value of business				
Recruitment of employees				
Increasing productivity levels				
Increasing profitability				

Technical Skills: The Business Plan

27. Do you currently have a written business plan for your business?

Yes	1
No	2

V86 ☐ 111

28. If yes, who compiled the business plan?
……

V87 ☐☐ 112-113

29. When was it done/updated?
……

V88 ☐☐ 114-115

30. If not, indicate why not (Please choose only one).

Do not have time to do it	1
Do not know how to do it	2
Do not have sufficient information to do it	3
Do not think it is necessary to have a business plan	4
Other (please specify)……	5

V89 ☐ 116

31. What criteria do you think financial institutions use to judge a business plan?
……
……
……
……

V90 ☐☐ 117-118

V91 ☐☐ 119-120

V92 ☐☐ 121-122

V93 ☐☐ 123-124

THANK YOU VERY MUCH FOR YOUR CO-OPERATION IN COMPLETING THIS QUESTIONNAIRE

Annexure B

ENTREPRENEURIAL LEARNING PROGRAMME EVALUATION INSTRUMENT (O_2)

Pages 326 - 333 marked (1- 7)

Annexure B

Universiteit van Pretoria
University of Pretoria

Chair in Entrepreneurship

Department of Business Management

ENTREPRENEURIAL LEARNING PROGRAMME EVALUATION INSTRUMENT

PLEASE NOTE: This questionnaire must only be completed by **women** entrepreneurs or potential **women** business owners

All information will be treated as **STRICTLY CONFIDENTIAL** and will only be used for academic purposes. Please feel free to contact the researcher if you need any information concerning the questionnaire.

Researcher: Melodi Botha
Tel (012) 420 4774
Fax (012) 362 5198
E-mail: melodi@postino.up.ac.za

Instructions for completion:

1. Please answer the questions as objectively and honestly as possible.

2. Place a cross (x) in the space provided after each question which reflects your answer the most accurately.

3. Where asked for comments or to express own opinion, keep answers short and to the point.

4. Please answer all questions applicable to you, as this will provide more information to the researcher so that an accurate analysis and interpretation of data can be made.

5. Please note: **Potential** Women Entrepreneurs do not complete question 2.

6. **Already established** Women Entrepreneurs do not complete question 1.

7. Please insert the respondent and group numbers that were given to you when you completed the first questionnaire and remember these numbers for future use.

PART A: BUSINESS INFORMATION

Note: Women who already own their own businesses DO NOT complete this question

1. If you are not a business owner yet, did this programme influence/motivate you to start your own business?

Respondent Group

Yes	1
No	2

If not, kindly supply reasons:

……
……
……

Note: Potential women entrepreneurs DO NOT complete this question

2. If you are a business owner already, did this programme motivate you to start multiple businesses?

Yes	1
No	2

If not, kindly supply reasons:

……
……
……

3. Where would you like your business to be six months from now in terms of:

…Turnover: ……
…Employees: ……
… Profit:……

4. How do you plan to achieve that?

……..
……..
……..

For office use only

V1 ☐☐☐ 1-3
V2 ☐☐ 4-5
V3 ☐ 6
V4 ☐☐ 7-8
V5 ☐☐ 9-10
V6 ☐☐ 11-12
V7 ☐ 13
V8 ☐☐ 14-15
V9 ☐☐ 16-17
V10 ☐☐ 18-19
V11 ☐☐ 20-21
V12 ☐☐ 22-23
V13 ☐☐ 24-25

5. How would you rate yourself, regarding the following skills, after the completion of the programme?

Item		1	2	3	4	5	
		Very poor	Poor	Average	Good	Excellent	
1.	Taking advantage of an opportunity						V14 ☐ 26
2.	Product knowledge						V15 ☐ 27
3.	Commitment to business						V16 ☐ 28
4.	Enthusiasm						V17 ☐ 29
5.	Performance motivation						V18 ☐ 30
6.	Business Planning						V19 ☐ 31
7.	Running a business						V20 ☐ 32
8.	Persistence and determination						V21 ☐ 33
9.	Being independent and in control						V22 ☐ 34
10.	Need for achievement						V23 ☐ 35
11.	Leadership abilities						V24 ☐ 36
12.	Knowledge of competitors						V25 ☐ 37
13.	Good communication skills						V26 ☐ 38

PART B: WOMEN ENTREPRENEURSHIP PROGRAMME

General information

6. Indicate your level of satisfaction with the Women Entrepreneurship Programme?

V27 ☐ 39

1	2	3	4
Highly satisfied	Fairly satisfied	Dissatisfied	Highly dissatisfied

If, dissatisfied please provide reasons

……
……
……

V28 ☐☐ 40-41

7. If I did not attend the programme, I would not have known the following:

……
……
……

V29 ☐☐ 42-43

V30 ☐☐ 44-45

8. The Programme content will be useful to me in starting/growing my own business.

Yes	1
No	2

V31 ☐☐ 46-47

V32 ☐ 48

If not, kindly supply reasons:

……
……
……

V33 ☐☐ 49-50

V34 ☐☐ 51-52

9. I would recommend this programme to a friend/colleague.

Yes	1
No	2

V35 ☐ 53

V36 ☐ 54

10. Indicate whether you agree/disagree that the following expectations were met during the Women Entrepreneurship Programme.

	Strongly Disagree	**Disagree**	**Agree**	**Strongly agree**
	1	**2**	**3**	**4**
To start/grow a business				
To compile a business plan				
To be more creative				
To develop new products				
Networking with other women entrepreneurs				
Financial and cash flow planning				
To market my products and business				
Other (please specify)…… ……				

V37 ☐ 55

V38 ☐ 56

V39 ☐ 57

V40 ☐ 58

V41 ☐ 59

V42 ☐ 60

V43 ☐☐ 61-62

11. How would you rate yourself in terms of your knowledge and skills, after the completion of the Programme, about the following?

Item		1	2	3	4	
		No knowledge whatsoever	**Some knowledge but insufficient**	**Some knowledge but need more knowledge**	**Sufficient knowledge**	
1.	Ability to obtain financial assistance for your business					V44 ☐ 63
2.	Using mentors and counsellors					V45 ☐ 64
3.	Making use of networking opportunities					V46 ☐ 65
4.	Creative problem solving					V47 ☐ 66
5.	Compiling a Feasibility study					V48 ☐ 67
6.	Compiling a Business Plan					V49 ☐ 68
7.	Sustainable competitive advantage					V50 ☐ 69
8.	Break-even analysis					V51 ☐ 70
9.	Drawing up financial statements					V52 ☐ 71
10.	Managing growth					V53 ☐ 72
11.	Business failure signs and causes					V54 ☐ 73
12.	Conducting market research					V55 ☐ 74
13.	Cash flow management					V56 ☐ 75
14.	General management					V57 ☐ 76
15.	Marketing of business/products/services					V58 ☐ 77
16.	Legal aspects – company/Business registration					V59 ☐ 78
17.	Human Resource management					V60 ☐ 79
18.	Financial management					V61 ☐ 80
19.	Risk orientation					V62 ☐ 81
20.	Creativity and innovation					V63 ☐ 82
21.	Opportunity identification					V64 ☐ 83
22.	Using role models for guidance					V65 ☐ 84

Entrepreneurial Performance

12. Please indicate whether you agree/disagree that the Women Entrepreneurship Programme will assist you in improving the performance of the following areas in your business.

	Strongly Disagree	**Disagree**	**Agree**	**Strongly agree**
	1	**2**	3	4
Growth in net value of business				
Recruitment of employees				
Increasing productivity levels				
Increasing profitability				
Other ……..				

V66 ☐ 85

V67 ☐ 86

V68 ☐ 87

V69 ☐ 88

V70 ☐☐ 89-90

Technical Skills: The Business Plan

Indicate to what extend you agree or disagree with the following statements:

13. The Women Entrepreneurship Programme provided me with the opportunity to prepare a business plan for my business.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

V71 ☐ 91

14. The programme provided the opportunity to present my business plan to peers, facilitators and potential funding institutions.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

V72 ☐ 92

The Facilitator/lecturer

Indicate to what extend you agree or disagree with the following statements:

15. The facilitator/lecturer was able to keep my attention throughout the programme.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

V73 ☐ 93

16. The facilitator/lecturer encouraged the participants to take part in class discussions throughout the programme/workshop. V74 ☐ 94

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

17. The facilitator/lecturer was very passionate and enthusiastic throughout the programme. V75 ☐ 95

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

18. The facilitator/lecturer has practical experience of business start-ups. V76 ☐ 96

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

If you would like your business to be monitored six months from now please provide your e-mail address.

……

THANK YOU VERY MUCH FOR YOUR CO-OPERATION IN COMPLETING THIS QUESTIONNAIRE

Annexure C

FOLLOW-UP RESEARCH QUESTIONNAIRE (O_3)

Pages 334 - 340 marked (1- 6)

Annexure C

Universiteit van Pretoria
University of Pretoria

Chair in Entrepreneurship

Department of Business Management

FOLLOW-UP RESEARCH QUESTIONNAIRE

PLEASE NOTE: This questionnaire must only be completed by **women entrepreneurs**

All information will be treated as **STRICTLY CONFIDENTIAL** and will only be used for academic purposes. Please feel free to contact the researcher if you need any information concerning this questionnaire.

Researcher: Melodi Botha
Tel (012) 420 4774
Fax (012) 362 5198
E-mail: melodi@postino.up.ac.za

Instructions for completion:

1. Please answer the questions as objectively and honestly as possible.

2. Place a cross (x) in the space provided after each question which reflects your answer most accurately.

3. Where asked for comments or to express own opinion, keep answers short and to the point.

4. Please answer all questions as this will provide more information to the researcher so that an accurate analysis and interpretation of data can be made.

5. Save this questionnaire on your computer and complete the questions by typing in the appropriate answer. Save again and send the saved document when you reply to the e-mail.

   Or

   Print out and complete the questions and fax back to the researcher.

PART A: BUSINESS INFORMATION

FOR OFFICE USE ONLY

Respondent Group

V1 [ ][ ][ ] 1-3

V2 [ ][ ] 4-5

1. Six months after the completion of the Women Entrepreneurship Programme, do you now own/still own your own business?

Yes	1
No	2

V3 [ ] 6

2. If yes, do you still own the same business that you owned six months ago?

   Or

   Did you start the same business that you intended on starting six months ago?

Yes	1
No	2

V4 [ ] 7

3. If no, indicate why you do not own THAT business anymore?

……
……
……

V5 [ ][ ] 8-9

V6 [ ][ ] 10-11

V7 [ ][ ] 12-13

4. Indicate your current annual sales/turnover

0 – R150 000	1
R150 001 – R250 000	2
R250 001 – R500 000	3
R500 001 – R1 Million	4
More than R1 Million – R2,5 Million	5
More than R2,5 Million	6

V8 [ ] 14

5. Provide an indication of the value of your capital assets

R0 – R100 000	1
R100 001 - R250 000	2
R250 001 – R2 million	3
R2 million – R5 million	4
R5 million – R10 million	5
R10 million – R50 million	6

V9 [ ] 15

V10 ☐☐☐ 16-18

6. Number of employees working in your business……

V11 ☐☐☐ 19-21

7. Average number of customers per month……..

Please rate your business enterprise in terms of:

8. How successful is your business? (Successful = achieve business goals)

1	2	3	4
Unsuccessful (not achieving business goals)	Somewhat successful (achieve some business goals)	Mostly successful (mostly achieving all business goals)	Highly successful (always achieving all business goals)

V12 ☐ 22

9. How profitable is your business?

1	2	3	4
Regularly not covering fixed costs	Mostly covering fixed costs only	Profitable (mostly have surplus money left after covering costs)	Highly profitable (always have surplus money left after covering costs)

V13 ☐ 23

10. How satisfied do you think your clients/customers are?

1	2	3	4
Highly satisfied (exceed customer expectations)	Somewhat satisfied (meet customer expectations)	Do not know	Highly dissatisfied (do not meet customer expectations at all)

V14 ☐ 24

11. When did your business break-even (Marginal income = expenses) for the first time?

1	2	3	4
Not yet	3 – 6 Months ago	7 months to one year ago	Longer than one year ago

V15 ☐ 25

PART B: WOMEN ENTREPRENEURSHIP PROGRAMME (WEP)

Please rate your business in terms of performance, before the WEP and now six months after the WEP, on a scale from 1 – 4 **(1 = poor, 2 = average, 3 = above average, 4 = good)** on the following aspects:

Please complete both parts by placing a cross (x) in the appropriate box

	Before WEP				After WEP					
	1 Poor	**2 Average**	**3 Above Average**	**4 Good**	**1 Poor**	**2 Average**	**3 Above Average**	**4 Good**		
12.Making a profit									V16 ☐ 26	V17 ☐ 27
13.Increasing turnover									V18 ☐ 28	V19 ☐ 29
14.Increasing assets									V20 ☐ 30	V21 ☐ 31
15. Return on Investment									V22 ☐ 32	V23 ☐ 33
16.Having record-keeping systems									V24 ☐ 34	V25 ☐ 35
17.Ability to do long-term planning									V26 ☐ 36	V27 ☐ 37
18.Positioning your business against competitors									V28 ☐ 38	V29 ☐ 39
19.Allocation of resources									V30 ☐ 40	V31 ☐ 41
20.Improving systems in business									V32 ☐ 42	V33 ☐ 43
21.Communi-cation in business (general)									V34 ☐ 44	V35 ☐ 45
22.Manage-ment roles and responsibi-lities									V36 ☐ 46	V37 ☐ 47
23.Size of business (expansion)									V38 ☐ 48	V39 ☐ 49
24. Usage of technology									V40 ☐ 50	V41 ☐ 51

	Before WEP				After WEP			
	1 Poor	**2 Average**	**3 Above Average**	**4 Good**	**1 Poor**	**2 Average**	**3 Above Average**	**4 Good**
25.Change in processes								
26.Change in attitudes								
27.Change in culture								
28.Change in manage-ment styles								

V42 ☐ 52 V43 ☐ 53
V44 ☐ 54 V45 ☐ 55
V46 ☐ 56 V47 ☐ 57
V48 ☐ 58 V49 ☐ 59

Indicate whether you agree/disagree that the WEP has assisted you to achieve the following:

	Strongly Disagree	Disagree	Agree	Strongly agree
	1	**2**	**3**	**4**
29. To start your own business				
30. To grow your business				
31. To manage your business				
32. To operate your business on a day to day basis				
33. To compile a business plan				
34. To be more creative				
35. To develop new products/services				
36. Networking with other women entrepreneurs				
37. To do financial and cash flow planning				
38. To market your products/services and business				
39. Growth in net value of business				
40. Recruitment of employees				
41. Increasing productivity levels				
42. Increasing profitability				
43. Other (please specify)…… ……				

V50 ☐ 60
V51 ☐ 61
V52 ☐ 62
V53 ☐ 63
V54 ☐ 64
V55 ☐ 65
V56 ☐ 66
V57 ☐ 67
V58 ☐ 68
V59 ☐ 69
V60 ☐ 70
V61 ☐ 71
V62 ☐ 72
V63 ☐ 73
V64 ☐☐ 74-75

44. Please indicate what you achieved with the business plan that you prepared for the WEP six months ago, if any.

……
……
……
……

V65 ☐☐ 76-77
V66 ☐☐ 78-79
V67 ☐☐ 80-81

45. Have you received financial assistance with the business plan that you prepared for the WEP?

Yes	1
No	2

V68 ☐ 82

46. If yes, from which financial institution/organisation?
……

V69 ☐☐ 83-84

47. Please give an indication whether WEP has had an effect on your business or not, please provide reasons to motivate your answer.

……
……
……
……
……
……

V70 ☐ 85
V71 ☐☐ 86-87
V72 ☐☐ 88-89
V73 ☐☐ 90-91
V74 ☐☐ 92-93
V75 ☐☐ 94-95

THANK YOU VERY MUCH FOR YOUR CO-OPERATION IN COMPLETING THIS QUESTIONNAIRE

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Annexure A

RESEARCH QUESTIONNAIRE (O_1)

Pages 317 - 325 marked (1- 8)

Annexure B

ENTREPRENEURIAL LEARNING PROGRAMME EVALUATION INSTRUMENT (O_2)

Pages 326 - 333 marked (1- 7)

Annexure C

FOLLOW-UP RESEARCH QUESTIONNAIRE (O_3)

Pages 334 - 340 marked (1- 6)