

Chapter 2: Entrepreneurship training

In evolution – nothing fails like success. A creature which has become perfectly adapted to its environment, an animal whose whole capacity and vital force is concentrated and expanded in succeeding here and now, has nothing over with which to respond to any radical change. Age by age, it becomes more perfectly economical in the way its entire resources meet exactly its current customary opportunities. In the end it can do all that is necessary to survive without any conscious striving or unadapted movement. It can, therefore, beat all competitors in the specific field; but equally, should the field change, it must become extinct.

Arnold Toynbee

2.1 Introduction

The background to this study is based on the situational circumstances of the current South African business environment. The fundamental aspects within the framework are regarded as entrepreneurial education and training *per se* with specific reference to creativity, innovation and opportunity identification as entrepreneurial skills. The importance of entrepreneurship and the accompanying training of entrepreneurs are not only supported by the current socio-economic situation in South Africa, but are also catalysed by it. Chapter 1 emphasised the role of entrepreneurship as an economic driving force. Consequently emphasis is placed on the fundamental difference between entrepreneurship and small business management in this study. Watson (1994:43) quotes Carland et al. (1984) in an effort to indicate the radical conceptual difference between entrepreneurship and small business management. The author empirically proves that the difference between the two concepts is situated within innovative behaviour and the cognitive style of entrepreneurs versus small business managers or owners.

Begley and Boyd (1987:99) support this statement with further empirical evidence by proving that eight different personality and business characteristics could be differentiated between entrepreneurs and small business managers. Entrepreneurial ventures also show a marginally higher financial growth figure and have more effective competitive strategies in place. Brockhaus, as quoted by Watson (1994:42), doesn't regard this statement as one based on total consensus and this creates room for further research. For the sake of this research intervention it is, however, accepted that a difference exists between entrepreneurship and small business management with regard to emphasis on the training of entrepreneurs as such.

This study is supported by the increasing value of entrepreneurship as an economic phenomenon as well as the need for entrepreneurial research in general with the main focus on the education of creativity, innovation and the identification of opportunities as part of entrepreneurship training as a whole.

The entrepreneurial trainer can be regarded as one of the favoured parties in this study. This party provides the scientific basis for the compilation of entrepreneurial curricula and the processing of this in the training situation. Included here is the way in which the potential compilation of an entrepreneurial curriculum in terms of entrepreneurial skills (creativity, innovation and opportunity identification) could be construed flowing from the results of the implementation of this study; the entrepreneur – the potential increase of entrepreneurial performance and the participation in a comparative entrepreneurial development programme as compiled by and developed from the **E/P=f [M (E/SxB/S)** content model. The South African socio-economic environment, with the fundamental advantage of entrepreneurial training, namely job creation, and the potential decrease of the general unemployment situation, is the

other favoured party. This could possibly be analogously indicated along with the implementation of a suitable training model.

2.2 The Entrepreneur: Conceptualising and definition

The historical development, processing and conceptualisation of entrepreneurship possibly started as early as the 1500s. Van Daalen (1989:16) categorises the conceptualising process of entrepreneurship as follows:

2.2.1 Entrepreneurs are seen as the flagships of complete uncertainty and risk

Richard Cantillon (1755) is regarded as the first champion of this argument as he regards the entrepreneur as someone who has the ability, inclination and willingness to estimate a certain risk and take action accordingly. This risk could have profitability as a result. In this regard Cantillon is quoted as follows: “The entrepreneur buys at a certain price and sells at an uncertain price”. This argument is supported by similar arguments by Hawley (1892); Knight (1921); Von Mises (1949) and Schackle (1955).

2.2.2 The Entrepreneur as “true” innovator

Schmöler (1880), as quoted by Van Daalen (1989:17), concluded with an analysis of economic behaviour indicating that the entrepreneur or *Unternehmer* must be seen as the core of all economic activity. The entrepreneur is furthermore regarded as a creative manager and organiser who is totally dependent of innovation and initiation. According to this, one can conclude that the entrepreneur combines production factors to produce new products and processes. Sombart, as quoted by

Hebert and Link in Van Daalen (1989:17), broadens this view by regarding the entrepreneur as a “new leader” as he/she urges the economic system on and strengthens it through creative innovation. Weber (1930) regards the entrepreneur as one who breaks free from the traditional production method and the development of new methods. Schumpeter (1939) is suitably quoted by Van Daalen (1989:22) here:

...Development in our sense is a distinct phenomenon, entirely foreign to what may be observed in the circular flow of the tendency towards equilibrium. It is spontaneous and discontinuous change in the channels of flow, disturbance of equilibrium which forever alters and displaces the equilibrium state previously existing.

One can thus conclude that even during this period of time innovation was regarded as one of the fundamental aspects of entrepreneurial behaviour.

2.2.3 The Entrepreneur as conveyor of uncertainty, certain abilities and innovation

The arguments of Baudeau (1767); Bentham (1838); Von Thünen (1850) and Von Mangoldt (1855) are summarised by Cole (1946) in Van Daalen (1989:24). He places greater emphasis on the role of the entrepreneur as an individual motivated by profit. As a decision maker and risk taker a part of his/her main activities also include innovation and invention that goes hand in hand with the reduction of cost and the increase of profit:

Entrepreneurship may be defined as the purposeful activity (including an integrated sequence of decisions) of an individual or group of associated individuals, undertaken to initiate, maintain or aggrandize a profit-orientated business unit for the production and/or distribution of economic goods and services with pecuniary or other advantages the goal or measure of success in interaction

with (or without the conditions established by) the internal situation of the unit itself or with the economic, political and social circumstances (institutions and practices) of a period which allows an appreciable measure of freedom of decision”.

2.2.4 Entrepreneurship in terms of perception and adaptation

Clark (1892); Kirzner (1973) and Schultz (1975) support the above-mentioned statement by putting more and more emphasis on the human factor in the economic system. In this school of thought the impact of human actions were critical. Human actions, classified as entrepreneurship, are applied to establish certain adaptations in the market in order to acquire a kind of equilibrium. The implication is therefore that the entrepreneur must exhibit the ability to handle certain instabilities or so-called “disequilibria” in the market.

The contemporary composition and conceptual layout of an entrepreneur is regarded as a field of study all on its own. For the sake of this study, the definitions as derived from Cornwall and Perlman (1990:4), Van Praag (1996:3), Burch (1986:4), Mare (1996:3), Drucker (1985:25); Hisrich and Peters (1998:9), and Kuratko and Hodgets (1998:31) are used. According to these the entrepreneur is regarded as an individual with the potential to create a vision from virtually nothing. This is fundamentally a human creative action. Energy is invested in the initiation process by initiating the start up of a company rather than to merely analyse and be an onlooker in the process of forming a new business. This vision and action includes the willingness to take a calculated risk. This risk envelops personal, social, and psychological as well as financial components. Everything possible is done to achieve the goals (set by the individual him/herself) and avoid the possibility of failure. A noticeable attribute within this frame of reference is the fact that the entrepreneur has the ability to identify an opportunity where the

regular man on the street would see chaos, contradictions, ambivalence and confusion. The core of entrepreneurship can, however, be seen in the development of the “new”, be it products or services with corresponding adding of value and profit driven decision-making. The reward for achievement is not only financial, but also involves personal satisfaction and independence.

For the sake of this study, the continual aim is to regard concepts and constructs in accordance with generally accepted definitions. It is therefore not the aim to redefine the underlying constructs, but merely to apply them as constructs and concepts within the theoretical model $[E/P=f [m (E/S \times B/S)]]$ as developed by Van Vuuren (1997:1).

2.3 Research within the field of Entrepreneurship

According to Watson (1994:3) research into the field of entrepreneurship suffers greatly from a lack of a communal structure, framework and the generally accepted definitions of constructs. The general direction for the future of entrepreneurial research is seen as very much a fragmented one.

Boshoff and Van Vuuren (1992:372) divide the entrepreneurial theory and research in three main categories, firstly the entrepreneur and his/her actions and qualities; secondly, the entrepreneurial process; and thirdly, the factors involved in increasing the promotion of the development of entrepreneurs and entrepreneurial activity. In support of the importance of the research into the importance of entrepreneurial research (the third factor) Paulin et al. in Watson (1994:34) regard this subject as one of the mainstream research areas within entrepreneurship as such.

The study therefore fundamentally aims to undertake this problematic issue within entrepreneurial research scientifically as well as to point out the problem areas within entrepreneurial training by suggesting a new framework wherein training can take place.

2.4 Training within the field of Entrepreneurship

Entrepreneurial training and education acts as a facilitator for entrepreneurial activities with the main focus being to stimulate entrepreneurial activity and performance. This fact acts as a base to ensure that the research that is necessary and conducive in this field to ensure economic growth, is in fact conducted. Training within this perspective is supported by the work of Buckley and Caple (1991:17), where the training *per se* is defined as an intentional effort to teach specific abilities, which are knowledge bearing, to complete the project better.

Hirsowitz (1993:25) argues that training creates new opportunities and possibilities as well as a consciousness to attempt and complete certain tasks in a different way. The trainability of entrepreneurs is accepted as a given in this study and is supported by Gibb (1985:3), Hisrich and Peters (1998:19) Kuratko and Hodgetts (1998:10), Rosa and McAlpine (1992:64), Van Vuuren (1997:1) and Welsch (1993:14), as well as McClelland (1969:1).

Currently the problems of entrepreneurial training is seen in the lesser consensus that exists where the content of courses and curricula are involved. Loucks (1982:45) supports this statement by pointing out that there is a big gap where substantial standardised components within the entrepreneurial training programme exist. Rosa and McAlpine (1992:73) further point out that more emphasis within the training situation should

be placed on the complex and multi-disciplinary aspects of entrepreneurship. Those that are regarded as successful programmes vary between being exceptionally simplistic to being mostly abstract.

Dermin and Levin in Van Vuuren (1997:1) regard the current programmes as:

- an over-emphasis of theoretical & quantitative instruments;
- having too little 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.

Scott (1988:13) regards the approach of the current training system as being very pragmatic whilst Timmons (2000:49) suggests the following desirable circumstances: Active involvement in entrepreneurial activities, an understanding of the dynamic characteristics of the entrepreneurial environment and the introduction of the existing reality aspects to the practice situation.

Morris and Hooper (1996:14) strongly argue that no single theory is being developed as the “content estimator” of entrepreneurial training. Research in this field tends to be explorative and descriptive as well as “cross-sectioned” and more dependent on “posterior” statistical testing rather than “priori” hypothetical testing. Testing in general tends to be small and non-representative.

Van Vuuren’s (1997:1-15) aim in his pioneering work was to try and construe a supposed multiplicative contents model in an explorative way

for entrepreneurial training. The model consists of the following constructs: Entrepreneurial performance (E/P); performance motivation (M); entrepreneurial skills (E/S) and business skills (B/S). The composition of the constructs configures in a dynamic multiplication model: $E/P = f [M(E/S \times B/S)]$

The primary aim of this study is based on this content model with specific reference to the following concepts or entrepreneurial skills: Creativity, innovation and the identification of opportunity as primary elements in the training process.

2.4.1 Entrepreneurship as a subject

Cooper, Hornaday and Vesper (1997:13) point out that from a historical perspective the first entrepreneurial programme was taught at the Harvard Business School as early as 1947.

Plaschka and Welsch (1990:102) regard entrepreneurship's existence and its right to exist as one that was characterised by a long struggle to develop an identity and acquire some recognition. The first hurdle was possibly the battle to differentiate between the differences existing between "entrepreneurship" and "small business management" as disciplines. The small business sector has been renowned for being a sector with a lack of growth and innovation as well as for the "mother" and "father" image. It was therefore difficult to ascertain a separate identity for entrepreneurship without stigmatising it as a part of the aforementioned. The authors point out that entrepreneurship was initially a part of general management subjects and later became a part of small business management. Vesper (1980:12) regards this phase (the pre-70s phase) as one where entrepreneurship accepted "borrowed" or "stolen" principles that didn't put the establishment of the identity at the

forefront. Plaschka and Welsch (1990:105) quote Vesper where he points out that entrepreneurship, as a subject, could be viewed as follows: "...entrepreneurship was a tangential activity, academically flaky, and lacking in a scholarly body of knowledge. Little research in entrepreneurship goes on and consequently the literature on it remains thin." The authors argue that the development of entrepreneurship as a discipline went through four fundamental phases before it could be acknowledged as an acceptable academic subject.

2.4.1.1 Systematic theory development

The consensus surrounding an acceptable definition with regards to the borders of entrepreneurship, the acceptance of the fact that entrepreneurs can be trained, the movement towards more sophisticated research methods and statistical techniques, a move towards the usage of bigger samples, the division and attention to entrepreneurship and intrapreneurship form part of the theory development. Wortman (1989), in Plaschka and Welsch (1990:110), on the other hand points out that very little uniformity exists in terms of the above-mentioned theoretical development.

2.4.1.2 Authoritarian and professional organisations

Formal disciplines are known for the support and existence of recognised representative professional organisations. The first representative organisation in this regard was "Recontress de St.Gall" in 1947. At present there exists about one similar entity in each state.

2.4.1.3 A professional culture

The entrepreneurial hero of the 1990s replaced the image of the “Robber baron of villains” of the 19th century. The value of entrepreneurship is currently recognised through concepts like creativity, innovation and opportunity development in a dynamic environment. As a result it is also formally accepted that entrepreneurial activity, the key to innovation, increased productivity and more effective competition in the market environment.

2.4.1.4 Entrepreneurship as a career

An acceptable pointer of the professionalism of a discipline is when its existence leads to a career or job opportunity. Sexton and Bowman (1984:93) add to this and is quoted as follows “...consequently, colleges and universities have recognised that starting and operating a business is a viable career alternative that deserves academic attention”

Mahlberg (1995:37) critically states that entrepreneurship as a discipline is one of the few subjects that pushes integration and the combination of functional knowledge and abilities to the limit. He further argues that the abilities and knowledge needed for the establishment of a business even differs from the ability and knowledge needed for the growth of the business. From this one can conclude that entrepreneurship should obviously follow a holistic approach.

It is important to notice that entrepreneurship as a process is as complex as any science. Gartner (1989:695) regards entrepreneurship as a non-continual, non-linear process known for its multi-disciplinary characteristics. Guedallo et al (1997:4) adds to this and regards the process as being unstable, holistic and even catastrophic “...rather it is

a disjointed, discontinuous, unique event no matter whether it is a mega or a macro venture”

Van Vuuren (1992:26) quotes Bygrave who compares science with physics. He points out that in the hierarchy of Sciences, Mathematics (as basic science) for instance would feature on top, with Sociology at the bottom. In this context entrepreneurship should be regarded as an applied science, rather than basic. He furthermore points out that with all the applied sciences, engineering would be on top with entrepreneurship right at the bottom. The multi-disciplinary characteristics of entrepreneurship are proven because some of the basic sciences (mathematics, physics, biology, psychology and sociology) as well as applied sciences (medical, economic and business management) show a degree of correspondence and are mostly contained within the field of entrepreneurship. Churchill (1998:39) points out that physics as a science already had its origin around 5 B.C. (Democritus and Plato). Entrepreneurship on the other hand originated in the 18th century (Smith era). Training in the aforementioned science reaches back more than 2000 years whilst training in entrepreneurship is only about 30 to 40 years old.

The newness of entrepreneurship as an applied science creates a situation wherein virtually no agreed method, concept, data or accepted practice (training context) exist. The opportunity presents itself therefore to formalise a simple method in science and this should be pushed towards academic consensus. This study aims to make a contribution in this regard.

2.4.2 The Entrepreneurship training model

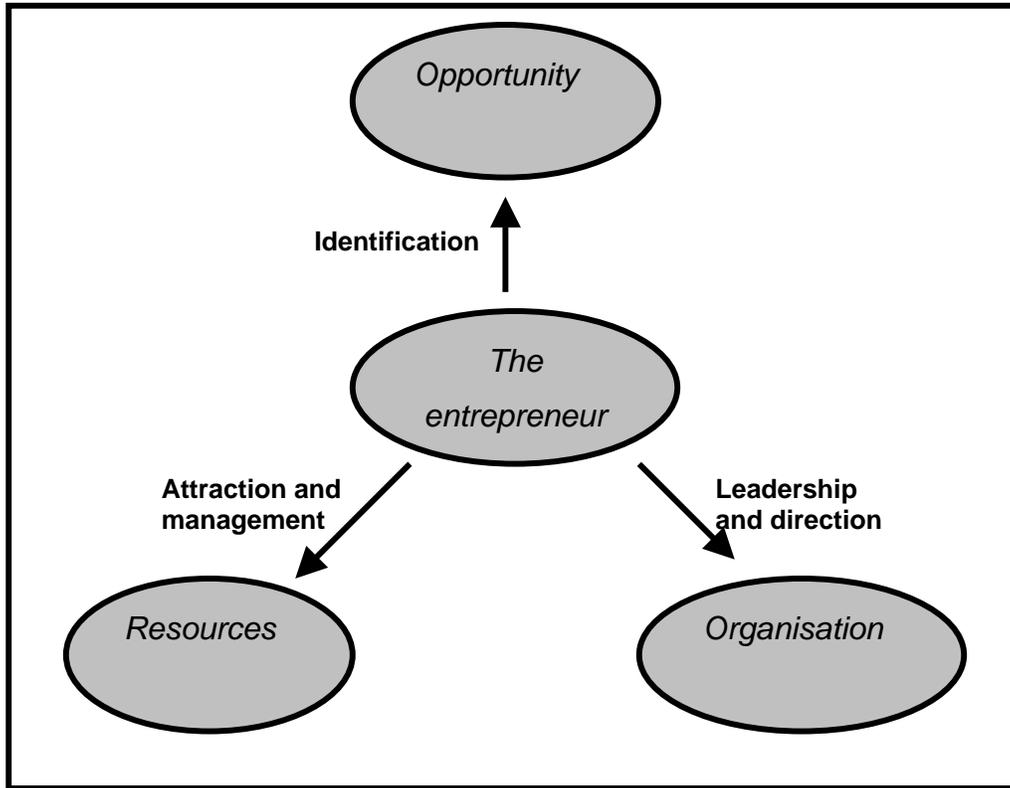
The suggested training model as compiled and applied by Van Vuuren (1997:3), was compiled from the following multiplication construct $E/P = f [M (E/S \times B/S)]$. The contents formula suggests that the construct **E/P** – entrepreneurial performance; **M** – performance motivation; **E/S** – entrepreneurial skills and **B/S** – business skills. One can conclude from this that the increase or decrease in entrepreneurial performance should be seen as the multiplication result of performance motivation (**M**); Entrepreneurial skills (**E/S**) and Business skills (**B/S**).

Van Vuuren, who is regarded as the technical developer of this model, uses the Motivational and Expectation Theory of Vroom (1964) as diversion instrument. Vroom's theory proves that achievement can be seen as multiplication function of **individual motivation (M)** and the **ability (V)** of the individual $P = f (M \times V)$. Abilities within this context are regarded as existing and acquired knowledge. Analogous to Vroom's model, Van Vuuren uses the construct "achievement" in the context of "entrepreneurial performance" as well as "business skills" that needs to be present in order to achieve or maintain a level of achievement.

Subsequently it is of the utmost importance to place the development of the model against the backdrop of the entrepreneurial process.

Firstly, the model of Wickham (2000:37), who explains the entrepreneurial process within a simplistic framework of value creation:

Figure 3: The entrepreneurial process



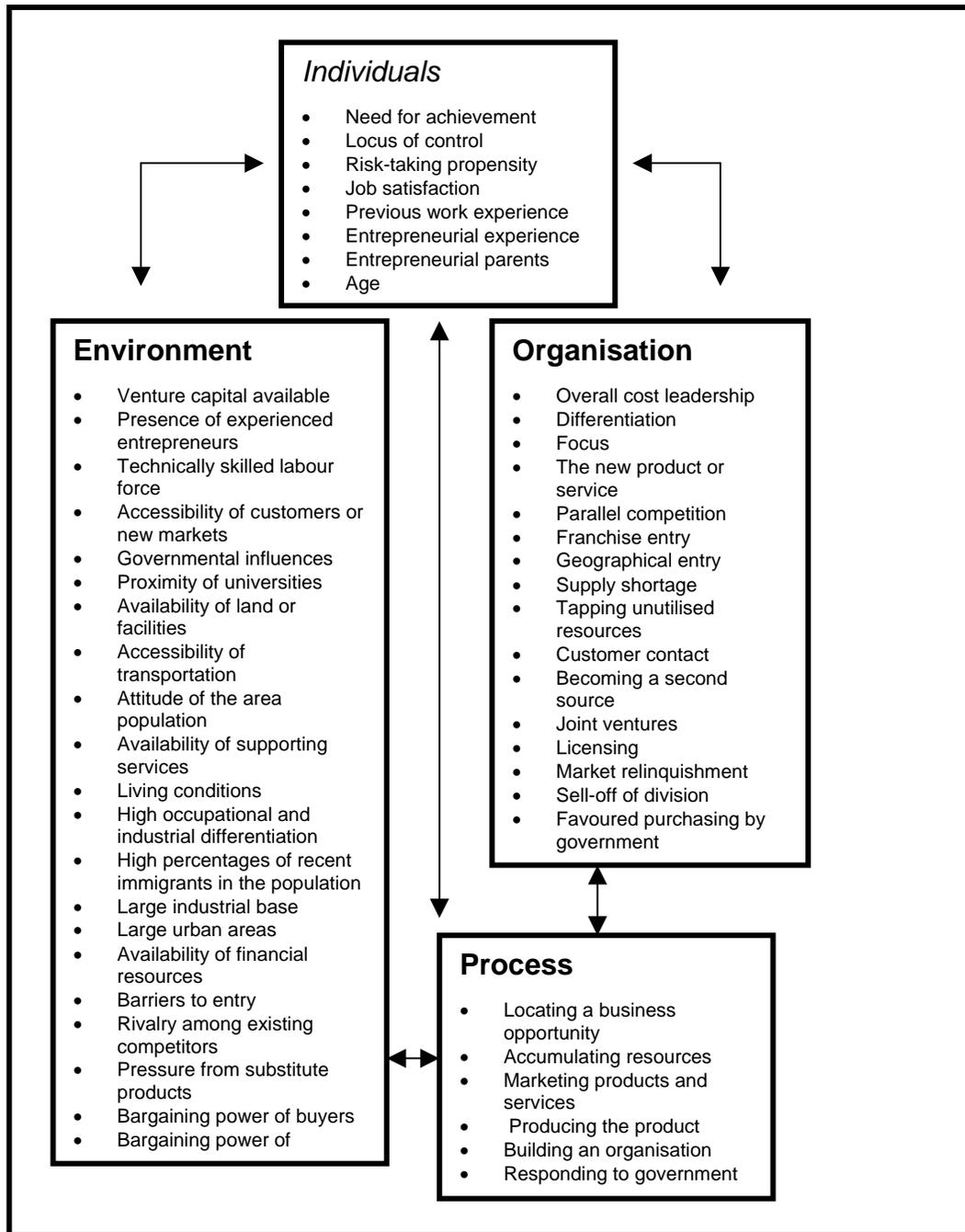
(Source: Adapted from Wickham 2000:37)

The entrepreneurial process, as indicated by Wickham, is based on four reciprocating contingencies. The entrepreneur forms the hub and core element in any entrepreneurial process. He or she (or entrepreneurial team) therefore needs certain characteristics and skills in order to explore feasible market opportunities. Wickham notes the significance of the entrepreneur in identifying and exploiting opportunities in the market in a differentiating manner. The latter elevates the importance of innovation as a differentiating entrepreneurial skill. An entrepreneurial organisation is therefore needed to produce the innovation and exploit the opportunity in the market place. Another differentiating skill (leadership) is needed to create an organisation which will grow and expand in an

entrepreneurial performance context. The entrepreneur is also responsible for attracting the necessary resources or factors of production to fulfil the expected need on the side of the organisation and to achieve set objectives.

Secondly, Gartner (1985) in Kuratko and Hodgetts (2001:44), broadens the model by placing more emphasis on the environmental variables that are role players in the development of the entrepreneurial business. The process model sees the individual (entrepreneur) as an element with specific traits (need for achievements, locus of control, risk-taking, job satisfaction, work experience, role models, age and education); the organisation (type of firm; entrepreneurial environment; partners; strategic variable – cost, differentiation and focus as well as competitive entry mechanisms); the process involved, as compared to the previous process, the business opportunity, resources, marketing of the products or services, the production of the product, organisational development and response to the institutional and societal impact. The environment, as such, forms a pivotal component of the process-model including the following variables: The role of venture capital; inclusion of experienced entrepreneurs – mentors; technical skilled labour force; accessibility of suppliers; access to customers and new markets; government influences; proximity of educational institutions; availability of land; transport; attitude of immediate population; access to support organisations and basic living conditions. The authors emphasise the interactivity of the model as a process approach as compared to the classical “segmented school of thought”. They present the process as follows:

Figure 4: Variables in the development of the entrepreneurial business



The role of entrepreneurial training as intervention in the successful achievement of objectives or the desired increase in entrepreneurial performance is a vital part of the entrepreneurial process (Timmons

1999:40), and with this it is meant that the training programme is a fundamental support function in this process. The trainability of entrepreneurs is already accepted as a given in the previously mentioned parts. Training programs in general are also based on the entrepreneurial process.

The contents of the suggested training model, namely $E/P = f \{M (E/S \times B/S)\}$, is formulated as a synthesis of the above-mentioned processes and could be schematically presented as follows:

Table 7: The Entrepreneurship training model

Entrepreneurial Performance (E/P)	Performance motivation (M)	Entrepreneurial skills (E/S)	Business skills (B/S)
<ul style="list-style-type: none"> ▪ Establishment of own business 	<ul style="list-style-type: none"> ▪ Performance motivation 	<ul style="list-style-type: none"> ▪ Risk propensity 	<ul style="list-style-type: none"> ▪ General management skills
<ul style="list-style-type: none"> ▪ Completion of first transactions 		<ul style="list-style-type: none"> ▪ Creativity and Innovation 	<ul style="list-style-type: none"> ▪ Marketing skills
<ul style="list-style-type: none"> ▪ Growth in net value of business 		<ul style="list-style-type: none"> ▪ Opportunity identification 	<ul style="list-style-type: none"> ▪ Legal skills
<ul style="list-style-type: none"> ▪ Recruitment of employees 		<ul style="list-style-type: none"> ▪ Role models 	<ul style="list-style-type: none"> ▪ Operational skills
<ul style="list-style-type: none"> ▪ Increasing productivity levels 			<ul style="list-style-type: none"> ▪ Human resource management skills
<ul style="list-style-type: none"> ▪ Increasing profitability 			<ul style="list-style-type: none"> ▪ Communication skills
			<ul style="list-style-type: none"> ▪ Business plan

(Source: Adapted from Antonites (2000:21))

As a result the various constructs of the model are discussed in short.

2.5 Entrepreneurial performance (E/P)

Van Vuuren (1997:3) argues that the following variables should be regarded as entrepreneurial achievement or results with regard to the realising of set entrepreneurial goals: Firstly, an increase in productivity; secondly, the increase in the amount 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.

2.6 Motivation (M)

Topical questions on what motivates the entrepreneurs have been in existence for a couple of years. What motivates an individual seen as an entrepreneur to totally commit him/herself to the establishment and development of a business? What motive is involved with the high inclination to take a personal risk in the process? Which motives distinguish the entrepreneur from the standard business person and what leads to the absolute striving towards independence versus the security of a set salary and employment?

It is generally accepted that certain personal qualities of the individual distinguish him/herself as entrepreneur or non-entrepreneur or as entrepreneur versus small businessperson. These qualities include an inclination towards risk, an internal locus of control, the way in which failure is accepted, drive, energy and so forth.

Gartner in Naffziger et al. (1994:29) argues that personal qualities are virtually totally applicable as generic qualities where the general

individual is involved, whom he describes as the “generic everyman”. Some of these qualities can therefore be present in anyone’s situation. Shaver and Scott, as quoted by Naffziger et al., rearrange this statement as follows:

The study of new venture creation began with some reasonable assumptions about the psychological characteristics of “entrepreneurs”. Through the years, more and more of these personological characteristics have been discarded, debunked or at the very least, found to have been measured ineffectively. The result has been a tendency to concentrate on almost anything except the individual. Economic circumstances are important; marketing is important; finance is important; even public assistance is important. But none of these will, alone, create a new venture. For that we need a person, in whose mind all of the possibilities come together, who believes that innovation is possible, and who has the motivation to persist until the job is done. Person, process, and choice: for these we need a truly psychological perspective on venture creation.

Endler in Naffziger et al. (1994:29) defines behaviour as a function of the interaction between the individual and the environment. Gartner (1989:696) adds to this that entrepreneurial behaviour is central in the process of venture development and that the entrepreneurial process plays a larger and more important role than merely gathering information about “who the entrepreneur really is”. Central to this environmental development and entrepreneurial process is the individual’s motivation.

2.6.1 Motivation

Kreitner and Kinicki (1998:189) conceptualise motivation *per se* as those psychological processes where consciousness, direction and perseverance of voluntary actions that are purposeful, are created.

Sanzotta (1977:72) defines motivation *per se* as a threefold construct namely:

2.6.1.1 Motivation towards competitiveness

Humans or individuals are defined as social beings that are dependent on group behaviour for support and survival purposes. Apart from the fact that humans are socially interdependent beings, competition or rivalry originates as a form of social interaction. This behavioural pattern develops as a comparative measure wherein, for instance, a situation develops where the best possible achievement is sought after. Within this framework motivation as such is regarded as the nucleus for the origination of rivalry or competition. Motivation can further act as a comparative measure for achievement and failure on the basis of the feedback function, created as a result of this in a competitive framework. This feedback acts throughout as an inherent formation instrument for further motivation towards higher levels of competitiveness.

2.6.1.2 Innate incentive

The construct motivation is further described as a basic explorative incentive, which is derived from the inquisitive nature of man as such. Explorative behaviour is motivated by the search for new experience and the flexibility of man that enables him/her to adjust to these so-called new circumstances. This points to an individual who, due to his inquisitive nature, demands to go through a certain learning curve in order to gain the required knowledge to adjust to the “new”. This process is driven by motivation.

2.6.1.3 Acquired behaviour

It is generally accepted that motivation influences the learning process and learning *per se*. Accepting that learning does influence motivation can also turn around the argument.

Motivation is thus placed on an equal footing with learning. Motivation is not only taught but represents a vital integration with the learning process. The author states that the individual doesn't learn effectively if the motivation does not exist. In addition, those individuals who do not learn effectively possibly are not motivated because they have never learnt how to be motivated.

Motivation can therefore be a positive influence on learning as well as in the learning process: "The more you learned how to be motivated in the past, the more easily you transfer that motivation either to new learning, or more importantly, to new levels of incentives."

Therefore, as soon as it is easier to move on to higher motivational levels the nature of motivation will change dramatically.

Within this context it is of the utmost importance to investigate the entrepreneur and motivation as a characteristic of the entrepreneur. The motivation of the entrepreneur as an individual becomes absolute when placed within the entrepreneurial performance (E/P) perspective with the aim to integrate motivation as a driving force in the increase of entrepreneurial performance. Entrepreneurial performance as discussed has as a result the aim to increase for instance the profitability, productivity, the net value and growth of the venture. The so-called need

to achieve (Nach) that is absolutely present within the entrepreneur, is as a result discussed in detail.

2.6.2. The entrepreneur's need to achieve

Gellerman, as quoted by Coetzee (1979:4), mentions the typical quality of the entrepreneur as follows:

They are well aware that big achievements do not come quickly or easily. Therefore they will mentally dig in for long, hard campaigns rather than hope for lucky breaks. Even their thinking is far more orientated towards the future, fuller of anticipation and attempts at logical predictions, than that of people without strong achievement needs.

In view of the above quote it is obvious that in respect of the entrepreneur, motivation must be put in the context of achievement motivation.

In the watershed work of David C. McClelland in 1961 entitled *The Achieving Society*, the hypothesis stated was that achievement motivation is partly responsible for economic growth. His basic hypothesis is that there is a strong correlation between 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 partly plays a role in the increase of economic growth. Trumble (1983:33) and McClelland (1961:37) base their hypothesis on individual observation where the following logical psychological supposition is made: The more an individual for instance eats, the more he wants to eat. Based on the same analogy, the more an individual achieves the more he/she would like to achieve. These two

variables are described as relatively comparable to one another. Accordingly there has to be a certain motive to achieve or to reach a certain goal. This achievement is tied to a specific action behaviour. He therefore argues that the motives are rational or that it can be rationally deduced from the completion of certain actions. McClelland uses the “Thematic Apperception Test” – TAT” as an instrument to measure individuals’ motivation levels in terms of certain needs that need to be satisfied. A meta-analysis has already been completed which shows that the instrument is a valid one in the measuring of the need to achieve (Kreitner & Kinicki 1998:197).

Murray in Coetzee (1979:5) defines achievement motivation as the achievement and completion of something difficult or rather a difficult task or project. Further, in order to manipulate, organise or master certain physical objects, individuals or ideas. These actions need to be completed as fast and independent as possible, while hurdles should be overcome in this process. Achievement motivation also includes that the individual should surpass other individuals and over-achieve in relation to his or her own set goals. This action focuses on self-fulfilment with the aim to develop and realise talents. Heckhausen in Coetzee (1979:6) regards two fundamental motives as being an absolute part of achievement motivation namely first, the belief and hope in success and secondly, the fear of failure. He is quoted as follows:

...the striving to increase or keep as high as possible one’s own capability in all activities in which a standard of excellence is thought to apply and where the execution of such activities can, therefore, either succeed, or fail.

Trumble (1983:34) broadens the definition of achievement motivation and describes it as something that pushes the individual to complete a task faster, better, more effective and with less exertion. McClelland

proves through his research that actual achievement cannot be realised should there not be a strong need for achievement. McClelland argues on the ground of this statement that there exists a strong relationship between achievement motivation and the entrepreneurial behaviour of the entrepreneur. The relevance of the work of McClelland in relation to recent findings is deduced from the psychological characteristics that need to be present within the entrepreneur in order to be successful. These entrepreneurial characteristics are identified in the development of the achievement phenomenon. He specifies three universal characteristics deduced from the achievement motivation theory as present in the entrepreneur:

Firstly: **Problem solving** that forms an integrational part of an individual's responsibility. This includes the formulation of goals and the implementation and achievement of them through personal exertion.

Secondly: **Calculated propensity towards risk** that has to be described as an integrated function of ability and should not be calculated from a mere chance situation.

Thirdly: The entrepreneur has to have the **knowledge of the results** reached as well as make an **evaluation of tasks** that were completed.

McClelland therefore concludes that a high need to achieve (nAch") leads the particular individual or leads to entrepreneurial action behaviour. Hisrich and Peters (1998:69) associate themselves with the idea that the need for independence and the need of a high achievement level are two highly important determinants of entrepreneurial behaviour.

Smith and Milner (1984:488) come to a further conclusion by identifying five outstanding role characteristics and accordingly five kinds of motivation patterns related to it:

Firstly, the **individual achievement role** that develops from a motivational basis and which determines that the entrepreneur has a certain characteristic need that can only be satisfied through the personal involvement of the individual as well as the ability to link success to personal involvement. This causal link seems to be important.

Secondly, the **role of the inclination towards risk** that originates from the motivational basis determines that the entrepreneur will take a calculated risk falling within the borders of his/her personal abilities.

Thirdly, the **role of striving towards results**. This role is based on a motivational basis that develops the need to compile an index on a continual basis showing the current level of achievement.

Fourthly, a **personal innovation role**. This role is motivated by constant behaviour aimed at presenting or suggesting new, and thus creative and innovative solutions.

Fifthly, a **planning or goal formulation role**. The motivation for this important role is the development of the need for thought surrounding the future and the anticipation of the possible result within this framework.

The above-mentioned authors prove empirically that the entrepreneurs who fulfil these roles or strive towards the motive pattern can survive for longer and be more successful. These results are achieved through the

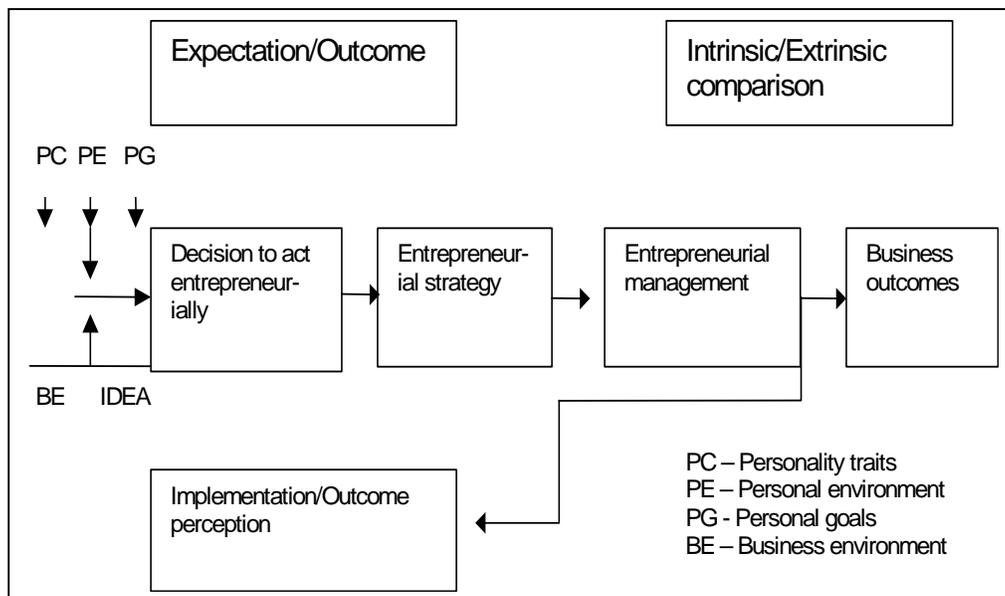
application of the following research instruments: The “Miner Sentence Completion Scale”, “Form T” and the “Innovative Technology” questionnaire. In terms of the hypothesis it is stated that individuals with a high need to achieve (nAch) are more likely to implement a faster expansion strategy that can be seen in the increase of entrepreneurial achievement.

Begley and Boyd (1987:79) support the notion that the need to achieve may be regarded as entrepreneurial behaviour in the entrepreneur. Their study proves that a high level of achievement motivation can definitely be perceived in the typical entrepreneur rather than in the typical small business manager. The results of this study show that a high level of achievement motivation appears more often in the typical entrepreneur rather than the small business manager. The results of this study also indicate that those individuals with a high level of achievement motivation, i.e. “achievers”, set markedly higher and more challenging goals for themselves. This group of respondents also makes use of feedback as a handy measurement instrument to show that goals have been achieved. The entrepreneurs compete with their own achievement standards and are constantly looking for new ways to improve their performance. Sexton and Bowman (1985); Hornaday and Aboud (1971) as well as DeCarlo and Lyons (1979) have come up with the same research results in independent studies.

Cochran in Livesay (1995:159), however, emphasises the fact that a demotivating situation could originate within the achievement motivational framework. Should a constant incompatibility arise between the expectations or the potential outcome (as perceived by the entrepreneur) and the true results of the outcome?

Nafziger et al. (1994:31) states that too little research has been done into the motivation of entrepreneurs. Owing to this fact the authors developed an integrated model aimed at the total entrepreneurial process. They argue in favour of the model that entrepreneurship could exist within existing ventures (corporate entrepreneurship) as well as the well-known venture creator (entrepreneur). The basis of the theory or model is the premise that it is believed that entrepreneurs are motivated to achieve certain goals. Entrepreneurs define their experience as being successful in as much the goals were reached. The model is illustrated as follows:

Figure 5: A model for entrepreneurial motivation



(Source: As adapted from Nafziger et al. (1994:33))

Newly formed ventures call for both strategic and operational management. As a part of the process the entrepreneur becomes a manager and evaluates his/her set goals that are being met (for instance business growth) according to their importance. These evaluations form the motivational level of the entrepreneur and develop the need to act more entrepreneurially (for instance the implementation

of an expansion strategy). According to the above-mentioned authors it has a more holistic nature than the other models that are regarded as more simplistic. The primary motivational characteristic of this framework lies therein that the entrepreneur is motivated to act more entrepreneurially as long as it is known that this type of behaviour is instrumental in the achievement of goals.

Van Vuuren (1997) uses the absolute mathematical model of Atkinson and Feather (1961:214) where the strength of the tendency to strive towards a certain need for achievement is avoided, is noted. The result of their study has shown that the tendency to do something must be regarded as a function of the strength or motive to strive towards certain achievements and success (**Ms**); to prevent failure; (**Mpf**); the subjective possibility of success (**Ps**); or failure (**Pf**); the reward value of success (**Vs**); or failure (**Vf**). The value of the reward on the successful completion of the task is placed congruently against the level of difficulty of the task, or rather in a positive relation to one another. The above-mentioned authors therefore imply that the more difficult the completion of the task is, the higher the reward for it should be, the acquisition of the reward is, however, subject to the successful completion of the task. Atkinson and Feather postulate therefore that **Vs=1-Vf**. The value of the reward increases as a subjective probability or the possibility exists that the success will decrease. This implies that should the individual realise that the success rate is decreasing, he/she will do everything possible to change the situation back into the positive sphere. With this **Ps+Pf=1** and **Vm=-Ps**. The easier the task, the bigger the discomfort when the effort to complete the task successfully, fails. The inclination to approach success in this way can be mathematically presented as (**MsxPsxVs**), and the opposite by way of handling failure as (**Mpf x Pf x -Vm**).

The likelihood of completing a task (T=task) is represented as the difference between the two aforementioned inclinations or tendencies.

$$\begin{aligned} T &= (Ms \times Ps \times Vs) - (Mpf \times Pf \times -Vm) \\ &= Ms - Mpf (Ps[1-Ps]) \end{aligned}$$

Van Vuuren (1997) further states that these variables play a critical role in the increase or decrease of entrepreneurial performance (E/P). As has already been pointed out, entrepreneurs have a higher level of need for achievement than the normal individual or the “non-entrepreneur”. It is also important to emphasise the stimulation of the development of the need to achieve as an intervention in the increase of entrepreneurial performance. This aspect must be absolutely presented in combination with the following constructs: Entrepreneurial skills (E/S) and business skills (B/S). McClelland’s success rate in the identification of high entrepreneurial achievement would not have been possible if the mentioned abilities were not present.

Mahadea (1988:43) mentions that the need to achieve can be taught through a training intervention. He quotes the following authors who proved this statement empirically: McClelland and Winter (1969; 1987); Timmons (1971); Durand (1975); and Boshoff (1987).

In closing, 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. This framework also includes the increase of entrepreneurial performance. The argument is concluded with the argument of Bartlett and Smith (1966) in Mahadea (1988:43) that

achievement training plays a large role in the development of achievement motivation and the generating of a need to achieve. Therefore, motivation on the one hand and achievement motivation on the other, plays a vital role throughout the training aimed at providing entrepreneurial as well as business skills.

2.7 Entrepreneurial skills (E/S)

This study focuses primarily on the training to provide entrepreneurial skills (E/S), with specific emphasis on the concepts of creativity, innovation and opportunity finding. The other relevant concepts (E/S) will also be discussed in more detail. The scope of the study therefore excludes an intricate explanation of business skills (B/S), although the learner is intensely subjected to such skills training.

Entrepreneurial skills (E/S) involves skills embraced by the following concepts: Risk propensity, Creativity and Innovation, Opportunity identification and Role models.

The following table indicates how entrepreneurial skills (E/S) fit into the total entrepreneurship training model:

Table 8: Entrepreneurial skills as part of the entrepreneurship training model

Entrepreneurial Performance (E/P)	Performance motivation (M)	Entrepreneurial skills (E/S)	Business skills (B/S)
<ul style="list-style-type: none"> ▪ Establishment of own business 	<ul style="list-style-type: none"> ▪ Performance motivation 	<ul style="list-style-type: none"> ▪ <u>Risk propensity</u> 	<ul style="list-style-type: none"> ▪ General management skills
<ul style="list-style-type: none"> ▪ Completion of first transactions 		<ul style="list-style-type: none"> ▪ <u>Creativity and Innovation</u> 	<ul style="list-style-type: none"> ▪ Marketing skills
<ul style="list-style-type: none"> ▪ Growth in net value of business 		<ul style="list-style-type: none"> ▪ <u>Opportunity identification</u> 	<ul style="list-style-type: none"> ▪ Legal skills
<ul style="list-style-type: none"> ▪ Recruitment of employees 		<ul style="list-style-type: none"> ▪ <u>Role models</u> 	<ul style="list-style-type: none"> ▪ Operational skills
<ul style="list-style-type: none"> ▪ Increasing productivity levels 			<ul style="list-style-type: none"> ▪ Human resource management skills
<ul style="list-style-type: none"> ▪ Increasing profitability 			<ul style="list-style-type: none"> ▪ Communication skills
			<ul style="list-style-type: none"> ▪ Business plan

(Source: Adapted from Antonites (2000:21))

Hisrich and Peters (1998:10) accentuate that the entrepreneurial process involves more than just the mere “problem-solving in a typical managerial position”. The process is more complex and also comprises the necessary entrepreneurial skills.

As a historical background to the research and development of entrepreneurial behaviour and skills, Timmons (2000:218) provides the following development time frame (as adapted):

Table 9: Time frame of development

Date	Researchers	Characteristics
1848	Mill	Risk propensity
1917	Weber	Source of formal authority
1934	Schumpeter	Innovation & initiative
1954	Sutton	Need for responsibility
1959	Hartman	Source of formal authority
1961	McClelland	Risk propensity and need for achievement
1963	Dauids	Ambition; need for interdependence, responsibility and self confidence
1964	Pickle	Driving force, communication, technical knowledge
1971	Palmer	Risk assessment
1971	Hornaday & Aboud	Performance motivation, autonomy, aggression, power, innovation and independence
1973	Winter	Power need
1974	Borland	Internal locus of control
1974	Liles	Performance need
1977	Gasse	Personal value orientation
1978	Timmons	Driving force, self confidence, calculated risk, internal locus of control, creativity and innovation

1980	Sexton	Energy, ambition, positive failure management
1981	Welsh & White	Need for control, responsibility, self confidence, challenge need, calculated risk propensity
1982	Dunkelberg & Cooper	Growth orientation, independent orientation, skills orientation
1982	Scheré	Acceptance of uncertainty and chaos
1983	Pavetti & Lau	Conceptual skills
1985	Macmillan, Siegel, SubbaNarishimha	Knowledge of market and leadership
1986	Ibrahim & Goodwin	Ability to delegate, managing consumer and employee relationships
1987	Aldrich & Zimmer	Networking
1987	Hofer & Sandberg	Motivation and synergy
1987	Schein	Management skills
1987	Timmons, Muzyka, Stevenson en Bygrave	Opportunity seeking propensity
1989	Wheelen & Hunger	Implementation of business skills
1992	Chandler & Jansen	Self-analysis and opportunity identification
1992	McGrath, MacMillan en Scheinberg	Individualism, uncertainty and temperament

(Source: Adapted from Timmons (1999:218))

In the following sections these concepts are discussed in more detail.

2.7.1 Risk propensity

Casson (1990:11) describes entrepreneurial risk as the result of insecurity that exists due to the fact that the success of market penetration can never really be determined beforehand. The correct prediction of the question by the entrepreneur would therefore be an indication of the success in the way of a decrease in risk. Hence, risk can be described as the possibility of innovation having an unwanted result.

Zimmerer and Scarborough (1996:48) regard risk as the conflict situation wherein the entrepreneur will find him/herself. Therefore all risk variables must be studied in depth with regards to the potential reward that could be a result of it. The authors refer to the successful entrepreneur as one who capitalises on the constructive effect of the conflict situation that originates when a certain risk is taken. This includes the decrease of the negative reaction that can develop from the accompanying exhaustion and frustration, which results from continuous failure.

In their opportunity evaluation model Zimmerer and Scarborough (1996:51) describe the following risks that could occur:

2.7.1.1 Time risk

The time implication of taking a new idea right through the product development phase until it could be considered right for the market.

2.7.1.2 Investment risk

This includes the cost of the establishment of a new venture, i.e. does the entrepreneur have access to enough capital to enable the venture to survive to the point of being an entrepreneurial institute? Other costs are those related to the total product development process, as well as those concerned with the physical manufacturing of the total product that will, for instance, satisfy the qualitative description.

2.7.1.3 Technical risk

All the technical aspects associated with the product development process are considered with the final product having to satisfy the set technical quality standards

2.7.1.4 Competitive risk

The possibility exists that competitors could be offering the same or comparable products in the market, while the success rate of competitors in comparable markets is also an indication of risk. The financial strength and depth of the competitor should not be omitted as a “follower” strategy by the competitor could pose further risk. The existing market advantage of the competitor as well as its existing distribution system, selling power and established relationships within the market place must be researched.

Deakins and Freel (1998:23) re-emphasise the calculated risk-taking trait of the entrepreneur. It is regarded as important to distinguish between uncertainty and risk. The entrepreneur manages uncertainty by means of analysing and evaluating risk possibilities to be encountered in future. The calculated nature of managing uncertainty and risk is still, though only to a certain extent, dependent on the existence of “chance”,

“luck” and “timing”. The projection of certain economic is not as predictable as in the past (e.g. inflation, exchange rates, interest rates and sales figures), and makes the risk evaluation process for especially the start-up entrepreneur, extremely strenuous. The whole opportunity identification process, which forms a core part of this study, integrates the assessment of risk factors.

2.7.2 Opportunity identification

The identification of opportunities on a continuous basis is a differentiating characteristic of the true entrepreneur. Ardichvili et al. (2003:107) supports the importance of opportunity finding as an entrepreneurial skill, by citing the following authors: Bhave (1994); Schwartz and Teach (1999); Sing et al. (1999); De Koning (1999) and Sigrist (1999), and therefore implying their relevance in a entrepreneurship training programme. These models vary from cognitive inclinations to economic variables. The discussion on opportunity finding forms an integral part of this study and will be elaborated upon in more detail in Chapter 3.

2.7.3 Role models

The influence of role models in the choice of entrepreneurial action can, in the context of this study, not be omitted or underestimated. To observe another person as a successful businessperson will obviously lead to the entrepreneur colouring in the picture for him/herself. The entrepreneur could even regard him/herself as being more successful than what is in front of him/her. Hisrich and Peters (1998:74) state that role models have a huge impact in the majority of job or career choices. The same statement can be made in the entrepreneurial context. Role models can be parents, brothers, sisters, or family members but

especially other entrepreneurs. For the potential entrepreneur the successful entrepreneur as outsider can act as a fundamental catalyst.

Within the training context the usage of successful entrepreneurs as example could act as a massive motivational technique. This aspect can both indirectly and strongly support the need for achievement and the achievement variables. Bagshaw (1996) uses successful entrepreneurs in a South African context, who could act as directive role models in any entrepreneurial training programme. This publication includes successful names ranging from Anton Rupert, Sol Kerzner, Pam Golding, Herman Mashamba, Sadek Vahed, Ranjit Ramnarain to Tony Factor and Themba Ngcobo. These examples reach over diverse cultural and gender borders and hold great value for the indication of successful role models in every entrepreneur's immediate environment or culture.

The use of role models could, according to Kreitner and Kinicki (1998:292), be a direct guideline for the entrepreneur in terms of certain role expectations that need to be present per definition. The entrepreneur can therefore realise that his/her chosen role model applies intensive innovation, took a calculated risk and strives towards unusual opportunities. Role insecurities could be removed as the entrepreneur can obviously see what is expected of the typical entrepreneur by making use of a role model to model him/herself on. The entrepreneur therefore places him/herself on an equal footing with the role model and in certain cases lets him/herself be motivated to the extent that even better achievement than that of the role model could be the result.

Apart from the expected entrepreneurial skills (E/S) that need to be present as content for the training model $E/P=f [M (E/S \times B/S)]$, the acquisition of business skills (B/S) is also of the utmost importance.

2.8 Creativity and innovation

Creativity and innovation form the primary focus of this study, and elaboration with regards to these concepts will take place in Chapter 4. Special reference should be made to the research done by Antonites and Van Vuuren (2002) that formed the basis of the current study. The aforementioned research assessed the content of entrepreneurship training programmes on a global level. Their research results have shown that creativity and innovation are included in 74% of all the entrepreneurship programmes assessed, and concurrently constitute the highest figure among the concepts measured. The following table indicates the different entrepreneurial skills measured as included in 70 entrepreneurship training programmes.

Table 10: Entrepreneurship training programmes: Entrepreneurial skills

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

The high occurrence and presence of these concepts in entrepreneurship programmes without proper indication of the content thereof, was evident. This fact fuelled the need for developing a Creativity and Innovation Content model, applying the model and testing

its efficacy. The study therefore illustrates the process based on the preliminary findings of Antonites and Van Vuuren (2002).

Creativity and innovation forms part of the total training model and can be illustrated by means of the following table.

Table 11: Creativity and innovation as part of the entrepreneurship training model

Entrepreneurial performance (E/P)	Performance motivation (M)	Entrepreneurial skills (E/S)	Business skills (B/S)
<ul style="list-style-type: none"> ▪ Establishment of own business 	<ul style="list-style-type: none"> ▪ Performance motivation 	<ul style="list-style-type: none"> ▪ Risk propensity 	<ul style="list-style-type: none"> ▪ General management skills
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<ul style="list-style-type: none"> ▪ Increasing productivity levels 			<ul style="list-style-type: none"> ▪ Human resource management skills
<ul style="list-style-type: none"> ▪ Increasing profitability 			<ul style="list-style-type: none"> ▪ Communication skills
			<ul style="list-style-type: none"> ▪ Business plan

(Source: Adapted from Antonites (2000:21))

2.9 Conclusion

Leitch and Harrison (1999:105) attempt to exemplify the nature, relevance, content and appropriateness of entrepreneurship education by citing the work of Block and Stumpf (1992), Slevin and Colvin (1992), Gorman et al. (1997), Young (1997), as well as Kourilsky and Carlson

(1997). The first mentioned authors furthermore quote Stumpf (1992) directly in review of the current state of entrepreneurship education:

...Rigorous research is clearly needed to understand the target audiences for entrepreneurship education, their unique educational objectives and learning styles, and the types of content to be covered for each audience, and which specific pedagogical methods will most effectively meet their educational goals. Such research must look at both the proximal criteria of student interest and immediate feedback as well as the more distal criteria of actual behaviour over ten or more years ... the most difficult and costly research on entrepreneurship education will involve the examination of different program content and pedagogical methods used to accomplish educational objectives.

This study endeavours to answer the “content” and “effectiveness of the entrepreneurship programme” issues, with regards to specific entrepreneurial skills. Research interventions conducted to date to solve these specific research problems, are eminently limited, particularly with regard to the South African academic and business environment. This can be ascribed to the relatively youthful nature of the entrepreneurship science.

The fact that a need exists for further research in the field of entrepreneurship education and training supports the feasibility of this study. A primary focus is thus allocated to training in the following entrepreneurial skills: Creativity, innovation and opportunity finding. The foregoing concepts will be defined and explained in the following chapter, given the limited availability of literature and research done in this specialised field.