GENERATING A THEORY FROM PREDICTING THE SUCCESS LEVEL OF ASSURANCE REPRESENTATIVES

By

LIEZEL LANE

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Abstract

GENERATING A THEORY FROM PREDICTING THE SUCCESS LEVEL OF ASSURANCE REPRESENTATIVES

Candidate: Liezel Lane

Department: Psychology

Supervisor: Prof RP de la Rey

Degree: Magister Artium (Psychology)

The aim of this research was to generate a theory to predict the success levels of assurance sales representatives. A sample of 245 participants from a life insurance company in South Africa was selected to participate in the study. The sample consisted of 213 males and 32 females; of these, 159 were European, 78 African and 8 Asian; the average age was 40.37 years. The Schepers Locus of Control Inventory (Schepers, 1995), the Entrepreneurial Attitude Orientation Scale (EAOS) (Robinson, Stimpson, Huefner & Hunt, 1991) and a biographical questionnaire were administered to the participants. Factor analysis was conducted to test the psychometric quality of the locus of control and the attitude scale. Hypotheses were tested for the variables with two performance outcomes: commissions earned and lapse ratios. Using the information obtained from the analyses, a model was built of the significant relationships between the performance criteria and the independent variables. Results indicated that neither the EAOS nor the Locus of Control Inventory scales predicted performance outcomes as hypothesized for sales professionals. The significant correlations that did result were generally counter to expectations. Demographic variables had limited success in predicting performance outcomes of sales professionals. The nature of the employment contract (full or part-time w/NEK, $F = 5.61$; $p < 0.05$), population groups (White South Africans vs. African South Africans w/NEK, $F = 5.22$; $p <$

0.05), job status (Manager vs. Sales Representative w/VEK, $F = 3.51$; $p < 0.05$), years in sales (w/NEK, $r = 0.14345$; $p < 0.05$), and desired salary (w/NEK, $r = 0.19571$; $p < 0.05$) were correlated with the performance outcome measures. Cultural and management implications are discussed with regard to the use of psychometric measures for selection. Research implications also are discussed.

Opsomming

TEORIEONTWIKKELING MET BEHULP VAN VOORSPELLING VAN DIE VLAK VAN WELSLAE VAN VERSEKERINGVERTEENWOORDIGERS

Kandidaat: Liezel Lane

Departement: Sielkunde

Studieleier: Prof RP de la Rey

Graad: Magister Artium (Sielkinde)

Die doelwit van hierdie navorsing was om 'n teorie te genereer om die suksesvlakke van versekeringmakelaars te voorspel. 'n Steekproef van 245 deelnemers van 'n lewensversekeringmaatskappy in Suid-Afrika was vir hierdie studie gebruik. Die steekproef is saamgestel uit 213 mans, 32 vrouens, 159 van Europese afkoms, 78 met 'n Afrikaherkoms en 8 Asiër verkoopsmense, met 'n gemiddelde ouderdom van 35.5 jaar. Die Schepers Lokus van Kontrole Vraelys (Schepers, 1995), die Entrepreneurial Attitude Orientation Scale (EAOS) (Robinson, Stimpson, Huefner & Hunt, 1991) en 'n biografiese vraelys was aan deelnemers voorgelê. 'n Faktorontleding was uitgevoer om psigometriese kwaliteite van die Lokus van Kontrole en die EAOS vraelyste mee te toets. Hipoteses oor die verband tussen die veranderlikes en twee diensleweringuitkomste naamlik, kommisie verdien en vervalfraksies, is getoets. Deur gebruik te maak van inligting wat uit 'n ontleding bekom is, is 'n model van die betekenisvolle verhoudings wat gevind is tussen die diensleweringkriteria en die onafhanklike veranderlikes gebou. Resultate het aangetoon dat nog die EAOS nog die Lokus van Kontrole-instrumente uitkomste van diensleweringkriteria genoegsaam voorspel het soos gepostuleer is vir professionele verkoopmense. Die betekenisvolle korrelasies wat wel bekom is was oor die algemeen die teenoorgestelde van wat verwag is. Demografiese veranderlikes was in 'n beperkte mate suksesvol in die voorspelling

van verdiensteuitkomste van professionele verkoopslui. Die aard van die dienskontrak (vol- of deeltyds w/NEK, $F = 5.61$; $p < 0.05$), populasiegroep (blanke Suid-Afrikaners teenoor nieblanke Suid-Afrikaners w/NEK, $F = 5.22$; $p < 0.05$), werkstatus (Bestuurder teenoor Verkoopsverteenwoordiger w/VEK, $F=3.51$; $p < 0.05$), jare in verkope (w/NEK, $r=0.14345$; $p < 0.05$), en verlangde salaris (w/NEK, $r=0.19571$; $p<0.05$) was gekorreleer met die diensleweringuitkomste wat gemeet is. Kulturele en bestuurimplikasies word bespreek ten opsigte van die gebruik van psigometriese metings vir seleksiedoeleindes. Navorsingimplikasies word ook bespreek.

CHAPTER 1: INTRODUCTION

The use of personality assessment and psychometry by human resources professionals in selecting fitting candidates is at an all time high. Links between individual behaviour and performance outcomes provide human resources professionals with opportunities to select the correct individuals for various tasks within an organization (Bowditch & Buono, 1994; Kreitner, 1995). This practice is common across industries, and the financial services field is no exception.

The performance of financial service organizations relies upon the capabilities of their salesforces to satisfy client needs and offer clients peace of mind.

Financial services institutions employ large marketing and sales forces to develop new markets, and, as part of the sales and service industry, rely upon labour-intensive activities to service clients' needs (Stajkovic & Luthans, 1997). A strong entrepreneurial spirit is required to succeed in sales and marketing. Sales representatives in some instances earn their income through commissions derived from policies sold and vested during each month (Barrick, Mount & Strauss, 1993). Furthermore, the rapid evolution of technology in the financial environment has created an even greater need for salespeople to continually become more innovative and to develop an entrepreneurial attitude. In some cases the nature of the work requires these individuals to be on the road constantly while working erratic and long hours (usually after business hours in order to see clients at home) (Bardes, 1995). It has been argued that these individuals display

characteristics similar to those of entrepreneurs (Boone, Brabander & Witteloostuijn, 1996; Brown, Cron & Slocum, 1998; Crant, 1995; Levy & Sharma, 1994; Lumpkin & Dess, 1996). For this reason human resources professionals look for an entrepreneurial spirit in candidates when recruiting for financial sales.

As part of the recruitment and selection process, managers and human resources practitioners have always been interested in selecting the right sales representative to increase organizational performance (i.e., high commission levels earned).

Practitioners and managers raise many concerns related to the personality profile of a successful sales representative and seek to understand why so many good sales representatives are so different from one another. There appears to be no formal or standard personality profile, attitude or demographic profile that can serve as a benchmark for recruiters. In addition, the new labour laws in South Africa prohibit employers from asking for certain demographic detail (such as age, education level, marital status, etc.) at the selection point in the organization.

With these limitations, practitioners are facing several questions: 1) How can an organization predict whether an insurance sales representative will be successful at selling insurance? 2) How can an organization tailor the selection process accordingly? and 3) How can an organization do so while continuing to comply with labour laws? Much research has been conducted in the area of performance by looking at attitude scales, demographics and personality measures, but there is little in the area of assurance

entrepreneurship in South Africa (Boshoff & Scholtz, 1995; Hoole & Boshoff, 1996; Coetzer & Schepers, 1997), so little is known about predicting the performance of assurance sales representatives.

Scholars have offered insight into why practitioners are unsuccessful in predicting whether candidates will succeed. Stajkovic and Luthans (1997) conducted a meta-analysis of behaviour modification on task performance, considering performance from a learning perspective using Reinforcement Theory. The two researchers suggest that a significant difference in performance outcomes exists between the manufacturing and service industries. They argue that because service organizations are far more labour-intensive, it is more challenging to assess performance outcomes and the nature of the task performance and processes.

Service industries are people-driven and are by their very nature unpredictable and variable. Stajkovic and Luthans (1997) illustrate the unstructured and unpredictable nature of the service organization by suggesting that it can be defined "as a deed, a performance, a social event, or an effort and output that is consumed where it is produced (p.1130)." Managers lack understanding of the characteristics of sales and service as a construct, finding it more difficult to identify and quantify the components of the sales and service content, and therefore failing to adequately assess and develop representative measures of service as a performance outcome construct (Stajkovic and Luthans, 1997). In manufacturing, performance outcomes tend to be specified in observable and predictable measures; however, it remains a challenge to quantify and measure intangible

elements with the tangible attributes of service. (Stajkovic and Luthans, 1997). The process of interacting with clients is never the same and the process would be difficult to standardize except in general terms. To compensate for the difficulty in quantifying sales tasks, managers have turned to looking at differences in the individual's personality, attitude and other attributes that begin to play a role in the tasks that are carried out and the services that are delivered. However, because none of the studies reported in the meta–analysis were based on South African subjects, little is known as to whether personality, attitude and demographic variables are reliable sources for predicting sales performance in a South African cross-cultural environment.

This study explores the difficulties faced by South African financial organizations using personality attitude and demographic variables to predict sales performance. Based on the findings of the exploratory study, a theory will be developed.

CHAPTER 2: PURPOSE OF THE STUDY AND RESEARCH OBJECTIVES

This chapter outlines the purpose and objectives of the study, highlights the present problems experienced in predicting sales performance, explains how psychology and businesses can benefit from this study, and establishes the necessity for the formulation of a theory.

2.1 Case scenario and motivation for the study

The company sampled for this study was interested in analyzing its recruitment process because line managers were observing inconsistencies when comparing company placement results to the success of those recommended and placed in sales positions.

The regular assessment procedure for recruitment required the candidates to complete a biographical questionnaire, a locus of control questionnaire and the 16 Personality Factor Questionnaire (16PF) (Cattell, Eber & Tatsuoka, 1970). Usually candidates who scored high on the internal locus of control and certain 16PF factors were recommended for sales positions. However, after relying on this process for a number of years, managers have grown sceptical of the validity of these measures, due to inconsistent sales outcomes among newly hired salespeople with regards to the assessment results and subsequent sales performance.

Among the major concerns was an extraordinarily high percentage of staff turnover in the first six months of placement. Line managers reported that African salespeople,

especially, struggled in sales and were not making money. There appeared to be additional environmental factors influencing performance, but these could not be pinpointed. Line managers reported that the assessment tools were not helping them make good placement decisions because they were not indicative of future performance. The human resources function was losing its credibility in the face of this criticism and there was speculation that human resources services were going to be eliminated because of the apparent ineffectiveness of the recruitment and assessment procedure. At the time of the inquiry, the supporting services of the company were being downsized, creating further speculation that the human resources function faced possible elimination.

This scenario raised several issues with regard to the assessment tools of the recruitment process, centering on their reliability and predictive validity. The effectiveness and efficiency of the recruitment and assessment process was in question, which implied that the credibility of the human resources function was at stake. Managers and Human Resources began to ask, "what will be a good predictor of sales performance?" and "how will a company know whether it is investing in the right people for the jobs?" This scenario also raised the issue whether psychometry had a place in recruitment and selection at all and whether recruitment processes needed to be redesigned to suit a post-apartheid, culturally diverse workforce.

This line of inquiry created an opportunity for in-depth research, as many valid issues were raised regarding prediction of the success of sales people in financial services.

2.2 The benefit of these research results in psychology and business today

Organizational behaviour is a field of study with roots in the social sciences, including psychology. The field is concerned with understanding specific concrete events in organizations, such as sales performance and how to select and recruit the right people to ensure sales success. The discipline of organizational behaviour seeks to understand the human complexities and dilemmas faced by organizations in order to respond to them and improve the quality of working life for people, because people together form an organization (Gordon, 1983). In the process of understanding behaviour, the relationship between business and psychology becomes interdependent. On the one hand, business uses psychology to understand human functioning in order to improve leadership and management practices and to make work a rewarding experience for both the organization and its employees. On the other hand, the field of psychology penetrates all areas of working life in order to understand human behaviour and well being.

This research study will benefit both these disciplines. Assurance companies invest time, money and energy to recruit and train new sales representatives. Therefore it is crucial to select the right candidates and to minimize staff turnover. The company's understanding and its ability to predict sales success is important for selection and recruitment strategies designed to meet the company's goals. This implies that human resources functions need to earn the firm's confidence and provide a reliable service to their internal clients. Without effective human resources functions the organization, individual behaviour is difficult to monitor. In addition, this study will also contribute to research done in sales as well as culturally diverse working environments in South Africa. It aims to provide

insight and understanding for both the business and psychological aspects of organizational behaviour in the following areas.

Personality assessment has been used historically to predict future performance of people in organizations, based on the premise that past behaviours are good predictors of future behaviours. Personality assessment has yielded mixed results, which raises the question of the effectiveness of using such tools for recruitment in a business environment. Donald (1987) highlights the dangers of using personality assessment in a post-apartheid and culturally diverse working society. The application of C-level (personality) tests across different ethnic and cultural groups can be regarded as unfair discrimination, due to the cultural bias of the questionnaires. In addition, certain cultures have not been exposed to the levels of literacy and learning tested in the questionnaire. Also, different norm tables for different cultures in the scoring of these questionnaires imply certain cultural assumptions and value judgments. This research will assess the psychometric validity of personality assessment in a culturally diverse working environment. The results of this study will have significant implications for recruitment and assessment practices in organizations. If traditional predictors of sales performance are unsuccessful, the human resources processes surrounding psychometric testing may need to be reevaluated to better represent the placement and performance objectives for a cross cultural work force. This study aims to help fill the void in the research and literature in a post-apartheid culturally diverse working environment.

2.3 The need for theory formulation

The results of this study will provide an opportunity for researchers to comprehend the connections and relationships between personality, attitude and demographic variables and sales performance (Rosenthal & Rosnow, 1991).

The South African working environment has undergone great change over the last seven years. In a post-apartheid era, managers and leaders have had to change their styles and processes to effectively manage diversity. The human resources processes are no exception. Considering different connections and relationships between the variables of this study and applying them to a post-apartheid working environment will help provide a knowledge base for future human resources practices in predicting sales performance. A well-researched theory in a post-apartheid context may instigate organizational change in recruitment, assessment and other human resources practices.

In summary, the aim of this research is to generate a theory to predict the success levels of assurance sales representatives. Based on research in the areas of personality and performance, attitudes and performance, as well as demographic variables and performance, the focus will be on these variables in the sales environment. The theory generated from this research will provide insight into how practitioners may design job analysis and selection and recruitment activities in ways that will be more effective for organizations. This study also will explore assessment techniques that may be more useful for evaluating performance than for predicting performance outcomes.

In examining the success of assurance representatives, scores from the Schepers' Locus of Control Questionnaire and the Entrepreneurial Attitude Orientation Scale (EAOS), as well as various demographic variables, will be used and correlated with direct performance measures (commission earned and lapse ratios obtained). Additionally, the Locus of Control Questionnaire and the Attitude Scale (EAOS) will be examined for their reliability in a South African work population.

CHAPTER 3: LITERATURE REVIEW

3.1 Background of entrepreneurial theory

The development of entrepreneurial theory has been controversial and ongoing (Morris & Sexton, 1996; Boshoff & Scholtz, 1995; Lumpkin & Dess, 1996). Although entrepreneurship research has been accepted as a legitimate field of academic inquiry, it has been criticized for lacking in theoretical foundation (Hoole & Boshoff, 1996; Bygrave, 1989), and is still searching for answers to the basic question of what makes an entrepreneur successful. Several definitions of *entrepreneur* have helped researchers predict potential for entrepreneurship:

- Innovation is the main factor distinguishing entrepreneurs and other people (Hoole & Boshoff, 1996; Lumpkin & Dess, 1996).
- Entrepreneurs may be capitalists, managers or inventors, but as entrepreneurs they recombine pre-existing factors of production where the outcome of the recombination cannot be clearly predicted (Hoole & Boshoff, 1996; Robinson, Stimpson, Huefner & Hunt, 1991).
- Entrepreneurship is the process of independently, autonomously creating (or trying to create) something, associated with a specific individual or individuals who add substantial value to society through continual creative, innovative and dynamic acquisition and recombination of resources; acceptance of the financial, psychological and social risks in an action-oriented perspective; and the resulting rewards and

punishments of monetary and personal satisfaction (Hoole & Boshoff, 1996; Lumpkin & Dess, 1996; Robinson, Stimpson, Huefner & Hunt,1991).

- An entrepreneur is an innovator or developer of opportunities, the executor of workable ideas, the creator of value, and someone who accepts risk taking and the implementation of the opportunities (Kuratko & Hodgetts, 1995; Lumpkin & Dess, 1996; Robinson, Stimpson, Huefner & Hunt, 1991).

Entrepreneurship has often been described as a phenomenon that exists in all organizations in varying degree and quantity (Morris & Sexton, 1996). Entrepreneurship also has been examined for its relative intensity. Entrepreneurial intensity has been operationalized with attitudes and behaviours such as innovativeness, risk taking and proactiveness. In addition to the temporal aspects of entrepreneurship, one major area of entrepreneurial research questions attitudinal versus behavioural tendency. This question is the basis of studies that link organized economic activity to entrepreneurship (Amit, Glosten & Muller, 1993) and examine what it means to be an entrepreneur (Morris & Sexton, 1996; Robinson et al., 1991). Researchers debate the relevance of the creation of new ventures, development of new products, and ownership or assumptions of risk; examine issues surrounding the behaviours displayed by sales representatives; and attempt to determine whether sales representatives should be classified as entrepreneurs. There appears to be consensus that entrepreneurship involves a behavioural dimension and is process driven. Thus, entrepreneurial events tend to evolve and demand adaptability on the part of the individual.

Literature suggests that the entrepreneurial process can be described in terms of inputs and outputs, which include environmental opportunities, entrepreneurial individuals, an organizational context, a business concept, and various financial and non-financial resources. The entrepreneurial context can range from a small, home-based business to a large multinational corporation (Morris & Sexton, 1996; Lumpkin & Dess, 1996). The differences between entrepreneurship and intrapreneurship (also known as corporate entrepreneurship) also have been examined (Bygrave, 1989; Morris & Sexton, 1996; Kuratko & Hodgetts, 1995; Lumpkin & Dess, 1996). Morris and Sexton (1996) argue that there exist more similarities than differences between the two.

Although the definition and scope of entrepreneurship is broad, there are similarities between the traditional construct of entrepreneurship and the behaviour displayed by sales representatives in a corporate setting. For example, Kuratko and Hodgetts (1995) suggest that individuals in both these areas seek autonomy and independence to be effective and productive, are motivated to expand their client base as this increases the income they receive, are responsible for their own income (i.e., they do not earn fixed salaries), are motivated to persevere and to add value to society, believe in what they do, appear to have a propensity to take risks, are characterized as being innovative, and need to be in control of their job tasks (See Table 3.1). These similarities suggest that sales representatives do or are required to display entrepreneurial behavioural preferences to be successful at sales.

TABLE 3.1

SIMILARITIES BETWEEN SUCCESSFUL ENTREPRENEURS AND ASSURANCE SALES REPRESENTATIVES
• Both seek autonomy and independence in their work.
• Both are interested in expanding their client base.
• Both prefer to be responsible for their own level of income.
• Both appear to be characterized as displaying perseverance.
• Both appear to have conviction (sense of mission) about their work.
• Both believe they need to add value to society.
• Both appear to have a risk-taking propensity.
• Both appear to be characterized as being innovative.
• Both appear to have a need to be in control of their own destiny.

Sales representatives display these behaviours during the sales process. In meeting with prospective clients they must be able to function without direct supervision. Their ability to manage time productively and follow up on prospects requires them to be autonomous and independent from supervision. Stajkovic and Luthans (1997) remind us that "behaviour is a function of its contingent consequences" (p.1123), supporting the notion that the behaviour displayed by sales representatives in their daily work is a function of the income they will generate from the behaviour they display. Therefore, sales representatives will be motivated to expand their client base because doing so will generate more income. They will feel responsible for their income levels as a direct result of how hard they work. Consequently, they will be motivated to display more perseverance, demonstrate conviction in the products or services they sell, and be compelled to meet the clients' needs, thereby adding value to society. As a result of

being directly responsible for their income, sales representatives will take calculated risks, be more creative, and display greater innovation in each sales situation they face.

Thus, it has been suggested that factors such as the locus of control, attitude and biographical data will be predictive of successful sales representative behaviour. Several studies have measured these characteristics in entrepreneurs to predict success, with mixed results (Boshoff & Scholtz, 1995; Lumpkin & Dess, 1996; Siguaw & Honeycutt, 1995; Lundgren, 1995; Coetzer & Schepers, 1997).

Bell (1946) defined a salesman from an autonomous standpoint: "no man is more independent than a successful life underwriter. He builds his own business and his services are in demand as he creates his income...Selling life insurance is a crusade and he is paid handsomely for doing what he would rather do than anything else in the world" (p.18-19).

Stanton & Buskirk (1987) examined desirable characteristics in salespeople. While they emphasize that creating such a list of characteristics could be both vague and dangerous because it is difficult to determine the relative importance of the characteristics to one another and almost impossible to measure these characteristics effectively, they do highlight desirable attributes in salespeople such as high energy levels, self-confidence, a hunger for money and status, a need for autonomy, perseverance and a competitive spirit.

Other literature on characteristics of salespeople highlight a powerful sense of mission. Salespeople who exhibit this characteristic have personal goals higher than the quotas set by management (Stanton & Buskirk, 1987), solve problems rather than placing blame or bluffing their way out of a situation (Miner, 1997), and see themselves as partners with their clients rather than adversaries. They believe their task is to communicate with clients as people (Steward, 1993), taking rejection as a situation from which they can learn (Steward, 1993), and displaying effective communication skills (Steward, 1993), empathy and ability to cope with criticism (Steward, 1993), negotiation skills and the ability to exert influence by knowing about every aspect of the service they are selling (Steward, 1993).

Based on the literature, it appears that sales representatives display entrepreneurial intensity and show entrepreneurial characteristics. The literature highlights some possible similarities and differences between sales representatives and entrepreneurs. There appear to be more similarities than differences, however (See Tables 3.1 and 3.2). The differences lie more in the context and process of activities, whereas the similarities appear to be in the entrepreneurial behaviour of sales representatives. Thus, from a behavioural perspective, sales representatives display some intensity of entrepreneurial behaviour.

TABLE 3.2

DIFFERENCES BETWEEN SUCCESSFUL ENTREPRENEURS AND ASSURANCE SALES REPRESENTATIVES
• Entrepreneurs traditionally own their own businesses, whereas representatives work for a corporation.
• Entrepreneurs may play a managerial role to others, whereas sales representatives need to manage only themselves.
• Entrepreneurs are usually involved in product development, whereas sales representatives sell the products to potential clients.
• The degree of risk-taking propensity between entrepreneurs and insurance sales representatives may differ.

3.2 Performance

Research predicting job performance has been used as a benchmark for success and best practices, allowing practitioners to measure and investigate causality behaviour. This is especially true of research conducted in the sales field, because performance indicates increases in revenue and, consequently, business growth (Lundgren, 1995; Bygrave, 1989; Cromie & Johns, 1983; McDaniel, 1989; Fischer, Reuber & Dyke, 1993; Siguaw, 1995; Lumpkin & Dess, 1996; Levy & Sharma, 1994; Barrick & Mount, 1993; Ones, Mount, Barrick & Hunter, 1994; Brown, Cron & Slocum, 1998).

Nahavandi and Malekzadeh (1999) describe a theory for evaluating and predicting individual performance in organizations using dependent variables such as raises, promotions and identification of potential in individuals. Their theory focuses on three methods: The first focuses on the trait method, in which employees are rated within organizations, based on personality traits. The second approach, the behavioural method, refers to a performance evaluation focused on work related behaviours. The third

performance evaluation is the outcome approach, which considers the actual results employees achieve.

Nahavandi and Malekzadeh (1999) argue that the third performance measure may be effective if the job behaviours are defined in ways that are observable, measurable, task-related and critical to the task. Research indicates that service industries struggle to define and assess performance outcomes accurately and that the nature of the task-performance and work processes involved in the delivery of performance outcomes in these industries is fundamentally different than in manufacturing companies, because they are labour intensive and people driven rather than machine or technology driven. "The complex evaluation of problems in service organizations are mostly related to the conceptual definition of service as a performance outcome and the operationalization of those definitions by practicing managers (Stajkovic and Luthans, 1997,p. 1130)." In summary, the performance outcomes in a service industry contain a set of intangible and implicit attributes that are difficult to define in operational terms.

Various studies have been conducted measuring the performance of individuals in entrepreneurship (Barling, Kelloway & Cheung, 1996; Morris & Sexton, 1996; Mann, Samson & Dow, 1998; Brown, Cron & Slocum, 1998, Schepers, 1995). Performance can be regarded as the outcome of a particular activity and is usually a measure of the individual's success level of a particular activity. Performance can be measured directly or indirectly, depending on the nature of the activity.

Use of direct performance measures in entrepreneurship research has not been frequent. Various studies have used direct performance measures, such as sales figures, commissions earned, clients gained or client growth figures (Barling et al., 1996; Morris et al., 1996; Mann et al., 1998; Brown et al., 1998, Schepers, 1995). For example, Mann et al. (1998) conducted a field experiment on the effects of benchmarking and goal setting on company sales performance, where the dependent variable was the percentage increase in sales performance over a four-month period. The results showed that effective benchmarking leads to improved performance.

Using direct performance measurements such as earned income for example is reasonable in entrepreneurship research since monetary outcomes are often a primary reason for these individuals to be drawn to this type of autonomous work.

Barling et al. (1996) demonstrate that the success of entrepreneurial activities is usually measured by the financial or monetary income generated, as this is the primary reason individuals occupy such positions. For example, Barling et al. (1996) examined the performance of car salespeople and time management. Sales performance measures were used because the "reliance on assessments of job performance based on supervisory ratings may result in restricted criteria, thereby limiting the potential for significant prediction (p.822-823)."

Research also shows that individuals working in an environment where they can determine their own income will prefer risk taking, demonstrate autonomy, have an

internal locus of control, and need to set their own goals (Morris et al., 1996; Brown et al., 1998). Brown et al. (1998) remind us that "the locus of control relates to the degree to which people see themselves as causal agents. People with an internal locus of control may set higher goals because they believe that achieving these goals depends on their own efforts and abilities rather than on uncontrollable externalities" (p.91). Coetzer and Schepers (1997) studied South African sales representatives and found that the locus of control is often associated with economic concepts when exploring individual behaviour.

Morris and Sexton (1996) examined entrepreneurial intensity and its relationship to company performance. Their survey was based on a self-report questionnaire distributed to 210 entrepreneurs across 50 equally represented industries. The questionnaire required individuals to rate themselves on a scale that measured their levels of innovation, risk taking and proactivity. They also completed a second part of the questionnaire that further explored the innovation construct in terms of company product development. Results demonstrated significant relationships between entrepreneurial intensity in five of the six performance measures: the percentage change in the overall size of the customer base ($r^2 = 0.33$; $p < 0.01$); the percentage change in the number of new customers ($r^2 = 0.26$; $p<0.04$); the percentage change in sales ($r^2 = 0.18$; $p<0.05$); the change in sales compared to competitors; the percentage change in employment; and the percentage change in profits ($r^2 = 0.23$; $p<0.02$). The percentage change in profits proved to be insignificant ($r^2 = 0.08$; $p < 0.28$).

Research on competition in a sales environment demonstrates that working for a commission-based salary means that workers need to be goal-oriented and competitive to be successful. Brown, Cron and Slocum (1998) state, that "although high performance is the ultimate sales management objective, research shows that setting challenging goals is an important intermediate step. Personal goals have been referred to as 'directors of action,' because they play a large role in determining the intensity, direction and persistence of goal-directed behavior" (Brown, Cron & Slocum, 1998, p. 88).

Salespeople who set their minds on goal setting in terms of the commission or money raise a competitive element to the working context in which they function. Creating a competitive environment be operationalized in terms of having to earn a basic minimum to remain in hire, or striving for goals on a personal level, or earning incentives- against peers or colleagues (Brown et al., 1998). Brown et al. (1998) measured the effects of trait competitiveness and perceived intraorganizational competition among salespeople in the medical products industry. The average age of the sample was 39 years; 80% were men and 88% were college graduates. The salespeople were paid commission on gross margin dollars and averaged $43 000 in annual income. The study was conducted during a time of promotion that allowed for personal and competitive goal setting to take place. The results reinforced the importance of goal setting to achieving high performance, showing that salespeople who are ambitious in goal setting perform better. Also, setting specific challenging goals was instrumental to high performance.

The literature indicates that job performance has been researched in most areas of work, including sales. Sales and service have been described as difficult to assess and evaluate, because there appear to be no clear, visible or measurable task outcomes (Stajkovic & Luthans, 1997). Therefore, financial reinforcement or direct measures are the most linear and effective ways of measuring sales performance (Nahavandi & Malekzadeh, 1999; Stajkovic & Luthans, 1997; Barling et al., 1996; Morris et al., 1996; Mann et al., 1998; Brown et al., 1998, Schepers, 1995).

3.3 Background to personality theory

Scholars seeking to predict job performance have researched the predictive value of personality measures in organizations. Tett, Jackson and Rothstein (1991) conducted a meta-analytic review of personality measures as predictors of job performance and concluded that "it is difficult in the face of this summary to advocate with a clear conscience the use of personality measures in most situations as a basis for making employment decisions"(p. 703-704). This is alarming, given industries' heavy reliance on personality measures.

Tett et al. (1991) propose that personality measures have a place in personnel selection research. However, the full potential of using personality traits in personnel selection will be realized only when confirmatory research strategies that employ personality-oriented job analyses become the standard practice for determining which traits are relevant to predicting performance on a given job. Tett et al. (1991) suggest that greater attention is needed in the selection of psychometrically sound personality measures.

Many approaches have been used to understand entrepreneurial behaviour and performance both within and outside of organizations, including the economic, the process and the behavioural, of which demographic and personality theory have been most commonly used (Boshoff & Scholtz, 1995). However, personality theory has been criticized for not being reliable (Hoole & Boshoff, 1996; Robinson, Stimpson, Huefner & Hunt, 1991) and for constantly changing (Barrick & Mount, 1991).

Many researchers have criticized the use of personality in predicting entrepreneurial behaviour. A review of several of these critiques is provided next.

Several scholars (Robinson et al., 1991; Hoole & Boshoff, 1996; Boshoff & Scholtz, 1995) have argued that research methodologies in personality theory were not developed for, nor intended to be used in, studying entrepreneurship. Rather, they were borrowed from psychology and applied to entrepreneurship, often inappropriately and ineffectively. It also has been argued that personality tests have for many years been under attack for having little relationship to job success (Hoole & Boshoff, 1996; Boshoff & Scholtz, 1995) and that these measures provide weak measurement of the intended construct when used in entrepreneurship research (Tett et al., 1991).

A lack of convergent validity makes the use of different personality instruments problematic (Hoole & Boshoff, 1996; Boshoff & Scholtz, 1995). Other studies investigating the predictive potential of personality in job performance show

contradicting results (Kuratko & Hodgetts, 1995). Traditional personality models tend to be based on the assumption that one's personality is formed early in life and remains fairly stable. This assumption is questioned where entrepreneurs are concerned (Crant, 1995; Lumpkin & Dess, 1996). Most studies reviewed were based on purely empirical as opposed to sound theoretical foundations (Robinson et al., 1991). This lack of a clear conceptual basis leads to overestimate of the potential value of personality measures in employee selection (Tett et al., 1991). Additionally, the impact of sampling error on single sample results is overlooked in studies relying on significance tests (Tett et al., 1991).

Despite the criticism that personality theory has received relating to predicting performance, it still is used extensively to identify the traits of an entrepreneur (Coetzer & Schepers, 1997; Hoole & Boshoff, 1995; Crant, 1995; Kren, 1992; Barrick & Mount, 1993; Kolb & Aiello, 1996; Barling, Kelloway & Cheung, 1996; Barrick, Mount & Strauss, 1993; Tett et al., 1991).

Hoole (1996) studied personality traits and entrepreneurial performance and found several relationships. Some of these traits included the need for achievement, risk taking propensity, tolerance for ambiguity, ego strength, dominance, suspicion, unconventionality, self-sufficiency, radicalism, self-concept, venturesomeness, independence, internal locus of control, autonomy, job dissatisfaction, money, career dissatisfaction, initiative, perseverance, self-discipline, desire to succeed, action

orientation, energy levels, goal orientation, initiative, assertiveness, seeing and acting on opportunities, and efficiency orientation.

Personality theory also has been used in the past to predict behaviours and performance, but studies have shown the ineffectiveness of personality measures in predicting behaviour (Tett et al., 1991, Boshoff and Scholtz, 1995). Studies also have criticized personality measures for being unreliable and lacking validity (Hoole & Boshoff, 1996; Robinson, Stimpson, Huefner & Hunt, 1991). However, research also has been successful in some cases in predicting behavioural characteristics of entrepreneurship (Coetzer & Schepers, 1997; Hoole & Boshoff, 1995; Crant, 1995; Kren, 1992; Barrick & Mount, 1993; Kolb & Aiello, 1996; Barling, Kelloway & Cheung, 1996; Barrick, Mount & Strauss, 1993; Tett et al., 1991). Thus, the usefulness of personality measures cannot be discounted based on past research done in all areas of organizational behaviour, including sales.

The next section explores the locus of control and sales performance.

3.3.1 The locus of control

The locus of control has occupied a central position in personality research for more than two decades (Rotter, 1966). Jennings & Zeithaml (1983) state that "the endurance and perceived research value of this construct coupled with the existing entrepreneurial studies where it has been included, indicate that the locus of control may play an increasingly prominent role in future research of entrepreneurs" (p.162).

The locus of control is a complex individual phenomenon concerned with the individual's perception of control over events (or his or her own success). Internally motivated people believe they determine their own fate within wider limits, whereas externally motivated people believe outside forces determine their fate (Jennings & Zeithaml, 1983; Bernardi, 1997; Boone, Brabander & Witteloostuijn, 1996; Coetzer & Schepers, 1997; Kolb & Aiello, 1996; Kren, 1992; Mwamwenda, 1995). Schepers (1995) reminds us that "People who are internally motivated are convinced that their success is dependent on their own achievements, abilities and dedication as well as striving towards a personal sense of excellence; whereas externally motivated people believe that luck, fate, chance and influential people control their destiny" (p.3). Boone et al. (1996) said that the "Locus of control can be viewed as a mediator of involved commitment in life pursuits. If one feels helpless to affect important events then resignation, or at least benign indifference, should become evident with fewer signs of concern, involvement and vitality" (p.672).

Social learning theory (McClelland & Winter, 1969; Bandura, 1997) plays a primary role in forming an individual's personality in early childhood, because the cognitive associations that are formed at that time are unconscious, represented less by verbal symbol systems, and less susceptible to change later in life. They are formed on an emotional level and impact early stages in the child's life, enabling these cognitive schemata to shape later behaviour.

Mischel (1968) argued that cognitive schemata in individuals are cognitive organizations of perceptions and cognition by means of which social reality is construed and through which information processing takes place in everyday life. Therefore an individual's perception of success or failure in life is linked to certain factors that have been identified as internal or external.

Schepers (1995) advocates a two dimensional approach to measuring the locus of control. Social learning theory and attribution theory can be used as a foundation for the locus of control construct. Social learning theory deals with the nature of social reinforcement that stems from an individual's social milieu and how it affects behaviour. Attribution theory refers to the manner in which the individual absorbs information regarding the established characteristics of others. Weiner (1986) uses attribution theory to explain motivation: "Causal perceptions are instrumental to goal attainment and aid in the pursuit of cognitive mastery. The search for causality does not appear to be constrained within any particular time and place in history [and] may provide the foundation for a general theory of motivation and emotion" (p.21). Causal attribution answers the question regarding an outcome of an event; for example, 'Why did I fail my exam?' The cause of a certain outcome is imposed or inferred by an attributor, i.e. 'The time limits imposed by the examiner caused me to fail my exam'. The attribution of causality may result in the assignment of a responsibility (Weiner, 1986). Most attribution research appears to center around non-attainment rather than attainment of goals, as well as around unexpected outcomes or uncertainty. Therefore internally motivated salespeople will attribute success or failure to their own perceived control over events, whereas externally

motivated salespeople will attribute success or failure to perceived external factors controlling the outcome of their actions.

3.3.1.1 Research conducted using the locus of control

Jennings & Zeithaml (1983) reviewed the research on the locus of control from 1966 to 1979. Most studies examined life situations involving stress events, psychological adjustment, cognitive ability, achievement, performance and change over the life cycle. Individuals with an internal locus of control tend to adjust faster, achieve more and do well in creative situations. External locus of control hinders ability to cope with challenges and is associated with negative feelings (Jennings & Zeithaml, 1983).

Studies have examined the relationships between the locus of control and several variables, including health problems, life cycle changes, cognitive ability, achievement, occupational choices, social political involvement, success and failure attributes, performance, adjustments to the aging process, and interpersonal perception and behaviour (Jennings & Zeithaml, 1983). Earlier studies showed that successful entrepreneurs had a high internal locus of control (Hornaday, 1971; Brockhaus, 1980).

Research on the locus of control construct has been performed in all areas of psychology and organizational behaviour and plays an important role in performance outcomes. Nahavandi & Malekzadeh (1999) refer to most entrepreneurs as having an internal locus of control. The drive, ambition, proactiveness and self-starter behaviours that define entrepreneurs are closely related to the locus of control personality trait.

3.3.1.2 Research of the locus of control and performance in entrepreneurship

Although there appears to be adequate research on the relationship between the locus of control and entrepreneurial behaviours and attitudes, research appears to be lacking in the relationship between the locus of control and actual performance (i.e. direct measurements of success). It has been speculated that earning potential is likely to be higher when individuals score high on the internal locus of control; there is a positive relationship between the locus of control and incentives; and there is a positive relationship between the locus of control and achievement (Bernardi, 1997; Boone et al., 1996; Kren, 1992; Kolb & Aiello, 1996). Research also indicates that individuals with a high internal locus of control are more action-orientated and prefer to function autonomously to achieve their goals (Coetzer & Schepers, 1997).

Early studies on the locus of control employed Rotter's (1966) approach exclusively. In subsequent research, Jennings and Zeithaml (1983) argued it was time to develop a more sophisticated, multidimensional approach to more accurately capture the complexity of the construct, leading to more successful research using the locus of control in organizational behaviour. The Rotter I-E Scale, the primary instrument used in entrepreneurial research (Jennings & Zeithaml, 1983), has been criticized for being poorly developed, because it leads to ipsative measures of the locus of control. Schepers (1993) argues there is nothing wrong with using ipsative measures, but only to predict motivational drives intrapersonally and interpersonally. Jennings and Zeithaml (1983)

also have criticized The Rotter I-E Scale, questioning its validity and implying that it may be too simplistic.

Brown et al. (1998) measured the effects of trait competitiveness and perceived intra-organizational competition among medical salespeople. Participants had an average tenure of 10 years and an average age of 39 years; 80% were men; 88% were college graduates; they earned an average annual salary of $43 000 (R250 000). Results reinforced the importance of goal setting and ambition related to performance. Brown et al. (1989) concluded that internal locus of control is directly related to an individuals' goal orientation, which leads to higher sales performance. Goal-setting theory and research suggest that salespeople who set high goals are likely to perform well as a consequence.

Boone, Brabander & Witteloostuijn (1996) used the locus of control of 81 CEOs in the furniture industry to predict the organization's effectiveness. The sample consisted entirely of males with an average age of 46 years and average sales of $9.4 million. A combination of interviews and locus of control questionnaires was used. Results showed that the locus of control is directly related to the performance of the companies examined. CEOs with an internal locus of control had higher organization performance regardless of strategy content.

Nwachukwu (1995) performed a similar study using the locus of control of 100 CEOs of small firms to predict small firm performance. Results showed that those with internal

locus of control perceive that an overly bureaucratized and rigid planning system leads to loss of personal control. Consequently these salespeople scale back on the amount of planning, supporting the idea that internals need control and actually seek situations in which control is possible. However, no significant relationship was found between locus of control and performance of the firms.

Kren (1992) examined the locus of control of 44 undergraduate business students in moderating the impact of performance-contingent incentives and participation on performance. The part-time evening students, who had substantial work experience, were paid incentives of cash. Results showed a positive relationship among incentives, effort and performance, but found no correlation between demographic variables and the locus of control. More specifically, Kren (1992) found that when the locus of control is internal, incentives result in a marked positive effect on effort ($r^2 = 0.287$; $p < 0.10$). However, when the locus of control is external, the relationship between incentives and effort is absent. Finally when incentives are absent, internals perform poorly compared to externals ($r^2 = 0.404$; $p < 0.10$). Kren (1992) concluded that, consistent with previous research, internals in the study assume a proactive orientation to the environment, expending effort to secure incentives; however, in the absence of incentives, they settle on something less than maximum effort. The effort of the external group in contrast is less dependent on the level of incentives. The implication of this study is that the benefits of expending organizational resources on performance incentives may not always be realized if an individual is oriented to an external locus of control.

If salespeople with high scores on the internal locus of control exert more effort when incentives are present, then it follows they would also be motivated to keep lost business (lapses) to a minimum, in an effort to exercise control over their performance outcomes. Similarly, if salespeople score high on the external locus of control when incentives are present, then a negative relationship is expected between the external locus of control and effort exerted. The motivation to keep lost business to a minimum would not be a motivator for individuals with an external locus of control, because performance outcomes would be contingent on external factors.

3.3.1.3 The locus of control and cultural issues

Although research indicates that sales performance is positively correlated with an internal locus of control, it appears that not much consideration has been given to cultural issues as a mediating factor between sales performance and the locus of control.

Coetzer and Schepers (1997) examined the relationship between the locus of control and the work performance of African marketers in the life assurance industry in South Africa. The commission earned per month by the sales representative, the number of policies generated, the percentage of policies lapsed and performance outcomes of African salespeople were specifically selected because of the lack of current empirical research. The sample consisted of 174 Black South African sales representatives, of whom 149 had been in service for more than three months. 139 participants were males and 10 were female. The Schepers Locus of Control inventory was used. The findings of the study showed a small but significant correlation between work performance and the external

locus of control ($r^2 = 0.073$; $p < 0.05$), contrary to the literature cited. However, most previous research was focused primarily on white participants, while this study examined work performance and locus of control in Black salespeople.

Nahavandi and Malekzadeh (1999) speculated that one reason for the high relationship between external locus of control and performance of African sales representatives is that the locus of control could help explain cross-cultural differences in samples. "In cultures with a strong fatalistic approach, people are more likely to believe that divine powers, karma or natural forces determine individual behaviour. In these types of cultures employees and managers are less likely to be highly proactive or willing to accept responsibility for success and failure. For example, in African cultures the people have a more fatalistic culture than the westernized cultures such as the US" (p.122).

Mwamwenda (1995) examined whether the locus of control scores of the South African students have an effect on gender differences and academic performance. The sample consisted of 46 African women and 27 African men who were administered the Rotter I-E Scale. Participants were full-time teachers studying on a part-time basis. A cross-cultural reference was made in this study, suggesting that cultural differences affect the relationship between the locus of control and performance. Results showed gender differences in locus of control, with men scoring high on the internal scale and women scoring high on the external scale ($t=2.05$; $p < 0.05$). More importantly, in this group there was no relationship between the locus of control and performance, suggesting that

cross-cultural validation of the locus of control needs to take place on a larger sample of Africans in South Africa to ascertain predictive value in cross-cultural samples.

The research conducted on cross-cultural populations and the locus of control suggests the need for more investigation with relation to the reliability and validity of the locus of control measurement tools. Although some evidence suggests that African populations may score higher on the external locus of control, evidence is not conclusive.

3.3.2 Autonomy as a factor of the locus of control

Lumpkin & Dess (1996) state that "entrepreneurship has flourished because independently minded people elected to leave secure positions in order to ... venture into new markets rather than allow organizational superiors and processes to inhibit them ...The concept of autonomy is a key dimension of an entrepreneurial orientation. Autonomy refers to the independent action of an individual or a team in bringing forth an idea or vision and carrying it through to completion.... It is the ability and will to be self-directed in the pursuit of opportunities" (p.140).

Zhou (1998) refers to task autonomy as "the extent to which an individual has control over how to carry out a task" (p.264). High task autonomy implies an individual has freedom to choose the method and procedure to get work done. Low task autonomy, in contrast, refers to an individual having little control over how to perform a task. Zhou (1998) states that intrinsically motivated individuals have shown a need for high task autonomy in order to be creative and productive.

Kren (1992) suggests there is a strong relationship between a high internal locus of control and a need for autonomy. Research results indicate that the impact of locus of control on participation relative to performance is related to the 'source of control'. In general, individuals with an internal locus of control may prefer and perform better under conditions of self-control, while individuals with an external locus of control may perform better under external control. Participation is related to the source of control because when it is present, participation allows an individual to influence the setting of performance goals, and thus provides an internal source of control. Individuals with an internal locus of control prefer control over their own destiny and freedom for personal initiative allowed by participation, while individuals with an external locus of control prefer a more directed leadership style, since participation may appear insufficiently structured and frustrating.

Kolb and Aiello (1996) confirm this in research conducted on the relationship between the locus of control and stress. Other research examining autonomy and locus of control suggests that a different outcome is possible; therefore people with an internal locus of control feel more stress in situations that limit their autonomy, and people with an external locus of control should feel more stress in situations that provide them with a substantial amount of autonomy.

Kolb and Aiello (1996) examined the effects of electronic performance monitoring on stress for 19 men and 38 women using the locus of control as a moderator variable.

Results indicated that people with an internal locus of control experience more stress when their work is monitored. In contrast, externals experience less stress when their work is electronically monitored than when their work is not observed. This suggests that people with an internal locus of control expect to exercise a certain amount of autonomy over their work and feel threatened when opportunities for autonomy are restricted. On the other hand, subjects with an external locus of control may experience stress when they are provided with more autonomy than they want and may feel more comfortable with the limitations imposed.

Barrick and Mount (1991) discussed whether the extent of autonomy on the job moderates the relationship between personality constructs and job performance. They proposed that the extent to which a person's personality characteristics predict behaviour will differ depending on the degree to which the external environment inhibits a person's freedom to behave in idiosyncratic ways. Thus, personality characteristics are more likely to influence the specific behaviour a person adopts. For example, an assembly line job that is closely supervised, highly structured, and machine paced provides little opportunity for individual differences in personality to be expressed. In contrast, a sales representative works under very little structure and is individually paced, allowing for a much broader range of individual differences to be displayed (Barrick & Mount, 1991). These findings imply that the nature of the job will determine which personality preferences should be displayed in order to maximize job performance as well as job satisfaction.

Zhou (1998) conducted research focused on certain contextual variables including task autonomy, and its relationship to creative performance. The research was conducted with 210 participants and showed, among other findings, that creative performance interacts with a high task-autonomy working environment.

Schepers and Coetzer (1997) examined South African marketers and found that individuals with an internal locus of control prefer autonomy in order to achieve their goals. The research suggests some cultural differences in the relationship between race and the external locus of control, indicating that in the South African context African marketers may perform better with less autonomy and more structure and guidelines, rather than more autonomy and the need for control over their working environment.

Although there appears to be a cross-cultural element related to autonomy and performance, evidence suggests that high scores on the autonomy scale are related to performance outcomes. A high need for autonomy in a sales environment indicates that an individual will be action oriented and need freedom in performing job tasks. Similarly, individuals who score low on the autonomy scale and are performing sales tasks that are inherently unstructured are less motivated to perform. Low autonomy scores suggest that performance outcomes will be higher than those of individuals with higher autonomy scores, because salespeople with a low need for autonomy need more structure and guidelines to perform. Similarly, it is suggested that high autonomy scores are related to performance.

3.4 Demographic variables

In research, demographic variables have been used in the past to arrive at a profile of an entrepreneur. Two assumptions underlie the use of demographic theory. First, people with similar backgrounds possess similar underlying stable characteristics, and identifying demographic characteristics, will predict entrepreneurship behaviour (Robinson et al., 1991). The most popular demographic characteristics that have been researched are birth order, role models, marital status, age, education level of parents and self, socioeconomic status, and previous work experience (Robinson, Stimpson, Huefner & Hunt, 1991; Levy & Sharma, 1994). Second, demographic research is based on the fact that demographic data directly describes past entrepreneurial behaviour and thus assumes that past behaviours are often good predictors of future behaviour. It is said that specific past behaviours can be used to predict similar behaviour in the future (McDaniel, 1989). In addition, demography assumes that behaviour that is strongly influenced by sex, race, language etc. can be drawn from in order to understand what may influence future actions or behaviour (Robinson et al., 1991; McDaniel, 1989).

Much criticism has been offered regarding the use of demographic variables in measuring performance. The demographic approach assumes that behaviour is determined or strongly influenced by characteristics such as sex, race or birth order. However, the flaw occurs with the interpretation and meaning of events in peoples' lives; that is, the specific reaction to circumstances, and not so much a given set of demographic factors, may determine entrepreneurial behaviour. Conclusions drawn by individuals as to the meaning of entrepreneurship may be based on any number of different variables, such as actual

experience and individual perceptions regarding that experience. Thus using demographic variables may be too simplistic an approach in predicting a complex concept such as successful entrepreneurial behaviour. This also suggests that conclusions regarding certain experiences do not remain static but change as new experiences occur or as past experiences are evaluated (Robinson et al., 1991).

Research shows that demographic variables are often used as surrogates for personality characteristics. This particular use of demographic variables is based on the assumption by researchers that "it is not the demographic characteristics themselves that affect entrepreneurship so much as it is the stable personality characteristics or traits developed by someone having those demographic characteristics"(p.16).

Demographic variables have the reputation for not being able to match up to established criteria in social science research. Demographics are static phenomena and cannot be used to explain dynamic and multifaceted phenomena. In this respect demographic concepts depend on more fundamental characteristics that directly influence the entrepreneur (Robinson et al., 1991). Researchers have failed to provide enough information on how their items were derived when they publish their results (Russell, Devlin, Mattson & Atwater, 1990).

Despite the criticism offered by Robinson et al. (1991) and Russell et al. (1990), there is evidence that demographic concepts have been successfully used to predict performance. Research has examined demography to predict employee suitability (McDaniel, 1989)

and has captured systematic, enduring differences between subgroups of people. In addition, research has consistently demonstrated the ability to predict criteria such as job choice, vocational preferences, job turnover, and job performance (Russell et al., 1990). It has also yielded consistent factor structures over time and across sample performance (Russell et al., 1990).

The next section reviews demographic variables and performance research.

3.4.1 Gender research and performance

Gender characteristics have been popular in research predicting work performance, due to the vast increase of the female working population over the last few decades (Fischer, Reuber & Dyke, 1993; Levy & Sharma, 1994; Siguaw, 1995; Lundgren, 1995; Comer, 1992, Erwee, 1987). However, gender stereotypes are found in occupations that are traditionally associated with one sex or the other. These stereotypes influence the performance effectiveness of certain genders in those jobs. Industrial sales have been considered to be a non-traditional occupation that has attracted more and more women. Despite the reports of high-performing saleswomen, gender discrimination has been experienced and identified, impeding the performance of women in such jobs (Comer, 1992). External factors (e.g. unfair treatment and discrimination) are seen as a hindrance to performance for women in sales.

Fischer et al. (1993) suggest that there is a lack of integrative frameworks for understanding the nature and implications of issues related to gender and

entrepreneurship. Research suggests that women are disadvantaged relative to men due to overt discrimination or to systematic factors that deprive them of vital resources like business education and experience. However, there is limited research evidence to support this conclusion. In addition, due to differences in early and ongoing socialization, women and men differ inherently. However, research has shown that this does not impede business performance or imply gender inferiority (Fischer et al., 1993).

Fischer et al. (1993) list some of the findings regarding the gender issue in entrepreneurship research, although it must be emphasized that the research is not conclusive and there appear to be more similarities between male and female entrepreneurs than differences. On average, women receive unequal treatment when they deal with lenders and other resource providers, and are less likely to have relevant education and relevant management, industry and entrepreneurial experience. Also, on average, men appear to be more resistant to change and autonomy in their working milieus, have high energy level and risk taking propensity. No difference was found in terms of the locus of control between men and women entrepreneurs.

Siguaw & Honeycutt (1995) examined gender differences in selling behaviours and job attitudes. With a sample of 268, of which 10.4% were women, it was reported that women have lower levels of role conflict and role ambiguity and higher levels of customer-oriented selling existed compared to men. Women believe that they perform as well as men in industrial-sales situations and do not require additional considerations from management to succeed (Siguaw & Honeycutt, 1995). There were no significant

differences in self-assessed sales performance between males and female salespeople. This may indicate that over time in industry, acceptance and recognition of women's abilities has developed, thus encouraging saleswomen to have more confidence in their abilities. The findings also may be attributed to the reward systems, which have developed since the growth of the female contingent in a sales setting, thus creating more incentives for women to perform better.

Comer (1992) studied the stereotyping issues of women in non-traditional positions and the perception of possible discrimination in sales positions relating to women by surveying 77 U.S. managers who supervised women in the traditional male-dominated occupation of sales. It was found that all the managers described their female subordinate salesforce (n=202) on gender stereotypes relating to their selling ability, their human relations ability and their motivation. Stereotyping was evident in management perceptions of the women's selling ability (being too nurturing, submissive and emotional), but no significant findings were evident with regard to human relations ability and motivation, suggesting that these individuals have, over time, proved to their superiors their commitment to their work.

Levy et al. (1994) contradicted the above findings, suggesting that women may be more suited for sales positions due to their ability to build long-term relationships with their clients, as well as their ability to practice good communication skills. Levy et al. (1994) demonstrated no consistent relationship between gender and sales performance, but suggested that in using demographic variables to predict sales performance one would

assume that individuals using adaptive selling skills would be more successful, depending on their demographic characteristics; i.e. individuals would tend to alter their behaviours during customer interaction based on perceived information about the nature of the selling situation and their demographic characteristics.

However, research shows no significant differences in terms of gender and sales performance and adaptive selling performance. Women are not more accurate about their clients' perceptions and are said to adopt psychological traits associated with men (Levy et al., 1994). Lundgren (1995) duplicated this research suggesting that selling techniques would be adapted according to the salesperson's perception of how the client reacts to him or her calling a prospective client without a prearranged appointment.

3.4.2 Age, sales experience and formal education and entrepreneurial performance

Demographic variables as independent variables have made significant contributions to the marketing and sales literature, but appear to be insignificant in contributing to predictions of sales performance (Robinson et al., 1991; Hoole & Boshoff, 1996; Boshoff & Scholtz, 1995). Research has indicated that there appears to be no consistency between sales performance and age, sales experience or education among salespeople (Levy et al., 1994).

Logically one would assume that age and sales experience could be correlated with sales performance. Levy et al. (1994) suggest that when salespeople use adaptive sales techniques, an inverted U-shape relationship would exist among sales performance, age

and sales experience. This happens in three ways. First, adaptive selling is hypothesized to increase as the individual gains more experience; it will then level off and subsequently decrease due to the number of senior salespeople who are promoted to higher positions. Second, research shows that the information-processing ability of individuals in sales situations may slow down with age, suggesting that older salespeople become less accurate about identifying their customers' needs, as well as less capable of building relationships with clients. Thus, cognitive effort in a sales situation increases with age and experience, but then declines as the individual becomes older. Third, career stages play a significant role in terms of sales performance (Levy et al., 1994). In the exploration stage, salespeople learn how to practice selling techniques. Ability is maintained during the establishment and maintenance stages of their careers, and decreases during the disengagement stage of their careers (Levy et al., 1994).

Levy et al. (1994) examined 201 full-time retail salespeople with a minimum of one year's experience and concluded that with regard to age and sales experience, no conclusive relationships were found between these variables and adaptive sales. These results suggest that in the future, multiple indicators of sales experience should be used when evaluating prospective salespeople.

Research examining levels of education also has played a role in explaining sales behaviour. It has been argued that the educational process is designed to foster critical thinking and the ability to view situations from multiple perspectives (Levy et al., 1994). It is suggested that the more educated salespeople are, the more adept they would be in

the sales process in terms of formulating questions and interpreting client needs, indicating that education should be positively correlated with sales performance. Research has suggested, however, that highly educated salespeople may become frustrated with repetitive sales tasks. Furthermore, as education increases, so should adaptive selling, but the relationship would be an inverted U-shape as disengagement takes place when highly educated people become frustrated with repetitive tasks (Levy et al., 1994).

The research conducted by Levy et al. (1994) suggests that formal education is related to the practice of adaptive selling only among older salespeople. With younger salespeople, education may not exhibit an effect on performance. The findings concluded that the growth in the practice of adaptive selling may be restricted to the less educated, when compared to more educated salespeople.

Levy et al. (1994) suggest that despite critiques of demographic theory and based on the research they conducted, it appears that demographic variables do interact to affect performance in sales situations. However, they caution against examining demographic variables in isolation. For example, gender and education should be examined only in conjunction with sales experience variables.

No significant research was found which focuses exclusively on cultural issues, such as language and race and their relationships with performance outcomes. Similarly, very little appears in the research literature relating marital status, birth order and perceived

financial position to sales performance, suggesting that research may be lacking in these areas pertaining to South Africa.

3.5 Attitude Theory

3.5.1 Background to attitude theory and research

The entrepreneurial orientation is often characterized as an attitude and a behavioural choice made by the individual in order to achieve success. Various behavioural dimensions underlie the entrepreneurial attitude, such as innovation, risk taking, proactiveness, autonomy and competitive aggression (Lumpkin & Dess, 1996; Morris & Sexton, 1996).

Fishbein (1967) has explained the reason for the popularity of attitude in entrepreneurship research. He describes Allport's attitude theory and measurement. Attitude is not a property of any one psychological school of thought. It is a concept that escapes the nature/nurture debate, and it can be applied either to the disposition of single, isolated individuals or to broad patterns of culture. This allows researchers to find a meeting point for discussion and research. As a result, the use of attitude theory in entrepreneurship research has often been favoured, because it is seen as less stable than personality trait approaches, changes across time and situation, and is an interactional and dynamic way for an individual to behave toward an attitude object, which changes from time to time and from situation to situation (Robinson et al., 1991).

Attitude theory is underlined by a principle of association. This means that individuals approve of things they associate with good feelings or beliefs, and tend to disapprove of things they associate with bad feelings or beliefs. This principle is often associated with theories of associative learning or classical conditioning. When these beliefs involve expectancies about the consequences of an action, Eisner (1997) refers to this as reinforcement learning. He explains that "attitudes should be regarded as an association of an object and an evaluation. The strength of any attitude, the ease and speed with which it can be recalled, the certainty with which it is held and its power to predict behavior all depend on the strength of this object-evaluation association (p.238)".

Robinson et al. (1991) suggest that there exist some weaknesses in attitude research. First, attitude research is seldom based on existing attitude theory and research. Second, in developing instruments to measure attitude, researchers have failed to follow standard scale development and validation procedures; however, the dynamic nature of attitude and improved methodology provide a foundation for the development of interactive models of entrepreneurship.

Earlier measurements of success included simple methods such as census of opinion and prior sales (Fishbein, 1967). Census of opinion is the simplest form of attitude measurement, as the counting of ballots is used to measure how common an attitude (opinion) might be. This measurement, with the rational scales, tends to be based on logical rather than empirical considerations. Other criticisms of the earlier methods of measuring attitudes hold that this type of measurement deals with common attitudes, and

there are few attitudes common enough to profitably be scales (Fishbein, 1967; Robinson et al., 1991). Fishbein (1967) wrote "each person possesses many contradictory attitudes, and for this reason his [her] mental set at the moment of submitting to a scale may only tell part of the story" (p.11-12).

Robinson et al. (1991) state that there are two approaches to attitude theory. Unidimensional approaches to attitudes tend to be represented by affective reactions alone. This approach was used in earlier research in attitudes. Robinson et al. (1991) suggest that in a tripartite model, there are three reactions to everything. These reactions are described as affective (positive or negative feelings about the object), cognitive (beliefs and thoughts about an object), and conative or behavioural reactions (behavioural intentions and or predispositions of behaving toward an object). In addition, the dynamic nature of an attitude and the improved methodology in developing attitude scales has provided a foundation for the development of interactive models of entrepreneurship.

3.5.2 Definition of an attitude

The attitude construct has been viewed as some kind of mental quantity that can be placed and moved along a continuum according to attitudinal changes. An attitude is a point on a continuum that changes as part of a dynamic process, depending on the context of a particular situation over time (Eisner, 1997).

Fishbein (1967) highlights some characteristics of attitudes that have been formulated by early researchers, featuring attitudes as mental postures, guides for conduct to which each

new experience is referred before a response is made. An attitude has also been referred to as an enduring state of readiness of mental organization, which predisposes an individual to react in a characteristic way to any object or situation with which it is related. An attitude provokes behaviors which can be "acquisitive, favourable, positive or negative and these tend to act towards or against an environmental factor which becomes a positive or negative value (p.7-8)."

The characteristics highlighted by Fishbein (1967) enabled researchers to develop an operational definition of attitudes. Allport (1937) defines an attitude as "a mental and neural state of readiness organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (p.8). Thus, previous experiences influence an individual's future action toward similar experiences or objects related to the experiences. Attitude is more dynamic than personality traits and changes with each new experience.

Robinson et al. (1991) define attitude as "the predisposition to respond in a generally favourable manner with respect to the object of the attitude. Every attitude has an object, be it a specific person, place, thing, activity, event, mental concept, cognitive orientation, life style or even a combination of these categories" (p.17).

Kubistant (1986) describes attitudes as "thoughts, feelings and intuitions about ourselves that are derived from our views of a situation, from our past experiences, and from our goals and aspirations" (p.22). He goes further to say that our attitudes reflect our basic beliefs in how we approach the world: "Attitudes help us determine perceptions of the

world, which in turn affect our immediate feelings which have a lot to do with our performance" (p.22). In summary, attitudes can be seen as ever changing sets of constructs about us that both release and direct our performance energies.

In sum, Eisner (1997) refers to an attitude as " not a single output called an attitude that occurs in response to a single attitude object, but a set or vector of outputs, or expressive reactions, associated with a set, or vector, of inputs that includes not only different features of the attitude object itself, but also various situational or contextual clues. The acquisition of an attitude depends on the learning of associations between these input and output vectors" (p.239)

3.5.3 Research relating attitude theory to entrepreneurial performance

Attitudes are linked to performance and possible success factors. Kubistant (1986) states that top performers invariably need to make essential choices in almost every situation they face. As stated earlier, performance attitudes can either be positive and uplifting or negative and demotivating. Top performers actively choose to be positive. Given a set of circumstances or a performance situation, they adopt a realistically positive outlook. McClelland and Winter (1969) also write that in attempting to change an individual's attitude toward a need for achievement or success, one needs to include variables such as reason or prestige to support an argument and affiliate with a new reference group.

Various studies have been conducted in attempting to determine attitudes of successful entrepreneurs (Robinson et al., 1991; Boshoff & Scholtz, 1995; Hoole & Boshoff, 1996).

Norman and Smith (1995) used the theoretical framework of the Theory of Reasoned Action (TRA) and The Theory of Planned Behaviour (TPB) to discover that attitude variability could be related to perceptions of control. They provide a theoretical account of the way in which attitudes, subjective norms, and behavioural intentions combine to predict behaviour. According to the Theory of Reasoned Action, the primary determinant of behaviour is the individual's intention to perform the behaviour. Two factors influence the person's attitude toward the behaviour: (1) the person's attitude toward the behaviour (whether it is favourable or unfavourable), and (2) the subjective norm or perceived social pressure to perform or not perform the behaviour. Norman and Smith (1995) add a dimension to the Theory of Reasoned Action and referred to it as the Theory of Planned Behaviour. They include a measure of perceived behavioural control, "which taps the degree to which the behaviour is seen to be under the person's control" (p.404). This measure appears to have similarities to the locus of control (Norman & Smith, 1995).

Norman and Smith (1995) examined 83 participants over a six-month period using the Theory of Planned Behaviour and physical exercise. Results showed that individuals with a positive attitude toward taking exercise and who believed that taking exercise would be under their own control were more likely to take regular exercise six months later. This research suggests that attitude in conjunction with perceived control has a positive effect on long-term performance (Norman & Smith, 1995).

Corr and Gray (1996) studied 130 financial salespeople to test attitude and success and failure. Salespeople who are sensitive to criticism or failure and who respond with internal, stable and global attributions to unfavourable events may experience lowered self-esteem and reduction in client-related motivation. This attributional style was hypothesized to correlate with performance among salespeople. The subjects had a mean age of 37.68 years and an average of 12.82 years in sales. Results showed that among successful salespeople, individual differences in attributional style are related to performance.

Robinson et al. (1991) developed the Entrepreneurial Attitude Orientation Scale (EAOS) to measure achievement in business (concrete results associated with start-up and growth of a business venture), innovation in business (perceiving and acting on business activities in new and unique ways), perceived personal control of business outcomes (an individual's perception of control and influence over his/her business), and perceived self-esteem in business (self-confidence, perceived competency in conjunction with his/her business affairs).

Robinson et al (1994) studied 54 entrepreneurs and 57 non-entrepreneurs of an exclusively male population. Members of the entrepreneurial group had started at least one business in the last five years prior to the study and started other businesses at other times of their careers. The non-entrepreneurial group consisted of white-collar non-managers from two high-tech companies, a municipal government and the financial department of a university. These individuals did not own or start up any businesses

prior to the study. The results indicated a significant difference between the two groups for all four EAOS subscales (achievement, personal control, innovation and self-esteem), thus indicating that the particular scale successfully measured entrepreneurial attitude and success ($F=19.78$; $p< .001$).

An interest in focusing on attitude measurement in entrepreneurship in South Africa has increased due to the controversial nature and debates surrounding personality measures and their reliability and validity. Boshoff and Scholtz (1995) examined attitudes as a way of differentiating entrepreneurs. They used the EAOS with 110 entrepreneurs, from three occupational groups, with a mean age of 43.8 years. The occupational groups were manufacturers (n=61), engineers (n=113) and managers (n=76) respectively. Results showed significant differences between successful and unsuccessful entrepreneurs, as well as between entrepreneurs in manufacturing and non-manufacturing businesses, thus indicating that the EAOS scale had predictive validity for entrepreneurs in a South African context. Boshoff and Scholtz (1995), however, cautioned against the possible cross-cultural use of the EAOS, questioning its predictive value.

More specifically, only the achievement and innovation constructs used in the study could be accepted as represented by consistent scales. Further findings suggest that entrepreneurs are not a homogenous group (Boshoff & Scholtz, 1995), because in the study, significant differences were found between successful and less successful entrepreneurs, as well as between entrepreneurs in manufacturing organizations and those in retail and service businesses. Another distinction was drawn between successful

entrepreneurs and other occupational groups. Apart from the EAOS perhaps showing predictive value in a South African sample, it has shown that entrepreneurs are not a homogeneous group.

In contrast to this research, studies in South Africa have shown that the EAOS may not be predictive of the South African context when measuring attitudes. These studies did not, however, involve MANOVAs in the data analysis. For example, Hoole and Boshoff (1996) looked at the measurement qualities of the EAOS when used interculturally in South Africa. Based on the research done by Boshoff and Scholtz (1995), Hoole and Boshoff (1996) questioned whether the constructs in the EAOS have validity and reliability on South African samples.

The literature suggests that attitudes are related to performance (Kubistant, 1986; Robinson et al., 1991; Boshoff & Scholtz, 1995; Hoole & Boshoff, 1996). The Theory of Reasoned Action suggests that performance is based on how the individual feels about the tasks he or she performs and the perceived external pressure to perform tasks (Norman & Smith, 1995). The Theory of Planned Behaviour adds that performance is dependent on the perceived control the individual has over his or her tasks (Norman & Smith, 1995). Research has been done on attitudinal dimensions such as perceived control (Robinson et al., 1991; Norman & Smith, 1995), perceived self-esteem (Robinson et al., 1991; Corr & Gray, 1996), achievement in business (Robinson et al., 1991) and innovation (Robinson et al., 1991). These variables have all been shown to be related to performance.

TABLE 3.3

SUMMARY OF LITERATURE REVIEW: VARIABLES STUDIED, STATISTICS USED AND RESULTS FOUND

Study	Variables	Statistics Used	Results
Robinson et al. (1991)	Demographic variables and success	Multiple regression	Not supported
Barrick & Mount (1991)	Autonomy and job performance	Single order regression	Supported
Kren (1992)	Internal Locus of Control and performance	Multiple regression	Supported
Levy et al. (1994)	Gender and sales performance	Single order regression	Not supported
Levy et al. (1994)	Age and sales performance	Single order regression	Not supported
Levy et al. (1994)	Level of education and sales performance	Single order regression	Not supported
Robinson et al. (1994)	Entrepreneurial attitude and success	Multiple regression	Supported
Boshoff & Scholtz (1995)	Entrepreneurial attitude and successful entrepreneurs and manufacturers	Multiple regression	Supported
Nwachukwu (1995)	Locus of Control and performance	Single order regression	Not supported
Mwamwemba (1995)	Locus of Control, gender differences and academic performance	ANOVA, t-tests	Supported
Sigaw & Honeycutt (1995)	Gender differences, selling behaviours and job attitudes	Multiple regression	Not supported
Norman & Smith (1995)	Perceived control and performance	Single order regression	Supported
Boone, Brabander & Witteloostuijn (1996)	Locus of Control and organizational effectiveness	Single order regression	Supported
Kolb & Aiello (1996)	Performance and stress using Locus of Control as a moderator	Multiple regression	Supported
Morris & Sexton (1996)	Entrepreneurial intensity and company performance	Multiple regression	Supported
Corr & Grey (1996)	Attitude, success and failure	Multiple regression	Supported
Coetzer & Schepers (1997)	External Locus of Control and work performance	Multiple regression	Moderately supported
Brown et al. (1998)	Goal setting and sales performance	Simple statistics	Supported
Zhou (1998)	Autonomy and creative performance	Single order regression	Supported

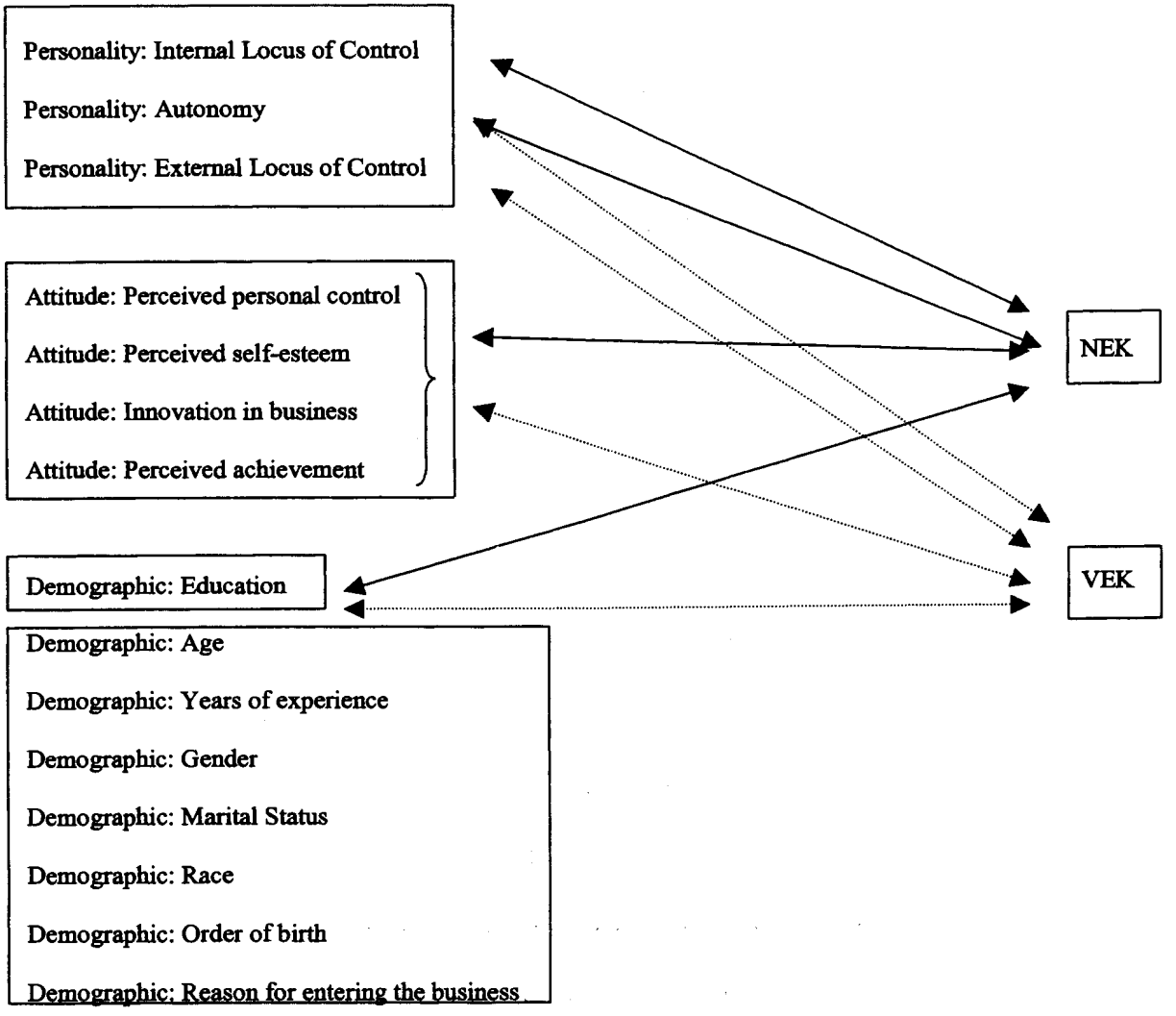
In summary (see Table 3.3), the literature shows that personality variables, demographic information and attitude variables play an important role in predicting performance outcomes in sales (Barrick, Mount & Strauss, 1993). Salespeople are required to display certain behaviours during the sales process. Research suggests that salespeople with an internal locus of control and high autonomy will perform better than salespeople with an external locus of control and low autonomy. Because their jobs tend to be less structured than in manufacturing firms and are based on commission earnings, they must be motivated to control their financial outcomes. Salespeople therefore require less structure and more autonomy in their work (Jennings & Zeithaml, 1983; Bernardi, 1997; Boone, Brabander & Witteloostuijn, 1996; Coetzer & Schepers, 1997; Kolb & Aiello, 1996; Kren, 1992; Mwamwenda, 1995). Research also suggests that past experiences influence an individual's future actions. The performance of salespeople depends on their individual perceptions and attitudes toward their job tasks. A salesperson's perceived personal control over his or her performance, perceived self-esteem about his or her work, perceived level of innovation, as well as his or her actual work achievement, influence his or her performance (Fishbein, 1967; Kubistant, 1986; Robinson et al., 1991; Norman & Smith, 1995; Boshoff & Scholtz, 1995; Hoole & Boshoff, 1996). Research also shows that demographic variables such as gender differences, age, sales experience, language, race, marital status, order of birth and perceived financial position have no relation with performance. Behaviour - and not static variables that individuals are born with - will ultimately predict performance (Robinson et al, 1991; Russell et al., 1990; Fischer et al., 1993; Siguaw & Honeycutt, 1995; Levy et al., 1994).

CHAPTER 4: HYPOTHESES FOR THE STUDY

The preceding literature review highlights the research on performance predictors in an entrepreneurial sales environment. According to the literature, variables such as the locus of control, demographics and attitude are related to sales performance. Hypotheses have been formulated to organize the perceived causal relationships found in the literature review and to help focus on specific relationships between the variables in the literature. The hypotheses for this study (see Figure 4.1) were investigated empirically to test whether certain observations and theories are plausible and acceptable. Testing the hypotheses strengthens the contribution to the knowledge base in industrial psychology (Rosenthal & Rosnow, 1991). If the hypotheses are true, the variables tested will be good predictors for performance of salespeople in financial services.

FIGURE 4.1

HYPOTHESIZED RELATIONSHIPS BETWEEN THE VARIABLES AND PERFORMANCE OUTCOMES



Notes: ◄——► **= Positive relationship,** ◄·····► **= Negative relationship**

No line = No relationship

NEK = Net Commission earned

VEK = Lapse Ratios

4.1 The relationship between the locus of control and performance

Schepers (1995) stated that "People who are internally motivated are convinced that their success is dependent on their own achievements, abilities and dedication as well as striving towards a personal sense of excellence; whereas externally motivated people believe that luck, fate, chance and influential people control their destiny" (p.3). Earning potential is likely to be higher when individuals score high on the internal locus of control, and there are positive relationships between the locus of control and incentives and between the locus of control and achievement (Bernardi, 1997; Boone et al., 1996; Kren, 1992; Kolb & Aiello, 1996). Research also indicates that individuals with a high internal locus of control are more action oriented and prefer to function autonomously to achieve their goals (Coetzer & Schepers, 1997).

If high scores on the internal locus of control are related to salespeople exerting more effort when incentives are present, then it follows they would also be motivated to keep lost business (lapses) to a minimum, in an effort to exercise control over their performance outcomes. Similarly, if salespeople score high on the external locus of control when incentives are present, then a negative relationship is expected between the external locus of control and effort exerted. The motivation to keep lost business to a minimum would not be a motivator for individuals with an external locus of control, because performance outcomes would be contingent on external factors. From the literature it follows that:

Hypothesis 1(a): Internal locus of control scores will relate positively to net commission earned (NEK), whereas external locus of control scores will relate negatively to net commission earned (NEK).

Hypothesis 1(b): Internal locus of control scores will relate negatively to the lapse percentage, i.e. commission not earned in business (VEK), whereas external locus of control scores will relate positively to the lapse percentage (VEK).

4.2 The relationship between autonomy and performance

Lumpkin and Dess (1996) refer to autonomy as "the independent action of an individual or a team in bringing forth an idea or vision and carrying it through to completion.... It is the ability and will to be self-directed in the pursuit of opportunities" (p.140). Schepers and Coetzer (1997) examined South African marketers and found that individuals with an internal locus of control prefer autonomy in order to achieve their goals. A high need for autonomy in a sales environment indicates that an individual will be action oriented and need freedom in performing job tasks. Similarly, individuals who score low on the autonomy scale and are performing inherently unstructured sales tasks are less motivated to perform.

Although there appears to be a cross-cultural element related to autonomy and performance, evidence suggests that high scores on the autonomy scale are related to performance outcomes. Low autonomy scores suggest that performance outcomes will be higher than for individuals with higher autonomy scores, as salespeople with a low

need for autonomy need more structure and guidelines to perform. Similarly, it is suggested that high autonomy scores are related to performance. It therefore follows that:

Hypothesis 2(a): Autonomy scores will relate positively to net commission earned (NEK).

Hypothesis 2(b): Autonomy scores will relate negatively to lapse percentages (VEK).

4.3 The relationship between gender variables and performance

Research conducted by Fischer, Reuber & Dyke (1993), Levy & Sharma (1994), Siguaw & Honeycutt(1995), Lundgren (1995), Comer (1992), and Erwee (1987) indicated no significant differences in terms of gender and sales performance. It appears that women are not more accurate about their clients' perceptions than are men, and they tend to adopt psychological traits associated with men (Levy et al., 1994). Lundgren (1995) also suggests that selling techniques used by a saleswoman would be adapted according to her perception of how the client reacts to her in cold-calling situations. It therefore follows that:

Hypothesis 3: Performance outcomes will not be related to gender differences.

4.4 The relationship between age and sales experience and performance

Research has indicated no consistency between age, sales experience and sales performance (Levy et al., 1994). Levy et al. (1994) examined 201 full-time retail salespeople with a minimum of one year's experience and concluded that with regards to

age and sales experience, no conclusive relationships were found between these variables and adaptive sales. They suggested that in future multiple indicators of sales experience should be used when evaluating prospective salespeople. It therefore follows that:

Hypothesis 4: No relationship will exist between age, sales experience and performance outcomes.

4.5 The relationship between education and performance

Research examining levels of education also has played a role in explaining sales behaviour. It has been argued that the educational process is designed to foster critical thinking and the ability to view situations from multiple perspectives (Levy et al., 1994). The more educated salespeople are, the more adept they would be in the sales process in terms of formulating questions and interpreting client needs, indicating that education should be positively correlated with sales performance. The research conducted by Levy et al. (1994) suggests that formal education is related to the practice of adaptive selling only among older salespeople. With younger salespeople, education may not exhibit an effect on performance. Levy et al. concluded that growth in the practice of adaptive selling may be restricted to the less educated, when compared to more educated salespeople. Therefore it follows that:

Hypothesis 5(a): The number of years of education will relate positively to net commission earned (NEK).

Hypothesis 5(b): The number of years of education will relate negatively to lapse percentages (VEK).

4.6 The relationship between race, marital status, order of birth and perceived financial position and performance

No significant research was found which focuses exclusively on cultural issues, such as race and its relationship with performance outcomes. Similarly, marital status, birth order and perceived financial position related to sales performance have not been studied, suggesting that research may be unexplored in these areas pertaining to South Africa. Therefore:

Hypothesis 6: No relationship will exist between race, marital status, order of birth and perceived financial position and performance outcomes.

4.7 The relationship between attitude variables and performance

Robinson et al. (1991) define attitude as "the predisposition to respond in a generally favourable manner with respect to the object of the attitude. Every attitude has an object, be it a specific person, place, thing, activity, event, mental concept, cognitive orientation, life style or even a combination of these categories" (p.17). The literature suggests that attitudes are related to performance (Kubistant, 1986; Robinson et al., 1991; Boshoff & Scholtz, 1995; Hoole & Boshoff, 1996). The Theory of Reasoned Action suggests that performance is based on how the individual feels about the tasks he/she performs and the perceived external pressure to perform tasks (Norman & Smith, 1995). The Theory of

Planned Behaviour adds that performance is dependent on the perceived control the individual has over his/her tasks (Norman & Smith, 1995). Research has been done on attitudinal dimensions, such as perceived control (Robinson et al., 1991; Norman & Smith, 1995), perceived self-esteem (Robinson et al., 1991; Corr & Gray, 1996), achievement in business (Robinson et al., 1991), and innovation (Robinson et al., 1991). These variables have all been shown to relate to performance. Based on the EAOS instrument developed by Robinson et al. (1991) it follows that:

Hypothesis 7(a): Perceived control scores will relate positively to net commission earned (NEK).

Hypothesis 7(b): Perceived control scores will relate negatively to lapse percentages (VEK).

Hypothesis 8(a): Perceived self-esteem scores will relate positively to net commission earned (NEK).

Hypothesis 8(b): Perceived self-esteem scores will relate negatively to lapse percentages (VEK).

Hypothesis 9(a): Perceived achievement in business scores will relate positively to net commission earned (NEK).

Hypothesis 9(b): Perceived achievement in business scores will relate negatively to lapse percentages (VEK).

Hypothesis 10(a): Innovation scores will relate positively to net commission earned (NEK).

Hypothesis 10(b): Innovation scores will relate negatively to lapse percentages (VEK).

CHAPTER 5: METHODOLOGY

An empirical investigation was conducted using a survey approach. Survey approaches in research are performed under conditions where hypotheses are tested to determine the relationships between various psychological variables (Leary, 1991; Rosenthal & Rosnow, 1991). This kind of research involves the examination of relationships between two or more variables in an effort to predict the success criteria of assurance sales representatives. According to Leary (1991), this research forms part of correlational research, because the researcher tries to determine the relationships between variables that have not been manipulated.

5.1 Sample

According to Leary (1991), in purposive sampling respondents are selected according to the judgment of the researcher on a sample typical of the population. Non-probability, or, more specifically, purposive sampling, was used in this research to ensure that the participants chosen were most representative of the assurance sales population.

The participants in the study were sales representatives of a financial institution specializing in life assurance. The participants worked in the Gauteng area of South Africa. Of the 245 participants, 86.9% were male and 13.1% female; 90% were full time sales representatives; 71% were married, 19.5% were single and 9.3% were either divorced, widowed or concubines. Of the sample, 64.6% were White South Africans, 31.7% were Black South Africans, and 2.8% were Coloured South Africans; 62% were

Afrikaans-speaking individuals, 5.7% were English-speaking, and the remainder of the sample spoke a form of African language. 46% of the sample entered this type of work in order to make more money, 21.2% entered in order to be their own boss, and 21.6% entered the line of work in order to use opportunities to develop their own ideas; 82.1% were active sales representatives, 12.5% were managers within the company. The average tenure with the company was 56.21 months and the average number of years doing sales representative work was 6.91 years.

5.2 Procedure

Data were collected from 265 sales representatives at a South African Life Assurance company of which 245 were useable. Each participant was asked to complete three measuring instruments. The instruments focused on three measures: biographical questions, The Schepers Locus of Control (Schepers, 1995) and the Entrepreneurial Attitude Orientation Scale (EAOS) (Robinson, Stimpson, Huefner & Hunt, 1991).

The participants completed the questionnaires in group sessions, ranging in size from 10 to 25 individuals, over a period of two months. Participation was entirely voluntary and anyone wishing not to participate was given the opportunity to withdraw. The task was not compulsory and the information was kept confidential. Feedback was given to those who requested it.

In order to assess the participants' performance statistics, permission was granted by the company to obtain production information of the participants over a 12-month period.

5.3 Measures

5.3.1 The biographical questionnaire

Literature indicates that demographic information, or biodata, have been used in research to predict successful behaviour in all job areas including entrepreneurship and sales (Comer, 1992; Fischer, Reuber & Dyke, 1993; Bowen & Hisrich, 1986; McDaniel, 1989; Robinson, Stimpson, Huefner & Hunt, 1991; Boshoff & Scholtz, 1995; Russell, Devlin & Mattson, 1990).

The variables included in the biographical questionnaire were chosen based on the literature.

The use of biographical variables in entrepreneurship research is based on the possibility that past behaviour and experiences help determine whether individuals will display future successful entrepreneurial behaviour (Levy & Sharma, 1994). However, critics have questioned whether demographic variables carry predictive value, especially in sales and entrepreneurship (Robinson et al., 1991).

Biographical data typically used in research include gender, age, sales experience, and formal education (Levy et al., 1994). Other variables such as birth order and family history also have been included. However, it appears that very little research is available which attempts to correlate cross-cultural variables such as race in predicting sales performance within certain contexts (Coetzer & Schepers, 1997).

Therefore, based on the literature as well as past research findings, a biographical questionnaire was included in the study. The biographical variables included:

- The age of the respondents (in years).
- The number of years respondents had been in sales prior to joining the firm.
- The salary the respondents earned before joining the firm.
- The desired salary of the sales representatives per month.
- The niche market in which each participant worked, including the individual market, young market, retired market, business market, the professional market and the senior market.
- The marital status of the participants, including such categories as married, single, divorced, widowed, and concubines.
- The population groups of the respondents, including White South Africans, Black South Africans, Coloureds, Indians & Asians.
- The language preferences of the participants, including the 11 official languages of South Africa.
- The number of years of formal schooling by the participants.
- The order of birth of the participants.
- The financial levels of the respondents' families during their teenage years, expressed in a self-report of individual perceptions ranging from poor to rich financial status.
- The respondents' reasons for becoming involved in sales representative work, including previous unemployment, lack of enjoyment in their previous work, a need to use the opportunities to develop their own ideas, to be their own boss and to make more money.

- The number of years the participants had been in service at the company.
- The employment status of the participants: whether they are full-time or part-time sales representatives and whether they hold managerial or assistant managerial positions.

The questionnaires were constructed to allow individuals to respond to specific items.

5.3.2 The Locus of Control Inventory (Schepers, 1995)

This scale was developed to take into account the South African context when measuring the locus of control of individuals.

The Schepers Locus of Control Inventory was used to measure the locus of control. The questionnaire consisting of 80 items was administered to 356 first year university students. A factor analysis of the items yielded three factors: Autonomy, Internal Control and External Control. The three scales were subjected to an item analysis and the reliabilities of the scales were determined with Cronbach's coefficient alpha. All three scales yielded reliability coefficients of the order 0.80.

The sample was subjected to cluster analysis using the three scores of the Locus of Control Inventory as input variables. Two distinct clusters emerged: Cluster 1 was low on Autonomy and Internal Control. Cluster 2 was high on Autonomy and Internal Control and low on External Control.

Some examples of the items under each subscale are listed below. The responses were rated on a 7-point Likert Scale, on which a rating of 1 indicated the item was of no importance to the participant and 7 indicated the item was of great importance.

Internal Locus of Control: For example:

- To what extent should an individual in his/her work determine routine and structure?
- To what extent do you believe that success is linked to an individual's commitment and abilities?
- How often do you make your own decisions as opposed to waiting for others to make decisions on your behalf?
- To what extent does recognition motivate you to perform better than you are?
- To what extent do you accept responsibility for the mistakes that arise in your work?

Autonomy: For example:

- How strongly do you feel about avoiding an issue during a conflict situation?
- To what extent are you likely to take risks?
- How easily are you able to persuade others of your point of view?
- How often do you initiate actions through your participation, rather than waiting for it to occur?
- How often do you wait for others to take the initiative, rather than taking the lead yourself?

External Locus of Control: For example:

- How strongly are you of the opinion that if you have failed once, it would almost impossible to succeed thereafter?
- How strongly do you believe that fate determines your destiny?
- To what extent are you dependent on others in order to do quality work?
- To what extent does luck play a role in your life?
- To what extent is your life influenced by coincidences of which you are not in control?

5.3.3 The Entrepreneurial Attitude Orientation Scale (EAOS) (Robinson, Stimpson, Huefner & Hunt, 1991)

Attitude was measured using the Entrepreneurial Attitude Orientation Scale (EAOS) developed by Robinson et al. (1991) to measure the attitudes of entrepreneurs.

The validation of this questionnaire took place in two stages: Stage 1 consisted of the initial development of the EAOS and the administration of the questionnaire (262 items) to introductory university students. The items were analyzed according to the tripartite model (items being classified as affective, cognitive or conative), which resulted in 91 items remaining in the questionnaire. The 91-item questionnaire was then administered to a class of 72 students. From this, a test/retest reliability was run for the four subscales. The correlations were: personal control ($r^2 = .71$; $p < .001$); need for achievement ($r^2 = .74$; $p < .001$); innovation ($r^2 = .85$; $p < .001$); and self-esteem ($r^2 = .76$; $p < .001$). These correlations confirmed the reliability of the EAOS.

In Stage 2 the questionnaire was administered to 54 entrepreneurs and 57 non-entrepreneurs (mostly males). Using the Cronbach alpha, the 91-item questionnaire was reduced to 75 items. A MANOVA was run to test whether entrepreneurs had higher attitude subscale values than non-entrepreneurs. A significant difference was found between the two groups for the scales innovation, personal control, self-esteem and achievement. Discriminant analysis was performed. Three of the four subscales that contributed to the discriminant function were innovation, personal control and self-esteem.

Robinson et al. (1991) concluded that the EAOS possessed satisfactory psychometric properties. A possible shortcoming of the research performed by Robinson et al. (1991) is that factor analysis was not performed on the items of the EAOS.

The EAOS was applied to a South African population in order to investigate the psychometric properties. The data was analyzed by means of EQS. Exploratory factor analysis and confirmatory factor analysis were used to confirm the factorial structure identified by Robinson et al. (1991).

A study conducted by Hoole & Boshoff (1996) indicated that the intercultural portability of constructs is an important consideration when doing intercultural research. The study therefore illustrated the danger of uncritically applying foreign scales cross-culturally.

Some examples of the items under each subscale are listed below:

- Achievement in business (concrete results associated with start up and growth of a business venture). Item examples include:
    - I get my biggest thrills when my work is among the best there is.
    - I never put important matters off until a more convenient time.
    - I often sacrifice personal comfort in order to take advantage of business opportunities.
    - I believe that concrete results are necessary in order to judge business success.
- Innovation in business (perceiving and acting on business activities in new and unique ways). Item examples include:
    - I feel very energetic working with innovative colleagues in a dynamic business climate.
    - I seldom follow instructions unless the task I am working on is too complex.
    - I get excited when I am able to approach tasks in unusual ways.
    - I feel terribly restricted being tied down to tightly organized business activities, even when I am in control
- Perceived personal control of business outcomes (the individual's perception of control and influence over their business). Item examples include:
    - I have always worked hard in order to be among the best in my field.
    - I create the business opportunities I take advantage of.
    - I know that social and economic conditions will not affect my success in business.

- I believe that in the business world the work of competent people will always be recognized.

- Perceived self-esteem in business (self-confidence, perceived competency in conjunction with their affairs). Item examples include:
  - I feel like a total failure when my business plans don't turn out the way I think they should.
  - I usually perform very well on my part of any business project I am involved with.
  - I feel very self-conscious when making business proposals.
  - I seem to spend a lot of time looking for someone who can tell me how to solve all my business problems.

5.3.4 Performance measures as the dependent variables

Two measures of performance were used in this study – net commission and lapse ratios. Research shows that direct forms of performance measurement in the entrepreneurial and sales field are the most accurate methods of correlating behavioural characteristics with success (Coetzer & Schepers, 1997). Previous research on South African sales representatives by Coetzer & Schepers (1997) used the net commission and lapse ratios as performance benchmarks for success. As this is a similar study, the following procedure was used to obtain a reliable performance variable:

Production statistics over a 12-month period were drawn on the participants. The statistics included net commission earned for 12 month (NEK) and lapse ratios (business

lost) for 12 months (VEK). The NEK had already been calculated by subtracting the number of lapsed policies from the gross annual income. Thus, NEK would be an indication of a salesperson's final and total earnings in a 12-month period. The VEK performance variable also is regarded as a direct performance measurement (although it forms part of the calculation of NEK); the higher it is the greater the indication of failed sales performance. In this study, there was a significant positive correlation ($r= 0.478$; $p<0.05$) between the two performance measures.

In the financial industry the sales representative is required to earn a minimum basic in order to remain in the business of life assurance. This minimum basic provided incentives for individuals to minimize lapse ratios and increase net commission earned.

5.4 Analysis

The analysis was done in three distinct stages. The following section describes the procedure followed in the analysis of the data.

Critique offered by Tett et al. (1991) on personality measures suggests that the psychometric value of personality questionnaires be tested. Therefore, the first step in the analysis of the data was to assess the psychometrics of the measures. The psychometric qualities of the measurements used in the Schepers Locus of Control and the Entrepreneurial Attitude Orientation Scale (EAOS) were tested using exploratory factor analysis and the alpha coefficients of each subscale.

Factor analysis is a statistical technique used for a single set of variables, tested to determine which variables form coherent subsets that are relatively independent of one another (Tabachnick & Fidell, 1989). "It is usually used as a tool for reducing the number of variables or examining patterns of correlations among variables, without a serious intent to test theory" (p.601). Variables that correlate with one another are combined into factors.

Exploratory factor analysis is used to describe and summarize the data by grouping correlated variables together (Tabachnick & Fidell, 1989). In the study, exploratory factor analysis enabled the underlying processes of those variables to be observed. Rotated factor loading patterns were used, as the results would be more easily interpretable if the underlying mathematical properties remained unchanged.

In the second stage of the analysis, the hypotheses (see Table 4.1) were tested for each of the demographic variables, the locus of control, and the EAOS with the performance measures NEK and VEK. Pearson's product moment coefficient was used to compare scores of the instruments used and various aspects of the demographic data. Pearson's product moment coefficient allowed the researcher to assess the relationship between continuously measured IVs and DVs. The relationship is illustrated with the Pearson's product moment coefficient.

In the third stage, ANOVA was used to compare the difference of the means between the demographic categories and the dependent variables. "ANOVA is used when two or

more means are compared to see if there any reliable differences among them... it is a set of analytic procedures based on a comparison of two estimates of variance (error variance and differences in means)" (Tabachnick & Fidell, 1989, p.37).

Using the information obtained from the analyses mentioned above, a model was built of the significant relationships found between the performance criteria and the demographic variables, the locus of control, and the entrepreneurial attitude scale.

CHAPTER 6: ANALYSES AND RESULTS

6.1 Introduction

This chapter describes the simple statistics of the sample in the study, the value of the instruments used to predict sales performance, and the results of the hypotheses.

6.2. Descriptive Statistics

The sample of sales representatives consisted of 245 participants. Each completed a biographical questionnaire, a Locus of Control inventory (Schepers, 1995) and an Entrepreneurial Attitude Scale (EAOS) (Robinson et al., 1991). The sample can be described as follows (Table 6.1 and 6.2):

TABLE 6.1

SAMPLE DEMOGRAPHIC DESCRIPTIVE STATISTICS

Variable	N	Mean	SD	Range	
				Min	Max
Age (years)	245	40.37	10.14	21	77
Number of years in sales work	234	6.91	7.5	1	37
Prior salary (per annum)	229	56 957	96 151	4000	1 200 000
Desired salary (per month)	242	11 897	12 861	2800	180 000
Tenure (number of months)	228	56.215	73.860	1	615
NEK (Net commission earned in 12 month period)	228	74 360	86 590	0	754 380
VEK (Value of policy lapses over 12 months)	228	11 294	53 727	0	800 765

TABLE 6.2

SAMPLE DEMOGRAPHIC DESCRIPTIVE STATISTICS (cont.)

Variable	n	% of sample
Market targeted by each sales person		
Individual	53	29.7
Young	19	11.0
Retired	27	15.7
Businesses	45	26.2

Variable	n	% of sample
Gender		
Male	213	86.9
Female	32	13.1

Variable	n	% of sample
Nature of employment contract		
Full-time contract	218	90.1
Part-time contract	24	9.0

Variable	n	% of sample
Marital Status		
Married	175	71.1
Single	48	19.5
Divorced	17	6.9
Widow(er)	3	1.2
Co-habiting	3	1.2

TABLE 6.2 (cont.)

Variable	n	% of sample
Population Group		
White South African	159	64.6
Black South African	78	31.7
Coloured South African	7	2.8
Indian South African	1	0.4

Variable	n	% of sample
Preferred Home Language		
English	14	5.7
Afrikaans	153	62.2
Zulu	25	10.2
Xhosa	4	1.6

Variable	n	% of sample
Level of Education		
10 years formal schooling	2	0.9
11 years formal schooling	3	1.3
12 years formal schooling	215	96

TABLE 6.2 (cont.)

Variable	n	% of sample
University Education (years)		
1	16	21.3
2	14	18.7
3	19	25.3
4	15	20.0

Variable	n	% of sample
Order of birth		
1st born	88	37.3
2nd born	65	27.5
3rd born	38	16.1
4th born	45	19.1

Variable	n	% of sample
Perceived financial status of individual during teen years		
Low	23	9.4
Below average	34	13.9
Average	153	62.4
Above average	32	13.1
High	3	1.2

TABLE 6.2 (cont.)

Variable	n	% of sample
Reason for becoming a sales representative		
Previous unemployment	13	5.4
Low previous job satisfaction	13	5.4
Opportunity to develop own ideas	52	21.6
Wanted to be their own boss	51	21.2
Wanted to make more money	112	46.5

Variable	n	% of sample
Current Status		
Manager	30	12.5
Assistant manager	10	4.2
Sales representative	197	82.1

The average age of the participants was 40.37 years (SD =10.14; range = 21 to 77). The sample consisted of 86% males, 64.6% White South Africans and 31.7% Black South Africans, of which 62.2% spoke Afrikaans and 11.8% spoke either Zulu or Xhosa. The sample also consisted of Indian and Coloured South Africans. Only 10% of the sample reported to prefer English as their first language.

The average experience in sales was 6.91 years (SD=7.5; range = 1 to 37). The average tenure in the company was 56.215 months (SD = 73.860; range 1 to 615). The average salary earned prior to working at the company was R56 957 per annum (SD = 96 151; range = 4000 to 1.2 million) and the average desired salary of the participants was R11

897 per month (SD = 12 861; range = 2 800 to 180 000). The average actual earnings recorded (NEK) was R74 360 (SD = 86 590; range = 0 to 754 380) per annum. The average lapse amount recorded (VEK) was R11 294 (SD = 53 727; range = 0 to 800 765) over a period of 12 months. Because of the commission-based nature of this industry, the resulting ranges of sales income and lapses represented everything from total failure and extraordinary success. The resulting mean values, which include both extremes, are therefore deflated. There appeared to be an even distribution of the markets targeted by the participants, ranging between individual (29.7%), young (11%), retired (15.7%) and businesses (26.2%). Altogether 90.1% of the participants had full-time contracts with the company, 71.1% of the participants were married and 96% reported that they had completed their high school education. However, the distribution was reasonably even in terms of the number of university years completed.

When participants were asked the primary reason why they had become sales representatives, 46% reported that they wanted to make more money, 21.2% wanted to be their own boss, and 21.6% reported a need to develop their own ideas. 10.8% reported they entered this career option due to previous unemployment or a lack of previous job satisfaction. 82.1% were active sales representatives, whereas 16.7% held a managerial position that included responsibilities over and above active selling.

6.3 The psychometric qualities of the Locus of Control and EAOS

6.3.1 The Locus of control

The Schepers Locus of Control (Schepers, 1995) is an 80-item inventory, which was originally divided into 3 factors: autonomy (27), external locus of control (25) and internal locus of control (26). For the sample, participants were asked to indicate the extent of their agreement with the randomly ordered items on a seven-point Likert scale ranging from 1(not at all) to 7 (to a great extent).

In order to confirm the psychometric value of the measurement, the items were analyzed using exploratory factor analysis on BMDP-4M (Release 7.1) statistical software. Rotated factor analysis was performed to make the solutions more interpretable without changing the underlying mathematical properties. The rotations were orthogonal, allowing observation of variables correlating with each factor.

Factor extraction was performed on 55 items. The factor analysis results are illustrated in Table 6.3.

TABLE 6.3

LOCUS OF CONTROL EXPLORATORY FACTOR ANALYSIS

Locus of Control: Rotated Factor Loading Patterns			
Item	Autonomy	External	Internal
A5Aut	0.349	0.070	-0.059
A6Aut	0.331	-0.092	-0.044
A7Aut	0.412	-0.066	0.166
A10Aut	0.391	0.101	0.023
A13Aut	0.641	0.029	-0.156
A14Aut	0.445	0.086	0.126
A19Aut	0.312	0.109	0.206
A25Aut	0.280	-0.069	0.035
A27Aut	0.584	-0.072	0.030
A28Aut	0.278	0.082	0.028
A30Aut	0.458	0.001	0.029
A31Aut	0.364	0.087	0.131
A48Aut	0.329	0.129	0.023
A60Aut	0.454	-0.137	0.003
A61Aut	0.527	-0.063	-0.001
A62Aut	0.344	-0.126	0.064
A66Aut	0.477	-0.179	0.153
A67Aut	0.402	-0.070	-0.035
A68Aut	0.462	0.076	0.066
A69Aut	0.477	0.033	0.149
A74Aut	0.423	-0.031	-0.040
A75Aut	0.537	-0.091	0.096

TABLE 6.3 (cont.)

Locus of Control: Rotated Factor Loading Patterns			
Item	Autonomy	External	Internal
A11Ext	-0.233	0.448	0.110
A12Ext	0.007	0.514	-0.130
A20Ext	0.020	0.338	0.033
A23Ext	-0.078	0.358	-0.020
A33Ext	-0.027	0.500	0.137
A34Ext	-0.052	0.470	-0.025
A35Ext	0.016	0.433	-0.116
A36Ext	0.122	0.322	-0.388
A38Ext	0.010	0.494	0.065
A41Ext	0.237	0.440	-0.450
A43Ext	0.093	0.343	-0.355
A45Ext	0.064	0.361	-0.429
A47Ext	0.034	0.392	-0.069
A50Ext	0.004	0.455	0.107
A51Ext	-0.030	0.470	-0.022
A52Ext	-0.010	0.305	-0.051
A53Ext	0.070	0.351	-0.300
A56Ext	0.113	0.483	-0.165
A57Ext	0.045	0.332	0.074
A58Ext	-0.072	0.277	-0.111
A78Ext	-0.266	0.249	0.053
A79Ext	-0.124	0.453	-0.036
A80Ext	-0.050	0.335	-0.058

TABLE 6.3 (cont.)

Locus of Control: Rotated Factor Loading Patterns			
Item	Autonomy	External	Internal
A32Int	0.120	0.185	0.407
A37Int	0.153	-0.080	0.438
A40Int	0.190	-0.095	0.519
A42Int	0.094	0.044	0.565
A44Int	0.165	0.075	0.316
A46Int	0.098	-0.025	0.454
A49Int	0.239	0.135	0.299
A70Int	0.188	-0.004	0.495
AA59Int	-0.091	-0.230	0.335
AA73Int	0.013	-0.178	0.374

The overall Cronbach alpha coefficient for the locus of control was (Cronbach alpha = 0.7886), suggesting that the inventory is fairly reliable. The Cronbach alpha coefficient represents the reliability of the common factors rather than the reliability of group differences. It refers to the generalizability of the scores taken in a variety of situations (Kerlinger, 1992). The individual factor alpha coefficient for the autonomy subscale was 0.8390; for the external subscale, 0.7830; and for the internal subscale, 0.7485.

All the autonomy (22), external (22) and internal (10) factor subscale items had loadings above 0.25 and none of the items loaded higher than 0.20 with the other factors. These results indicate that the Schepers Locus of Control Inventory (1995) demonstrated high internal consistency for this sample.

Factor correlations were performed for the locus of control sub-scales. The autonomy and internal subscales showed a positive correlation (r = 0.318). The autonomy and external subscales showed no correlation (r = - 0.027). Similarly, the external and internal subscales were not correlated (r = - 0.214). These findings are indicated in Table 6.4.

TABLE 6.4

FACTOR CORRELATIONS FOR ROTATED FACTORS OF THE LOCUS OF CONTROL

	Autonomy	External	Internal
Autonomy	**0.8390**		
External	-0.027	**0.7830**	
Internal	0.318	-0.214	**0.7485**

6.3.2 The Entrepreneurial Attitude Orientation Scale

The EAOS (Robinson et al., 1991) is a 75-item inventory that was originally divided into 4 factors: achievement (22), innovation (25), personal control (12) and self-esteem (11). Participants were asked to indicate the extent of their agreement with the randomly ordered items on a five-point scale ranging from strongly agree (1) to strongly disagree (5).

The EAOS was not factor analyzed by Robinson et al. (1991) when they originally developed the instrument. Factor analysis was performed, using the data from the sample in this study, to confirm the psychometric value for South African sales context using BMDP-4M (Release 7.1) statistical software. Rotated factor analysis was performed to

make the solutions more interpretable without changing the underlying mathematical properties. The rotations were orthogonal, allowing observation of variables correlating with each factor.

The resulting rotated factor loading patterns are illustrated in Table 6.5.

TABLE 6.5

ENTREPRENEURIAL ATTITUDE ORIENTATION SCALE (EAOS) EXPLORATORY FACTOR ANALYSIS

EAOS: Rotated Factor Loading Patterns				
Item	Achievement	Self-esteem	Personal control	Innovation
B28Ach	0.440	0.057	0.300	-0.173
B32Ach	0.452	0.236	0.220	-0.218
B33Ach	0.426	0.295	-0.166	0.041
B36Ach	0.395	0.109	0.277	-0.126
B42Ach	0.295	-0.329	0.171	-0.026
B47Ach	0.353	0.026	0.265	0.210
B48Ach	0.554	0.090	0.095	0.102
B49Ach	0.588	0.090	0.218	-0.128
B50Ach	0.327	0.147	-0.044	0.188
B55Ach	0.525	0.144	0.020	-0.028
B60Ach	0.519	0.040	0.053	-0.042
B61Ach	0.484	0.123	-0.086	0.160
B62Ach	0.195	-0.152	0.020	0.169
B63Ach	0.384	0.002	0.011	0.280
BB68Ach	-0.631	0.101	0.043	-0.005
B67Ach	0.517	-0.062	0.071	0.171
B69Ach	0.461	-0.146	0.001	0.092
B70Ach	0.420	-0.189	0.030	0.178
B71Ach	0.464	0.004	-0.003	0.111
B74Ach	0.313	-0.105	0.075	0.273
BB35Ach	0.028	-0.263	-0.338	-0.240
B66Ach	0.450	0.090	0.038	0.064

TABLE 6.5 (cont.)

EAOS: Rotated Factor Loading Patterns				
Item	Achievement	Self-esteem	Personal control	Innovation
BB76Ach	-0.531	0.105	-0.193	0.107
BB31Ach	0.050	-0.177	-0.437	-0.232
BB20Se	-0.150	0.349	0.143	0.043
B21Se	-0.096	0.257	0.141	0.161
B37Se	0.178	0.205	-0.093	0.158
BB7Se	-0.012	0.411	0.079	0-.066
BB16Se	-0.115	0.749	-0.109	0.145
BB20Se	-0.150	0.349	0.143	0.043
BB23Se	0.044	0.767	-0.066	0.048
BB30Se	0.280	0.560	0.030	-0.245
BB39Se	-0.089	0.108	-0.231	-0.108
BB40Se	0.060	0.296	-0.092	-0.374
BB68Se	-0.631	0.101	0.043	-0.005
BB75Se	-0.314	0.155	-0.147	-0.231
B3Pc	0.229	-0.134	0.244	-0.008
B5Pc	0.179	0.019	0.228	0.068
B13Pc	0.165	0.089	0.350	0.015
B14Pc	-0.022	0.006	0.591	-0.085
B15Pc	-0.040	0.088	0.432	0.175
B17Pc	-0.064	-0.083	0.592	-0.017
B18Pc	0.203	0.068	0.476	-0.305
B19Pc	0.186	0.159	0.363	0.027

TABLE 6.5 (cont.)

EAOS: Rotated Factor Loading Patterns				
Item	Achievement	Self-esteem	Personal control	Innovation
B22Pc	0.098	0.160	0.274	0.116
B24Pc	0.089	-0.206	0.313	-0.048
B25Pc	0.112	-0.084	0.469	0.041
B26Pc	0.182	0.007	0.548	0.034
B27Pc	0.382	-0.024	0.405	-0.182
B38Pc	-0.280	-0.503	0.022	-0.077
B51Pc	-0.217	-0.461	0.130	-0.023
B57Pc	-0.072	-0.082	0.147	0.059
BB52Pc	-0.273	-0.026	0.152	-0.253
B4Pc	0.229	-0.134	0.244	-0.008
B8Pc	0.033	0.056	0.107	0.210
B6Pc	0.135	-0.170	0.239	0.242
B9Pc	0.074	-0.024	0.172	0.263
B11Inn	0.205	0.018	-0.007	0.312
B10Inn	0.111	0.101	0.285	0.350
B12Inn	0.140	-0.116	-0.060	0.215
B34Inn	-0.239	-0.560	-0.148	0.169
B41Inn	0.161	0.096	0.151	0.305
B44Inn	0.003	-0.045	-0.072	0.295
B45Inn	-0.079	-0.218	0.131	0.397
B46Inn	0.253	-0.053	0.231	0.410
B53Inn	-0.356	-0.514	-0.007	0.183
B54Inn	0.084	0.215	0.248	0.370

TABLE 6.5 (cont.)

EAOS: Rotated Factor Loading Patterns

Item	Achievement	Self-esteem	Personal control	Innovation
B56Inn	0.064	0.093	0.016	0.342
B58Inn	-0.074	0.045	0.167	0.388
B59Inn	0.143	-0.154	0.269	0.315
B64Inn	0.049	-0.312	0.097	0.255
B65Inn	0.015	-0.271	0.212	0.154
B72Inn	0.114	-0.255	-0.024	0.124
B73Inn	-0.107	-0.413	0.020	0.167
BB43Inn	-0.528	-0.074	-0.122	0.068

The Cronbach alpha coefficient for the EAOS scale was (Cronbach alpha = 0.7776), suggesting that the inventory is fairly reliable. The individual factor alpha coefficient for the achievement subscale was 0.8197); for self-esteem, 0.6353; for personal control, 0.7552; and for innovation, 0.5963. The Cronbach alpha coefficient represents the reliability of the common factors rather than the reliability of group differences. It refers to the generalizability of the scores taken in a variety of situations. In order to show significant reliability, the Cronbach alpha coefficient should be at least 0.7 (Kerlinger & Pefhazur, 1973). Self-esteem and innovation did not show significant factor reliability.

Of the 23 achievement factor subscale items, 21 had loadings above 0.25, and six of these 21 items loaded higher than 0.25 with items from other factors. These findings suggest that the achievement factor lacks uniqueness.

Of the eleven self-esteem factor subscale items, nine had loadings above 0.25, and three items of these nine loaded with items from other factors, suggesting a lack of uniqueness.

Sixteen personal control factor subscale items had loadings greater than 0.25, but two of these items loaded higher with other factors, suggesting that these two items are not reliable.

Of the 22 innovation factor subscale items, 15 had loadings greater than 0.25, but four of these items loaded higher than 0.25 with items from other factors, and three of these four showed greater loading with other factors than with the innovation factor. These findings raise questions about this subscale's reliability.

In order to evaluate the original psychometric value of the EAOS, the data from this study were used to test the factor structure of the instrument by specifying those items that Robinson et al. (1991) identified for each subscale. The original item specifications for the EAOS scale developed by Robinson et al. (1991) proved inconsistent and unreliable, with subscale items often loading randomly between factors as indicated in Table 6.6. Rarely did a factor's items load as speculate by Robinson et al. (1991), indicating that the sub-scale items do not capture the domain of interest for each factor. Given these poor loading patterns, the inventory as developed and specified offered little research merit.

TABLE 6.6

ENTREPRENEURIAL ATTITUDE ORIENTATION SCALE (EAOS) EXPLORATORY FACTOR ANALYSIS ACCORDING TO THE AUTHORS (ROBINSON ET AL., 1991)

EAOS: Rotated Factor Loading Patterns				
Item	Achievement	Innovation	Personal control	Self-esteem
B3Ach	0.229	-0.134	0.244	-0.008
B5Ach	0.179	0.019	0.228	0.068
B9Ach	0.074	-0.024	0.172	0.263
B11Ach	0.205	0.018	-0.007	0.312
B13Ach	0.165	0.089	0.350	0.015
BB20Ach	-0.150	0.349	0.143	0.043
B22Ach	0.098	0.160	0.274	0.116
B25Ach	0.112	-0.084	0.469	0.041
B26Ach	0.182	0.007	0.548	0.034
B28Ach	0.440	0.057	0.300	-0.173
B29Ach	-0.020	-0.404	-0.036	-0.043
B32Ach	0.452	0.236	0.220	-0.218
B33Ach	0.426	0.295	-0.166	0.041
B36Ach	0.395	0.109	0.277	-0.126
B37Ach	0.178	0.205	-0.093	0.158
B42Ach	0.295	-0.329	0.171	-0.026
B46Ach	0.253	-0.053	0.231	0.410
B50Ach	0.327	0.147	-0.044	0.188
B59Ach	0.143	-0.154	0.269	0.315
B67Ach	0.517	-0.062	0.071	0.171
B69Ach	0.461	-0.146	0.001	0.092

TABLE 6.6 (cont.)

EAOS: Rotated Factor Loading Patterns				
Item	Achievement	Innovation	Personal control	Self-esteem
B72Ach	0.114	-0.255	-0.024	0.124
B4Inn	0.229	-0.134	0.244	-0.008
B8Inn	0.033	0.056	0.107	0.210
B15Inn	-0.040	0.088	0.432	0.175
B19Inn	0.186	0.159	0.363	0.027
B21Inn	-0.096	0.257	0.141	0.161
B34Inn	-0.239	-0.560	-0.148	0.169
BB40Inn	0.060	0.296	-0.092	-0.374
B41Inn	0.161	0.096	0.151	0.305
BB43Inn	-0.528	-0.074	-0.122	0.068
B45Inn	-0.079	-0.218	0.131	0.397
B48Inn	0.554	0.090	0.095	0.102
B51Inn	-0.217	-0.461	0.130	-0.023
B54Inn	0.084	0.215	0.248	0.370
B56Inn	0.064	0.093	0.016	0.342
B58Inn	-0.074	0.045	0.167	0.388
B60Inn	0.519	0.040	0.053	-0.042
B64Inn	0.049	-0.312	0.097	0.255
B65Inn	0.015	-0.271	0.212	0.154
BB68Inn	-0.631	0.101	0.043	-0.005
B70Inn	0.420	-0.189	0.030	0.178
B71Inn	0.464	0.004	-0.003	0.111

TABLE 6.6 (cont.)

EAOS: Rotated Factor Loading Patterns				
Item	Achievement	Innovation	Personal control	Self-esteem
B73Inn	-0.107	-0.413	0.020	0.167
B74Inn	0.313	-0.105	0.075	0.273
BB75Inn	-0.314	0.155	-0.147	-0.231
BB76Inn	-0.531	0.105	-0.193	0.107
B6Pc	0.135	-0.170	0.239	0.242
B10Pc	0.111	0.101	0.285	0.350
B12Pc	0.140	-0.116	-0.060	0.215
B17Pc	-0.064	-0.083	0.592	-0.017
B38Pc	-0.280	-0.503	0.022	-0.077
BB39Pc	-0.089	0.108	-0.231	-0.108
B44Pc	0.003	-0.045	-0.072	0.295
B47Pc	0.353	0.026	0.265	0.210
B49Pc	0.588	0.090	0.218	-0.128
B53Pc	-0.356	-0.514	-0.007	0.183
B62Pc	0.195	-0.152	0.020	0.169
B66Pc	0.450	0.090	0.038	0.064
BB7Se	-0.012	0.411	0.079	-0.066
B14Se	-0.022	0.006	0.591	-0.085
BB16Se	-0.115	0.749	-0.109	0.145
B18Se	0.203	0.068	0.476	-0.305
BB20Se	-0.150	0.349	0.143	0.043

TABLE 6.6 (cont.)

EAOS: Rotated Factor Loading Patterns

Item	Achievement	Innovation	Personal control	Self-esteem
BB23Se	0.044	0.767	-0.066	0.048
B24Se	0.089	-0.206	0.313	-0.048
B27Se	0.382	-0.024	0.405	-0.182
BB30Se	0.280	0.560	0.030	-0.245
BB31Se	0.050	-0.177	-0.437	-0.232
BB35Se	0.028	-0.263	-0.339	-0.240

Factor correlations were performed for the EAOS sub-scales. The achievement subscale showed a significant positive correlation with both the personal control ($r = 0.312$; $p < 0.05$) and innovation ($r = 0.242$; $p < 0.05$) sub-scales. Similarly, the personal control subscale showed a positive significant correlation with the innovation subscale ($r = 0.210$; $p < 0.05$). The achievement subscale did not show a significant correlation with the self-esteem subscale ($r = 0.102$; not significant). Similarly, the self-esteem subscale did not correlate significantly with personal control ($r = 0.0005$; not significant). The self-esteem subscale, however, did not significantly correlate with the innovation subscale ($r = -0.122$; not significant). These findings are indicated in Table 6.7.

TABLE 6.7

FACTOR CORRELATIONS FOR ROTATED FACTORS OF THE EAOS

	Achievement	Self Esteem	Personal control	Innovation
Achievement	**0.8197**			
Self Esteem	0.102	**0.6353**		
Personal Control	**0.312****	0.0005	**0.7552**	
Innovation	**0.242****	-0.1222	**0.210****	**0.5963**

** p< .05

6.4 Results of the demographic, locus of control and attitude variables and the prediction of performance (NEK and VEK)

6.4.1 Significant Demographic Results (ANOVA)

Differences between full and part-time employees in performance outcome measures (VEK; NEK) were tested with ANOVA - General Linear Models Procedure. Full-time salespeople averaged R78 000 higher in NEK and R12 057 higher in VEK. However, only the NEK mean difference was statistically significant (F=5.61; r square = 0.0245) (See Table 6.8a).

TABLE 6.8a:

ANOVA PERFORMED ON DEMOGRAPHIC VARIABLE (Nature of employment contract) WITH NEK AND VEK (PERFORMANCE MEASURES) - which were statistically significant

General Linear Models Procedure – ANOVA 1

Nature of the employment contract

	Full-time	Part-time	F Value	r^2
N	204	21		
Mean Difference (NEK)	78857	32092	**5.61****	0.024537
Mean Difference (VEK)	12057	3974	0.42	0.001899

** p< .05

Race differences between White and African employees in performance outcome measures (VEK; NEK) were tested with ANOVA - General Linear Models Procedure. White salespeople averaged R38 981 higher in NEK and 6 740 higher in VEK. However, only the NEK mean difference was statistically significant (F=5.22; r square = 0.0444) (See Table 6.8b).

TABLE 6.8b:

ANOVA PERFORMED ON DEMOGRAPHIC VARIABLE (Population Group) WITH NEK AND VEK (PERFORMANCE MEASURES) - which were statistically significant

General Linear Models Procedure – ANOVA 2				
	Population Group			
	White	**African**	**F Value**	**r^2**
N	159	78		
Mean Difference (NEK)	38981	-38981	**5.22****	0.044374
Mean Difference (VEK)	6740	-6740	.42	0.003735

** p< .05

Status differences between managers and salespeople in performance outcome measures (VEK; NEK) were tested with ANOVA - General Linear Models Procedure. Managers averaged R15 879 lower in NEK and R30 317 higher in VEK than salespeople. However, only the VEK mean difference was statistically significant (F=3.51; r square = 0.031) (See Table 6.8c).

TABLE 6.8c:

ANOVA PERFORMED ON DEMOGRAPHIC VARIABLE (Status of position with company) WITH NEK AND VEK (PERFORMANCE MEASURES) - which were statistically significant

General Linear Models Procedure – ANOVA 3

Status of position within the company

	Manager	Sales Rep.	F Value	r^2
N	30	197		
Mean Difference (NEK)	-15879	15879	1.13	0.010185
Mean Difference (VEK)	30317	-30317	**3.51****	0.031084

** p< .05

6.4.2 General Demographic ANOVA results (not statistically significant)

This section reports the remaining demographic results that were not statistically significant (ANOVA).

TABLE 6.9

ANOVAS PERFORMED ON DEMOGRAPHIC VARIABLES WITH NEK AND VEK (PERFORMANCE MEASURES) - Were not statistically significant

General Linear Models Procedure							
ANOVA	**n**	**F value**		**p value**		**r^2**	
		NEK	**VEK**	**NEK**	**VEK**	**NEK**	**VEK**
Anon 4 Markets targeted	245	0.98	0.39	0.4425	0.8835	0.036688	0.015032
ANOVA 5 Gender	245	0.012	0.17	0.7272	0.6847	0.000540	0.000731
ANOVA 6 Marital status	245	0.71	0.21	0.5833	0.9307	0.012640	0.003817
ANOVA 7 Language preference	245	1.31	0.12	0.2312	0.9992	0.051426	0.004894
ANOVA 8 Level of education completed	245	0.59	0.04	0.5529	0.9616	0.005737	0.000380
ANOVA 9 University education	245	0.93	1.98	0.5016	0.0652	0.113335	0.214464
ANOVA 10 Order of birth	245	1.01	0.78	0.3913	0.5087	0.013772	0.010659
ANOVA 11 Perceived financial position	245	0.51	0.21	0.7284	0.9334	0.009107	0.003746

TABLE 6.9 (cont.)

General Linear Models Procedure (cont.)

ANOVA	N	F value		p value		r^2	
		NEK	VEK	NEK	VEK	NEK	VEK
ANOVA 12	245	0.16	0.37	0.9591	0.8311	0.002895	0.006712
Reason for doing sales							

No statistically significant mean differences in performance outcomes (VEK, NEK) were found for markets targeted by salespeople (individual, young, retired, professional, business), gender (male, female), marital status (married, divorced, single, widowed, co-habited), language (English, Afrikaans, African Languages), education level, University education, birth order, perceived financial positions (low, below average, average, above average, wealthy), or motivation to pursue sales (unemployed, prior lack of job satisfaction, wanted to be their own boss, opportunity to develop their own ideas, make more money).

6.4.3 General Demographic Results (Correlations)

Age was not statistically significant with NEK or VEK. Number of years in sales showed a significant positive correlation with NEK ($r= 0.143$; $p< 0.05$). Prior salary of salespeople showed no significant correlation with NEK or VEK; however, the desired salary of participants showed a significant positive correlation with NEK ($r= 0.196$; $p< 0.05$). Tenure with the firm demonstrated a significant positive correlation with NEK ($r=0.255$; $p<0.05$). Tenure with the firm showed no significant correlation with VEK (See table 6.10).

TABLE 6.10

CORRELATION MATRIX OF DEMOGRAPHIC VARIABLES WITH NEK & VEK

Correlation Analysis using Pearson Correlation Coefficient (r)			
	N	**NEK**	**VEK**
Age	225	-0.07101	-0.00319
No of years in sales	218	**0.14345****	0.10260
Prior salary	213	-0.07714	-0.04480
Desired salary	225	**0.19571****	0.01265
Language	228	**-0.15443****	-0.03814
Tenure	228	**0.25496 ****	-0.00907

****p<.05**

6.4.4 Simple Statistics for Locus of Control

The sample size for all three subscales was 244. The mean for the autonomy subscale was 133.787; the standard deviation was 11.2, with a minimum of 89 and a maximum of 154. The mean for the external locus of control subscale was 53.262; the standard deviation was 14.42, with a minimum of 20 and a maximum of 96. The mean of the internal locus of control subscale was 62.689; the standard deviation was 8.63, with a minimum of 23 and a maximum of 77 (See Table 6.11).

TABLE 6.11

SIMPLE STATISTICS FOR THE LOCUS OF CONTROL

Simple Statistics					
	N	**Mean**	**SD**	**Min**	**Max**
Autonomy	244	133.787	11.72	89	154
External	244	53.262	14.42	20	96
Internal	244	62.689	8.626	23	77

6.4.5 Simple Statistics for Entrepreneurial Attitude Orientation Scale (EAOS)

The sample size for all four EAOS subscales was 245. The mean for the achievement subscale was 1.958, and the standard deviation was 0.367, with a minimum of 1.17 and a maximum of 3.13. The mean for the self-esteem subscale was 3.002, and the standard deviation was 0.232, with a minimum of 2.42 and a maximum of 3.8. The mean of the personal control subscale was 3.766, and the standard deviation was 0.379, with a minimum of 0.285 and a maximum of 5.07. The mean of the innovation subscale was 2.535, and the standard deviation was 0.339, with a minimum of 1.58 and a maximum of 3.33 (See table 6.12).

TABLE 6.12

SIMPLE STATISTICS FOR THE EAOS

Simple Statistics					
	N	**Mean**	**SD**	**Min**	**Max**
Achievement	245	1.958	.367	1.17	3.13
Self-esteem	245	3.002	.232	2.42	3.80
Personal control	245	3.766	.379	2.85	5.07
Innovation	245	2.535	.339	1.58	3.33

6.4.6 Locus of Control Correlations with performance (VEK and NEK)

The only statistically significant relationship between locus of control and either of the two performance outcome variables (VEK or NEK) was the internal locus of control, which was negatively correlated with NEK ($r=-0.145$; $p<0.05$). External and autonomy locus of control subscales showed no significant correlations with VEK or NEK (See table 6.13).

TABLE 6.13

CORRELATION MATRIX OF THE LOCUS OF CONTROL WITH NEK & VEK

Correlation Analysis using Pearson Correlation Coefficient (r)					
	Autonomy	**External**	**Internal**	**VEK**	**NEK**
Autonomy					
R	1.000	-0.11473	**0.48592****	-0.05272	-0.06892
N	244	244	244	227	227
External					
R	-0.11473	1.000	**-0.22228****	-0.02935	-0.01601
N	244	244	244	227	227
Internal					
R	**0.48592****	**-0.22228****	1.000	-0.03126	**-0.14460****
N	244	244	244	227	227
VEK					
R	-0.05272	-0.02935	-0.03126	1.000	**0.47758****
N	227	227	227	227	227
NEK					
R	-0.06892	-0.01601	**-0.14460****	**0.47758****	1.000
N	227	227	227	228	228

****p<.05**

6.4.7 EAOS Correlations with VEK and NEK

The achievement subscale showed no significant correlation with either VEK or NEK.

The self-esteem subscale showed no significant correlation with either VEK or NEK.

However, the personal control subscale showed a negative significant correlation with

NEK (r= -0.173; p< 0.05). The innovation subscale showed no significant correlation with either VEK or NEK (See table 6.14).

TABLE 6.14

CORRELATION MATRIX OF THE EAOS WITH NEK & VEK

Correlation Analysis using Pearson Correlation Coefficient (r)						
	Achievement	**Self Esteem**	**Personal Control**	**Innovation**	**VEK**	**NEK**
Achievement						
R	1.000	**0.47900****	**0.16952****	**0.36842****	0.03282	-0.02955
N	245	245	245	245	228	228
Self -esteem						
R	**0.47900****	1.000	**-0.23864****	**0.47110****	0.05901	0.03272
N	245	245	245	245	228	228
Personal control						
R	**0.16952****	**-0.23864****	1.000	-0.03018	-0.04057	-0.017289
N	245	245	244	245	228	228
Innovation						
R	**0.36842****	**0.47110****	-0.03018	1.000	0.00147	0.01701
N	245	**245**	245	245	228	228
VEK						
R	0.03282	0.05901	-0.04057	0.00147	1.000	**0.47758****
N	228	228	228	228	228	228
NEK						
R	-0.02955	0.03272	**-0.17289****	0.01701	**0.47758****	1.000
N	228	228	228	228	228	228

****p<.05**

6.4.8 VEK and NEK Performance Outcome Correlations

The two performance outcome measures were positively correlated ($r= 0.478$; $p<0.05$).

6.5 Results of Hypotheses Testing

This section describes the analysis performed to test the hypothesized relationships discussed in Chapter Five.

Hypothesis 1(a): Internal locus of control scores will relate positively to net commission earned (NEK), whereas external locus of control scores will relate negatively to net commission earned (NEK).

Internal Locus of control scores showed a negative correlation with NEK ($r = - 0.145$; $p< 0.05$). External Locus of control scores were not significantly correlated with NEK. **Hypothesis not supported.**

Hypothesis 1(b): Internal locus of control scores will relate negatively to the lapse percentage, i.e. commission not earned in business (VEK), whereas external locus of control scores will relate positively to the lapse percentage (NEK).

Internal Locus of control scores were not significantly correlated with VEK. External Locus of control scores were not significantly correlated with NEK. **Hypothesis not supported.**

Hypothesis 2(a): Autonomy scores will relate positively to net commission earned (NEK).

Autonomy scores (locus of control) were not significantly correlated with NEK.

Hypothesis not supported.

Hypothesis 2(b): Autonomy scores will relate negatively to lapse percentages (VEK), i.e. business that has not vested.

Autonomy scores (locus of control) were not significantly correlated with VEK.

Hypothesis not supported.

Hypothesis 3: Gender differences will not be related to net commission (NEK) or lapse percentages (VEK).

No statistically significant mean differences were found between gender and NEK or VEK as performance outcomes. **Hypothesis was supported.**

Hypothesis 4: No relationship will exist between age, sales experience and net commission earned (NEK) and lapse percentages (VEK).

No statistically significant means differences were found between age and NEK or VEK as performance outcomes. **Hypothesis was supported.**

Statistically significant mean differences were found between sales experience and NEK ($r = 0.143$; $p < 0.05$), but not between sales experience and VEK. Hypothesis not supported.

Hypothesis 5(a): The number of years of education will relate positively to net commission earned (NEK).

No statistically significant means differences were found between the number of years in education (schooling and tertiary education) and NEK as a performance outcome.

Hypothesis not supported.

Hypothesis 5(b): The number of years of education will relate negatively to lapse percentages (VEK).

No statistically significant mean differences were found between the number of years in education (schooling and tertiary education) and VEK as a performance outcome.

Hypothesis not supported.

Hypothesis 6: No relationship will exist between race, marital status, order of birth and perceived financial position and net commission earned (NEK) or lapse percentages (VEK).

Statistically significant mean differences were found between race and NEK ($F = 5.22$; $p < 0.05$), but not between race and VEK. **Hypothesis not supported.**

No statistically significant mean differences were found between marital status and NEK or VEK. **Hypothesis was supported.**

No statistically significant mean differences were found between birth order and NEK or VEK. **Hypothesis was supported.**

No statistically significant mean differences were found between perceived financial position and NEK or VEK. **Hypothesis was supported.**

Hypothesis 7(a): Perceived control scores will relate positively to net commission earned (NEK).

Perceived personal control scores showed a negative significant relationship with NEK ($r= -0.173$; $p<0.05$). **Hypothesis not supported.**

Hypothesis 7(b): Perceived control scores will related negatively to lapse percentages (VEK).

Perceived personal control scores were not significantly correlated with VEK. **Hypothesis not supported.**

Hypothesis 8(a): Perceived self-esteem scores will relate positively to net commission earned (NEK).

Perceived self-esteem scores were not significantly correlated with NEK. **Hypothesis not supported.**

Hypothesis 8(b): Perceived self-esteem scores will relate negatively to lapse percentages (VEK).

Perceived self-esteem scores were not significantly correlated with VEK. **Hypothesis not supported.**

Hypothesis 9(a): Perceived achievement in business scores will relate positively to net commission earned (NEK).

Perceived achievement in business scores was not significantly correlated with NEK. **Hypothesis not supported.**

Hypothesis 9(b): Perceived achievement in business scores will relate negatively to lapse percentages (VEK).

Perceived achievement in business scores was not significantly correlated with VEK. **Hypothesis not supported.**

Hypothesis 10(a): Innovation scores will relate positively to net commission earned (NEK).

Innovation scores were not significantly correlated with NEK. **Hypothesis not supported.**

Hypothesis 10(b): Innovation scores will relate negatively to lapse percentages (VEK).

Innovation scores were not significantly correlated with VEK. **Hypothesis not supported.**

6.6 Summary of Results

Neither the EAOS nor the Locus of Control Inventory scales predicted performance outcomes as hypothesized for sales professionals (VEK or NEK). The significant correlations that did result were generally counter to expectations (internal locus of control and perceived personal control). Demographic variables had limited success in predicting performance outcomes of sales professionals (VEK or NEK). The nature of

the employment contract (full or part-time w/NEK, $F = 5.61$; $p < 0.05$), population groups (White South Africans vs. African South Africans w/NEK, $F = 5.22$; $p < 0.05$), job status (Manager vs. Sales Representative w/VEK, $F = 3.51$; $p < 0.05$), years in sales (w/NEK, $r = 0.14345$; $p < 0.05$), and desired salary (w/NEK, $r = 0.19571$; $p > 0.05$) were correlated with the performance outcome measures. None of the 25 independent variables correlated with both NEK and VEK.

CHAPTER 7: DISCUSSION

7.1 The research problem

The aim of this research was to generate a theory from predictions of the success levels of assurance salespeople, based on personality, demographic and attitude theory. Predicting success in the sales field has been a challenge for two reasons. First, the nature of sales work requires a strong entrepreneurial spirit in individuals, because the tasks involve interaction with people and the ability to tap into individual client needs to sell financial services. As a result of the unpredictable human factor involved in the sales process, job descriptions tend to be loosely defined; consequently, it is difficult to measure task effectiveness (Stajkovic & Luthans, 1997). Lacking the ability to measure task effectiveness leads, in turn, to difficulty predicting success in sales.

Second, labour regulations in South Africa make it increasingly difficult to use traditional selection methods to place salespeople. In the past, information from personality questionnaires and demographic information obtained from candidates were used to help select the best candidates, because it was believed that successful salespeople have a certain personality profile (Tett et al., 1991). Regulations now sometimes prohibit such use of personality tests, although practitioners continue to question what makes a sales person in financial services successful. The challenge for human resources practitioners is to find a way to predict future success for new candidates, as well as for existing employees in financial sales, while abiding by labour laws.

The literature review discussed the use of personality theory, demographic variables and attitude theory in research on work performance, specifically sales and entrepreneurial performance. All three theoretical constructs have had some success and failure in research on sales performance.

7.2 Predicting sales success using the locus of control

Personality theory, although extensively used in research on work performance, has been criticized for having little relationship with job success and regarded as a weak measurement in terms of its predictive value (Boshoff & Scholtz, 1995; Tett et al., 1991; Kuratko & Hodgetts, 1995; Crant, 1995). However, much research has proven that some traits are related to successful sales performance (Coetzer & Schepers, 1997; Hoole & Boshoff, 1995; Crant, 1995; Kren, 1992; Barrick & Mount, 1993; Tett et al., 1991). The usefulness of personality measures in predicting sales performance can therefore not be discounted based on organizational behaviour research. For this reason, a personality measure was used in this research, as well as tests of the reliability and validity of using personality measures in predicting sales performance.

The locus of control was used because it is a key construct in predicting sales performance and entrepreneurial behaviour. Research shows that high internal locus of control scores and high scores in autonomy indicate a direct relationship with success and good performance (Jennings & Zeithaml, 1983; Bernardi, 1997; Boone et al., 1996; Coetzer & Schepers, 1997; Kolb & Aiello, 1996; Kren 1992; Mwamwenda, 1995).

The results of this study with regard to the locus of control were counter to previous studies predicting sales performance. In this study there was no indication of a relationship between the external locus of control and net commission earned.

Earlier studies with regard to entrepreneurship showed that successful entrepreneurs have a high internal locus of control. The drive, ambition, proactiveness, and self-starter behaviours that define entrepreneurs are closely related to the locus of control personality trait (Hornaday, 1971; Brockhaus, 1980). It has been speculated that earning potential is likely to be higher when individuals score high on the internal locus of control, that a positive relationship exists between the locus of control and incentives, and a positive relationship exists between the locus of control and achievement (Bernardi, 1997; Boone et al., 1996; Kren, 1992; Kolb & Aiello, 1996). Boone et al. (1996) and Schepers (1995) found that internally motivated people will show more commitment in their work, regardless of the working conditions. In times of difficulty in their work, externally motivated people typically feel helpless to affect important events and are likely to become resigned or indifferent, with fewer signs of concern and commitment. Brown et al. (1998) remind us that salespeople with an internal locus of control see themselves as causal agents and prefer to work in an environment where they can exercise control, take risks and work with autonomy.

The results of this study are also counter to past studies when applied to a cross-cultural sales situation. The lack of research using the locus of control in a cross-cultural sales setting is evident. Psychometrically, the locus of control instrument proved to be

valuable for this sample, but its predictive value as a construct was low. However, it is clear that its predictive value of performance is limited in a cross-cultural sales setting. The only significant correlation with performance outcomes was the negative correlation of the internal subscale with net commission earned. According to Brown et al. (1998), individuals with an internal locus of control see themselves as causal agents and tend to set themselves higher goals, because achieving these goals depends on their own efforts and abilities. If internals perceive overly bureaucratized and rigid systems, they feel a distinct lack of personal control and may feel demotivated (Boone, Brabander & Witteloostuijn, 1996; Nwachukwu, 1995). This may account for the negative relationship between commission earned and the internal locus of control.

The results indicate that although some salespeople have high internal scores, they may not be able to exercise their need for control, risk-taking and autonomy in their work. The organizational structure may not allow enough flexibility and freedom for salespeople to exercise control over their tasks. The management styles of the sales leaders, company policies and restrictions and rules may make sales ineffective. It also could be reasoned that performance outcomes are contingent on external or environmental factors, regardless of whether an individual has an internal locus of control. These findings are supported by the research of Morris and Sexton (1996), who found that company performance is far more contingent on entrepreneurial intensity than the amount of entrepreneurship that takes place. Therefore, behaviours such as innovation, risk-taking and proactivity need to be encouraged by management in order for salespeople with an internal locus of control to be successful. Kren (1992) links

internal locus of control with incentives. Thus, when incentives are absent, internals could perform poorly. The results from this research may support this argument.

It also is evident from this research that high internal locus of control scores correlate with low lapse ratios. Brown et al. (1998) indicated that individuals with high internal scores show a need to exercise control, take calculated risks and work independently. However, based on these results, in a sales environment the need for risk-taking and exercising control is not related to lapse ratios. For example, a client may cancel a contract with the salesperson for reasons not related to the salesperson and how he or she performed.

7.3 Predicting sales success using autonomy

Entrepreneurship research has identified autonomy as a key dimension of an entrepreneurial orientation (Lumpkin & Dess, 1996). An individual who scores high on task autonomy shows a need for freedom to choose the method to get things done and to be action oriented (Zhou, 1998; Schepers & Coetzer, 1997). Research conducted on salespeople in South Africa indicated some cultural differences in terms of the autonomy subscale, indicating that in South Africa, African salespeople may appear to perform better with less autonomy and more structure and guidelines (Schepers & Coetzer, 1997). There appears to be no specific research indicating that high task autonomy leads to high sales performance. However, research on autonomy and performance has been done in other areas (Jennings & Zeithaml, 1983; Bernardi, 1997; Boone et al., 1996; Coetzer & Schepers, 1997; Kolb & Aiello, 1996; Kren 1992; Mwamwenda, 1995).

The results of this study with regard to the locus of control did not support the literature in predicting sales performance. Autonomy was not significantly related to performance. According to the literature review it was logical to reason that an individual who scores high on task autonomy will perform better in an unstructured environment such as sales, and success would mean fewer failures in job performance. Perhaps autonomy has no relationship with performance because this measurement is not suitable for predicting performance in a cross-cultural sales environment.

Although the Schepers Locus of Control (1995) has been shown to have predictive value in research, it may have little predictive value for this sample in a sales environment. Personality measures have shown some predictive value in entrepreneurship research, but their predictive value may not be as strong for the sales environment. Although Barrick and Mount (1993) found that task structure and the nature of the job determine which personality preferences an individual displays in order to maximize performance, the display of autonomy in sales does not appear to be prevalent.

The literature review indicates similarities between entrepreneurs and salespeople. Although entrepreneurs and salespeople appear to display common behaviours, future research could be done to differentiate the working environments and consequent behaviours displayed in these two seemingly similar areas.

7.4 Predicting sales success using demographic variables

The use of demographic variables in predicting performance has been extensive (Robinson et al., 1991; Russell, Devlin, Mattson & Atwater, 1990, Siguaw, 1995; Lundgren, 1995 Hoole & Boshoff, 1996; Boshoff & Scholtz, 1995). Although criticized by researchers (Robinson et al., 1991), the use of demographic theory in predicting performance is based on the assumptions that similar individual backgrounds share similar underlying stable characteristics and that demographic data describe past behaviour, thus assuming that past behaviour is a good predictor of future behaviour (Robinson et al., 1991).

Research has been done on gender characteristics and job performance, but results have not been consistent (Levy et al., 1994; Fischer et al., 1993; Siguaw & Honeycutt, 1995). It was hypothesized that gender differences are not related to performance outcomes; results of this study showed that gender differences do not predict performance outcomes.

The results of this study are consistent with literature illustrating that age is not a good predictor of performance ($r = -0.07101$, $p < 0.05$) and that sales experience appears to have some predictive value for future performance ($r = 0.143$; $p<0.05$). Levy et al. (1994) refer to the relationship between sales performance and sales experience as having an inverted U-shape. Adaptive selling is hypothesized to increase as the individual gains more experience (which is, in part, due to the aging process), will then level off, and subsequently decrease due to the number of senior salespeople who are promoted to higher positions. Career stages play a significant role in terms of sales performance (Levy

et al., 1994). In the exploration stage, salespeople learn how to practice selling techniques. These sales skills are maintained during the establishment and maintenance stages of their careers, and decrease during the disengagement stage of their careers (Levy et al., 1994). The average number of years in sales work for the sample in this study was 6.91 years (SD = 7.5), ranging from one year to thirty-seven years. Tenure within the sample averaged 56.3 months (SD = 73.86). The positive and significant relationship between sales experience and performance could be due to the inverted U-shape theory, which suggests that performance may be improving as individuals continue to learn sales techniques, gain more experience and advance in their career stages. The results of this study also indicated no significant relationship between age and sales experience and the lapse ratios (VEK), indicating that failure in sales is not related to age or sales experience.

Levy et al. (1994) suggested that higher levels of education make salespeople more adept in the sales process, leading to successful performance outcomes. Although research supports this relationship, the research conducted by Levy et al. (1994) found that education and sales performance are related for older salespeople, and for younger salespeople, education may not affect performance. The results of this study indicate no relationship between education and sales performance, counter to the hypothesized relationship. This result may be due to the relative inexperience of the individuals in the sample (6.91 years average sales experience). In addition, the cultural diversity represented in the sample may discount education as a positive predictor of performance, because of the discrepancies in education levels across cultures. Although 96% of the

sample in this study did complete high school, performance could be related to sales education and training rather than schooling.

The results of this study indicated that full-time salespeople performed significantly better than did part-time salespeople ($F= 5.61$, $r^2 = 0.0245$). This obvious finding is due to the relatively different amounts of time spent in the field by full-time and part-time salespeople. However the results indicated that the nature of a salesperson's contract is not predictive of failure in sales (lapse ratios). Similar results were obtained for the differences between full-time salespeople and managers related to performance outcomes ($F=3.51$, $r^2 = 0.031$).

Other demographic variables used in the research did not correlate with performance outcomes, indicating that such demographic variables are not useful in predicting performance outcomes.

The different markets targeted by salespeople, such as individuals, professionals, retired people, and businesses, are not predictive of future performance. Marital status is not predictive of performance, although it can be argued that married people may have a greater urgency to earn well, because of their increased responsibility in having to take care of a family. Although 71.1% of the sample were married, marital status did not show predictive value with regard to performance.

Individual birth order is not predictive of performance, although it has sometimes been speculated that the eldest child in a family tends to be more responsible and focused on achievement than younger siblings. Although 37.3% of the sample were first born, this variable showed no predictive value.

Perceived financial status of salespeople during their teen years is not predictive of performance. It has been speculated that people coming from disadvantaged or low-income backgrounds tend to be more entrepreneurial and focused to make money. However, 62.4% of the sample considered themselves to come from backgrounds of average financial status, yet this factor proved not to be predictive of performance. The motivation for entering the sales field is not predictive of performance. 46.5% of the sample indicated they wanted to make more money, 21.6% were looking for an opportunity to develop their own ideas, and 21.2% indicated they wanted to be their own boss. Even though these responses may indicate certain motivations for successful performance, the results indicated no relationship between motivation for entering sales and performance outcomes. An opportunity exists, however, for further research into the relationships between reasons for entering sales, sources of motivation and performance.

Goal orientation appeared to be a significant predictor of performance in this study. Participants were asked what their desired salary would be for a period of 12 months. The results indicated a significant relationship ($r = 0.19571$, $p<0.05$) with performance, signifying that individual goal orientation has value for predicting future performance, and can potentially play a role in selection and recruitment. Brown, Cron and Slocum

(1998) offer a possible reason for the positive relationship between desired salary and performance: "although high performance is the ultimate sales management objective, research shows that setting challenging goals is an important intermediate step. Personal goals have been referred to as 'directors of action', because they play a large role in determining the intensity, direction and persistence of goal directed behaviour" (Brown, Cron & Slocum, 1998, p. 88).

Differences in culture/race relating to performance were significant in this study. White South Africans averaged R38 981 higher in NEK ($F = 5.22$, $r^2 = 0.444$) and R6 740 ($F=.42$; $r^2 = 0.003$) higher in VEK. There are some significant cultural issues with regard to the working environment of different cultures in a sales context. External factors such as the markets that are penetrated, transport availability, extent and level of training and education, language and literacy obstacles may account in part for the differences in performances between different races. The results of this study indicate that opportunities exist to investigate why certain cultures perform differently in a sales environment, as this has significant implications for managers and leaders. Practitioners should remember that cultural differences should not be used as a predictor of performance in the selection process.

7.5 Predicting sales success using attitude

Entrepreneurship has been characterized as an attitude and a behavioural choice made by individuals in order to achieve success (Lumpkin & Dess, 1996; Morris & Sexton, 1996).

Top performers need to make essential choices in almost every situation they face (Kubistant, 1986). Thus, attitude is linked to performance.

Research suggests that attitude in conjunction with perceived control has a positive effect on long-term performance (Norman & Smith, 1995). The relationship between attitude and performance also has been researched using attribution variables. For example, salespeople who are sensitive to criticism or failure may experience lowered self-esteem and reductions in client-related motivation (Corr & Gray, 1996). Research also has been conducted on entrepreneurs in a South African setting (Boshoff & Scholtz, 1995), using attitude to differentiate entrepreneurs and non-entrepreneurs. Research conducted in South Africa, however, also indicates there may be cross-cultural issues related to attitude and performance, and factor analysis has shown that the EAOS instrument may not be predictive in a South African context (Hoole & Boshoff, 1996).

Because the use of the EAOS in the South African context has been both limited and, questioned in terms of its cross-cultural validity, the psychometric value of the EAOS measurement tool was analysed using exploratory factor analysis. The original item specifications for the EAOS scale developed by Robinson et al. (1991) proved inconsistent and unreliable, with subscale items often loading randomly between factors, as indicated in Table 6.6, and failing to capture the domain of interest for each factor. Given these poor loading patterns, the inventory as developed and specified offered little research merit.

The individual factor alpha coefficients for the EAOS were: achievement subscale (Cronbach alpha = 0.8197), innovation (Cronbach alpha = 0.6353), personal control (Cronbach alpha = 0.7552), and self-esteem (Cronbach alpha = 0.5963). Self-esteem and innovation did not show significant factor reliability.

The results of the exploratory factor analysis done on the EAOS indicated low reliability of this measure for the sample tested, due to poor factor loadings and strong correlations between the factors. The factor correlations for the achievement subscale showed a positive correlation with both the personal control ($r = 0.312$) and innovation ($r = 0.242$) subscales. Similarly, the personal control subscale showed a positive correlation with the innovation subscale ($r = 0.210$). The achievement subscale did not show a significant correlation with the self-esteem subscale ($r= 0.102$). Similarly, the self-esteem subscale did not correlate significantly with personal control ($r = 0.0005$). The self-esteem subscale, however, did not correlate with the innovation subscale ($r = - 0.122$). Thus psychometrically, the achievement, personal control and innovation sub-scales are similar constructs, and this measure offers little research value. Nevertheless, correlations were attempted between the EAOS scores and performance, but these results may not be reliable or predictive of performance.

There were small, but negative statistically significant, relationships between personal control and NEK ($r = -0.017$, $p<0.05$), but no relationship between personal control and VEK. Personal control (from the EAOS) may be a similar construct to the internal locus of control construct, because the results indicate a similar relationship with performance.

This result may confirm the theory that when individuals score high on the internal locus of control and personal control, but show decreasing performance outcomes, they feel a loss of control in their working environment.

Based on the results of this study, a model for predicting performance outcomes can be drawn (Figures 7.1a and 7.1b). Given the small correlations in figure 7.1a (r= 0.143 – r=0.195), although statistically significant, none are strong predictors of performance. Therefore advocating a model based on these variables is a questionable endeavour. However, sales experience and goal orientation in terms of desired salary may be of some benefit to organizations; in addition, the personal control and internal locus of control correlations offer a possible opportunity for management intervention in understanding why individuals with a high internal locus of control and a high need for personal control are not performing in this sample. External variables may affect behaviour, and therefore performance, in this sales environment. Cross-cultural issues also may play a role, but further research will be needed to gain further understanding.

FIGURE 7.1a

ACTUAL CORRELATIONS BETWEEN THE VARIABLES AND PERFORMANCE OUTCOMES

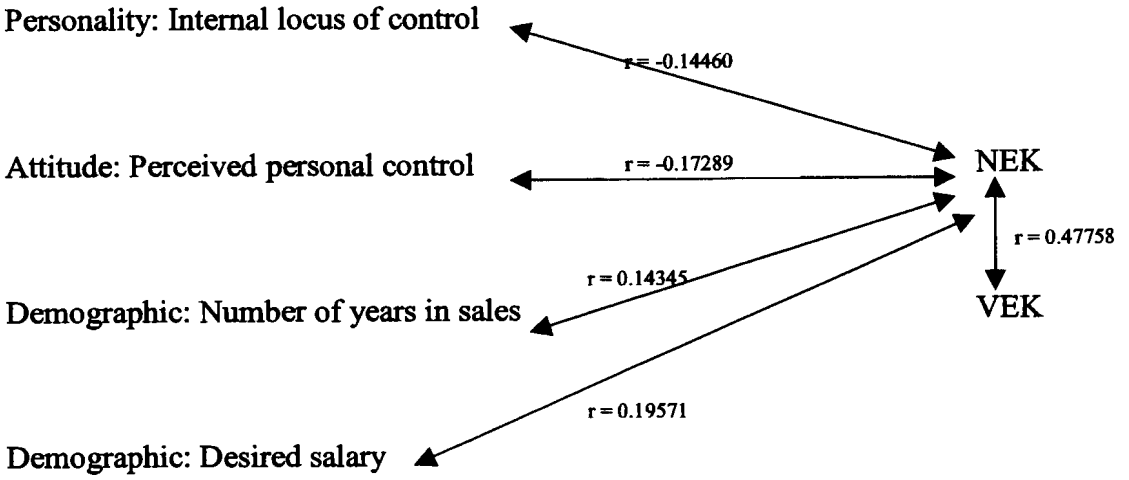
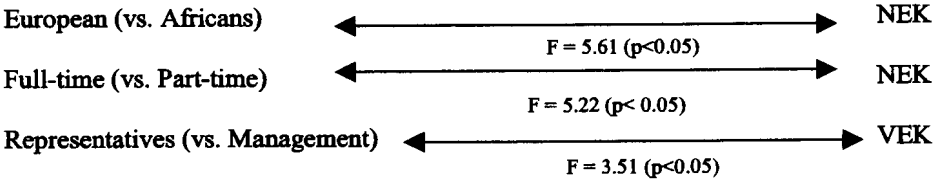


FIGURE 7.1b

ACTUAL DIFFERENCES IN PERFORMANCE OF DEMOGRAPHIC VARIABLES USING ANOVA



Although the model (Figures 7.1a and 7.1b) also shows the demographic variables that were statistically significant in terms of the performance outcomes, these variables show little value for managers and practitioners. The cultural differences illustrated in Figure 7.1b may be due to factors such as education and literacy issues that may be a problem in the sales force in the post apartheid era. Results related to the other variables, namely full-time vs. part-time status and representative vs. managerial position, seem to be

logical and understandable because of the time differences spent in the sales process. Part-time salespeople and managers essentially have different job descriptions than those involved in sales on a full-time basis.

This model therefore offers little value to managers in terms of predicting performance or including these variables in the selection process.

7.6 Contribution of the study

This study contributes to South African research in a post apartheid setting. It offers practitioners some guidelines and suggestions in terms of practical and theoretical implications of the research, for application to human resources management and understanding of the individual within the workplace. The research highlights the existing problems with regard to cross-cultural research in South Africa, as well as the use of unreliable psychometric instruments in sales. The research provides opportunities for future differentiation of entrepreneurship and sales, suggesting that sales may not fall under the entrepreneurship 'blanket'. The controversy surrounding the value of personality and demographics in measuring performance has motivated more research to be done in this area. This research has certainly highlighted the need for more study of cultural diversity within the sales milieu. It is hoped that research using South African participants in sales and performance outcomes will continue, enabling a fruitful line of inquiry.

7.7 Limitations of the study

Some of the shortcomings in this study include the lack of previous research on cross-cultural sales environments in South Africa. As a result much of the study was based on findings from research done in sales and other professions in other parts of the world. The low level of literacy and education of the African sales force in a post apartheid working environment may have contributed to the poor reliability of the measures. The cultural differences (between White South Africans and Black South Africans) and performance outcomes were not separated in the study in terms of the personality questionnaires and the outcome variables, perhaps accounting for the poor reliability of the measures. The participants all came from the same company. However, sampling was structured in a way that allowed for a better distribution of all the cultures within the organization.

7.8 Practical Implications of the study

The findings lead to a number of implications for managers and leaders. Understanding the value of recruiting accurately and using reliable procedures to predict performance of salespeople provide opportunities to search for and develop new methods for better effectiveness. Knowledge of methods and measures that are reliable (or unreliable) can help organizations search for and use more effective means of predicting performance. This study provides managers with evidence that demographic variables and personality questionnaires may not help predict performance of salespeople, unless these variables have been tested to be psychometrically reliable. However, some practical suggestions can be made.

Managers and leaders should be cautious about measuring performance using personality instruments that have not been shown to be reliable in a cross-cultural sales environment. Hoole and Boshoff (1996) illustrated the danger of uncritically applying foreign scales cross-culturally when they conducted research on entrepreneurs and non-entrepreneurs in South Africa. The results indicated that the intercultural portability of constructs is an important consideration when doing intercultural research.

The locus of control may be a good intervening construct to use along with other variables, such as motivation and attitude, in climate evaluations, productivity studies or behaviour modification interventions, where the locus of control can be used to help assess an individual's response/reaction to certain events within the organization and the effects of that response on performance. The results of the internal locus of control related to performance for this sample indicate a possible opportunity for managers in the organization to investigate why individuals with an internal locus of control are not performing in an environment where the opportunity to be in control is part of the nature of sales.

Some suggestions for the use of demographic variables in organizations and specifically in selection and recruitment can be made. Results indicate that the nature of the employment contract, cultural issues, sales experience and goal orientation (in terms of desired salary) may relate to performance outcomes. The nature of the employment contract and whether an individual prefers to work part-time or full-time relates to the

individual's needs and how he or she prefers to work. In the selection interview, questions such as "please describe the most favourable conditions necessary for you to perform and obtain job satisfaction" would provide useful information to organizations, while remaining within labour law guidelines.

Cultural and racial issues in selection and recruitment remain sensitive and cannot be used as potentially discriminating variables. The results of the racial differences and performance outcomes in this study appear to reflect the educational, training and development issues facing managers and leaders within a post apartheid working environment. Managers and leaders have the opportunity to investigate the possibilities for better preparing African salespeople to improve personal performance outcomes, especially in the areas of the structure of the working environment, management and leadership styles, and training and mentoring programmes.

Individual sales experience provides useful information for selection purposes. Previous sales experience indicates the individual maturity levels within the sales field. Caution must be exercised in including this variable in the selection interview; interviewers may ask about previous sales experience only if it is a direct component of the job tasks and important for performance. This study indicated a significant relationship between sales experience and performance and thus sales experience may be a useful variable. Previous sales experience also indicates the degree to which a candidate may need training and development.

Individual goal orientation indicates the degree to which a salesperson sets short- and long-term goals for achievement. Although this variable is not a static demographic variable, an individual's need to set sales goals indicates that he or she takes some responsibility to map out and monitor individual performance. In the selection interview, questions such as "Do you have any short- and long-term goals? If so what are they and how do you intend attaining these goals?" or "Why do you like setting goals for yourself?" and "What is your action plan for achieving certain goals?" can be used.

7.9 Research implications of the study

The primary research implication for this study is the importance of the psychometric value of the instruments used in the study and the lack of research conducted in a cross-cultural sales environment in South Africa. Some specific research implications can be explored and addressed with the following recommendations.

Psychometric instruments such as the Locus of Control and the EAOS, intended for research and practice for the South African sales force, need to be thoroughly tested for their reliability in a cross-cultural setting. Research opportunities exist to differentiate between entrepreneurship and sales in terms of the behavioural similarities and differences displayed within a cross-cultural environment. Such research could explore and compare behaviour and performance outcomes of entrepreneurs and salespeople.

Due to the cultural diversity in South Africa and based on the results of this study, research opportunities exist to investigate the differences in performance between

different cultural groups and to correlate performance with education, training and mentoring programs. Studying the goal orientation and motivation sources of salespeople may contribute to predicting future performance. Mwamwenda (1995) has researched the cross-cultural effectiveness of the locus of control, but more research needs to be conducted on the cross-cultural implications of the locus of control in organizations and sales. There also appears to be an opportunity to research individual career stages, sales experience, and performance in cross-cultural sales environments. Most research has concentrated on the locus of control and behaviour in areas such as changing life events, general organizational behaviour, leadership, goal setting, stress, competition and motivation (Kren, 1992; Boone et al., 1996 and Boone, Brabander & Witteloostuijn, 1996).

More research needs to be done linking the locus of control to sales behaviour and performance. Bernardi (1997), Boone et al. (1996), Kren (1992), and Kolb and Aiello (1996) have speculated that entrepreneurial success is related to the internal locus of control but this has not been sufficiently proved. More specifically, research can be conducted in the area of sales behaviour and the locus of control (Coetzer and Schepers, 1997; Nahavandi and Malekzadeh, 1999).

Research on the EAOS scale could continue testing of the scale for cross-cultural reliability as well as its predictive value with regard to performance outcomes in a sales environment. Currently, research in this area is not conclusive.

7.10 Future suggestions and directions

Because of inconsistent findings occurring in the set of results that was generated by this research investigation, the intention to generate a theory was dispensed with and replaced by the formulation of an improved model for the prediction of sales performance; and some conclusions can be drawn and theories generated. In summary the following was evident from a sample of salespeople in a cross-cultural working environment.

The internal locus of control may predict performance or the lack of performance, but may not highlight intervening environmental factors related to performance. Also, the locus of control may be better suited as an intervening tool with other variables to understand individual reactions in a given working environment. Entrepreneurial attitude scales may not necessarily be predictive of sales performance in a cross-cultural setting.

Detailed job analyses and competency identification may become increasingly important to structure and design the selection interview process. Managers also should be aware that demographic factors such as age, education, marital status, targets marketed, order of birth, perceived financial status as a teen and motivation for going into the sales field will not predict whether individuals will perform at sales. Previous sales experience may be a good indicator of performance, depending on the individual's career stage and the training they have received, but the lack of education, mentoring, training and literacy may be some reasons for cultural differences in sales performance. However, managers can consider that individual goal orientation may be an adequate predictor of sales

performance. Using the lapse ratio percentages is not an indication of performance as long as the net commission (NEK) outcome is greater than the lapse ratios (VEK).

Based on the results of this study, it seems that increasing opportunities are available for managers to align job analysis, performance evaluations and recruitment procedures. As more labour restrictions are placed on the selection process, it may be more beneficial for managers to consider basing interviews strictly on competencies required for the job and not so much on personality questionnaires and static variables such as demographic information. However, these changes will require an in-depth analysis of the sales tasks and skills needed to perform in sales, and research indicates the difficulty facing managers in predicting performance outcomes in the sales and service industries (Stajkovic & Luthans, 1997). The sales environment is unpredictable and unstructured. The performance, effort and output are consumed where they are produced; thus, the process is different for every salesperson and the tasks completed within the process to a large degree cannot be quantified.

With the challenges that managers face and the results gained from the study, a proposal can be made to initiate research within sales companies to align job analysis, performance evaluation and recruitment procedures. The results of this research may help managers place salespeople effectively, gain an in-depth understanding of the sales tasks (by identifying and categorizing sales tasks according to the markets that will be targeted, the sales techniques necessary for these markets and the cultural/geographic areas that will be

targeted) involved in their organizations, and potentially predict performance of salespeople.

FIGURE 7.2

PROPOSED PROCESS FOR IDENTIFYING SALES PERFORMANCE DETERMINANTS

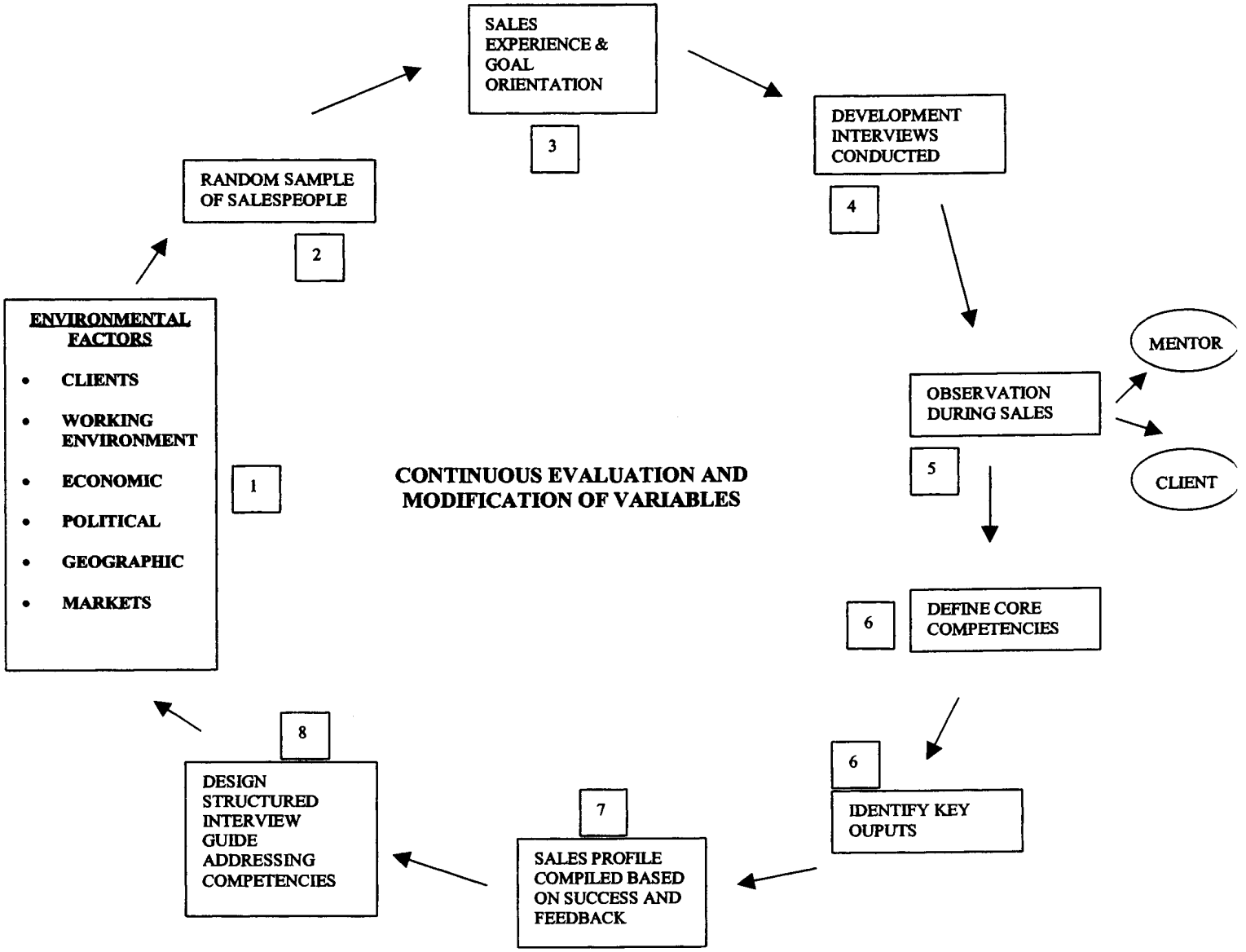


Figure 7.2 illustrates the process sales companies can adopt to achieve the goals outlined above; the process can be explained as follows:

The organization identifies external environmental factors that potentially affect the sales process (for example, management styles, client profiles, economic and political obstacles, geographic cultural differences and markets that need to be targeted). Salespeople who are aware of such factors may need to adapt the sales process accordingly in order to optimize performance. A random sample of existing salespeople is selected to participate and asked for information about financial goals for the year and previous sales experience. Interviews are conducted with the participants to identify their primary needs to achieve their financial goals. Each individual is observed during the sales process. The clients also provide feedback. Core competencies and outputs are identified based on the data gathered. The competencies need to be observable and measurable. Sales profiles are designed based on the information from the previous stages of the process. A structured interview guide is compiled to address the competencies and outputs for the job. These interviews can be used for selection and evaluation purposes. The process is evaluated continually and modified according to changing environmental conditions and the performance outcomes obtained.

One advantage of this process includes structuring sales positions in a manner that is measurable and predictive of future performance. This enables managers to break the task components down to identify problem areas as well as training needs for individuals, accurately structuring recruitment and selection to represent the competencies needed for

sales, thus reducing error variance. This process can provide structure and guidelines for salespeople who need them; the process also makes it easier for sales and service organizations to comply with labour legislation. Using this process, managers can determine whether different competencies are needed for different target markets or culturally diverse geographic areas. This can eliminate cross-cultural issues surrounding the reliability and validity of psychometric instruments, aligning recruitment with job analysis and performance evaluations and preventing competencies from becoming redundant in a changing environment through continuous evaluation of the sales process.

Bibliography

Allport, G.W. (1937). Personality: a psychological interpretation. New York: Holt, Rinehart & Winston.

American Psychological Association publication manual (4th ed.). (1995). American Psychological Association: Washington, DC.

Amit,R., Glosten, L., & Muller, E. (1993). Challenges to theory development in entrepreneurship research. Journal of Management Studies, 30, 815-834.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.

Bardes, D. (1995). What about the human factor? Life Association News, 90, 74-77.

Barling, J., Kelloway, E.K., & Cheung, D. (1996). Time management and achievement striving interact to predict car sales performance. Journal of Applied Psychology, 81, 821-826.

Barrick, M.R., & Mount, M.K. (1991). The big five personality dimensions and job performance: A meta-analysis. Journal of Personnel Psychology , 44, 1-26.

Barrick, M.R., & Mount, M.K. (1993). Autonomy as a moderator of the relationships between the big five personality dimensions and job performance. Journal of Applied Psychology, 78, 111-118.

Barrick, M.R., Mount, M.K. & Strauss, J.P. (1993). Conscientiousness and performance of sales representatives: Test of the mediating effects of goal setting. Journal of Applied Psychology, 78, 715-722.

Bell, H.S. (1946). How to succeed in life insurance selling: A manual on the mechanics of life insurance salesmanship. The world's work (1913) Ltd: Kingswood.

Bernardi, R.A. (1997). The relationships among locus of control, perceptions of stress and performance. Journal of Applied Business Research 13, 1-8.

Boone, C., De Brabander, B., & van Witteloostuijn, A. (1996). CEO locus of control and small firm performance: An integrative framework and empirical test. Journal of Management Studies, 33(5), 667-699.

Boshoff, A.B. & Scholtz, C.P.T. (1995). Measuring attitudes as a way of differentiating entrepreneurs. South African Journal of Economic and Management Sciences, 16, 1-11.

Bowditch, J.L. & Buono, A.F. (1994). A primer on organizational behavior (3rd.ed.). John Wiley & Sons Inc: New York.

Bowen, D.D. & Hisrich, R.D. (1986). The female entrepreneur: A career development perspective. Academy of Management Review, 11(2): 393-407.

Brockhaus, R.H. (1980). Risk taking propensity of entrepreneurs. Academy of Management Journal, 23(3), 509-520.

Brown, S.P., Cron, W.L., & Slocum, J.W. (1998). Effects of trait competitiveness and perceived intraorganizational competition on sales person goal setting and performance. Journal of Marketing, 62, 88-98.

Bygrave, W. (1989). The entrepreneurship paradigm (II): Chaos and catastrophes among quantum jumps. Entrepreneurship Theory and Practice, 14(2), 7-30.

Cattell, R.B., Eber, H.W. & Tatsuoka, M.M. (1970). Handbook for the 16 personality factor questionnaire (16 PF). Champaign IL: Institute for Personality Ability and Testing.

Coetzer, E.L., & Schepers, J.M. (1997). Die verband tussen lokus van beheer en die werksprestasie van swart bemarkers in die lewensversekeringsbedryf. Industrial Psychology, 23, 34-41.

Comer, L.B (1992). Gender differences in sales managers' perceptions of occupational gender stereotypes. Perceptual and Motor Skills, 74, 995-1002.

Corr, P.J., & Gray, J.A. (1996). Attributional style as a personality factor in insurance sales performance in the UK. Journal of Occupational and Organizational Psychology, 69, 83-87.

Crant, M. (1995). The proactive personality scale and objective job performance among real estate agents. Journal of Applied Psychology, 80(4), 532-537.

Cromie, S. & Johns, S. (1983). Irish entrepreneurs: Some personal characteristics. Research Note. Journal of Occupational Behaviour, 4, 317-324.

Donald, C. (1987). Issues in psychometric assessment in South Africa. Unpublished position paper from the AAC Industrial Psychology Unit.

Eisner, J.R. (1997). Connecting attitude with cognitive science. Progress in Communicating Sciences, 13(13), 229-250.

Erwee, R. (1987). Entrepreneurship as a career option for women: An overview of research. South African Journal of Business Management, 18(3), 152-162.

Fischer, E.M., Reuber, A.R., & Dyke, L.S. (1993). A theoretical overview and extension of research on sex, gender and entrepreneurship. Journal of Business Venturing, 8, 151-168.

Fishbein, M. (1967). Readings in attitude theory and measurement. New York: Wiley.

Gordon, J.R. (1983). A diagnostic approach to organizational behavior (2nd ed.). Boston: Allyn & Bacon, Inc.

Hoole, C. (1996). Assessment of structural equation modeling as method for predicting success of entrepreneurs. Master of Arts Thesis: University of Pretoria.

Hoole, C. & Boshoff, A.B. (1996). Measurement qualities of the EAOS when used interculturally. Presented at the International Conference for Advances in Management, Boston (1996).

Hornaday, J.A. (1971). Characteristics of successful entrepreneurs. Personnel Psychology, 24, 141-53.

Jennings, D. & Zeithaml, C. (1983). Locus of control: A review and directions for entrepreneurial research. National Academy of Management Proceedings, 42-46.

Kerlinger, F.N. (1992). Foundations of behavioral research. (3rd ed.). University of Oregon: Harcourt Brace College Publishers.

Kerlinger, F., & Pefhazur, E. (1973). Multiple regression in behavioral research. New York: Holt Rinehart & Winston.

Kolb, K.J. & Aiello, J.R. (1996). The effects of electronic performance monitoring on stress: Locus of control a moderator variable. Computer in Human Behavior, 12(3), 407-423.

Kreitner, R. (1995). Management. (6th ed.). Houghton Mifflin Company: Boston.

Kren, L. (1992). The moderating effects of locus of control on performance incentives and participation. Human Relations, 45(9), 991-1012.

Kubistant, T. (1986). Performing your best. Champaign IL: Life Enhancement Publications.

Kuratko, D.F., & Hodgetts, R.M. (1995). Entrepreneurship: A contemporary approach. (3rd ed.). The Dryden Press: Harcourt Brace Publishers.

Leary, M.R. (1991). Introduction to behavioral research methods. Belmont: Wordsworth.

Levy, M. & Sharma, A. (1994). Adaptive selling: The role of gender, age, sales experience, and education. Journal of Business Research, 31, 39-47.

Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of Management Review, 12(1), 135-172.

Lundgren, S.R.(1995). Cold call sales effectiveness: An investigation of source perceptions and gender differences. Advances in Consumer Research, 22, 606-610.

Mann L., Samson, D. & Dow, D. (1998). A field experiment on the effects of benchmarking and goal setting on company sales performance. Journal of Management, 24, 73-96.

McClelland, D.C., & Winter, D.G. (1969). Motivating economic achievement. New York: Free Press.

McDaniel, M.A. (1989). Biographical constructs for predicting employee suitability. Journal of Applied Psychology, 74(6), 964-970.

Miner, J.B. (1997). A psychological typology of successful entrepreneurs. Westport: Greenwood Publishing Group Inc.

Mischel, W. (1968). Personality and assessment. New York: Wiley.

Morris, M.H., & Sexton, D.L. (1996). The concept of entrepreneurial intensity: Implications for company performance. Journal of Business Research, 26, 5-13.

Mwamwenda, T.S. (1995). South African graduate students' locus of control, gender differences and academic performance. Psychological Reports, 77, 629-631.

Nahavandi, A. & Malekzadeh, A.R. (1999). Organizational behavior: The person-organization fit. Prentice Hall, Upper Saddle River: New Jersey.

Norman, P. & Smith, L. (1995). The theory of planned behaviour and exercise: An investigation into the role of prior behaviour, behavioural intentions and attitude variability. European Journal of Social Psychology, 5, 403-415.

Nwachukwu, O.C. (1995). CEO locus of control, strategic planning, differentiation and small business performance. Journal of Applied Business Research, 11(4), 9-14.

Ones, D.S., Mount, M.K., Barrick, M.R., & Hunter, J.E. (1994). Personality and job performance: A critique of the Tett, Jackson and Rothstein (1991) meta-analysis. Personnel Psychology, 47, 147-156.

Robinson, P.B., Stimpson, D.V., Huefner, J.C. & Hunt, K. (1991). An attitude approach to the prediction of entrepreneurship. Entrepreneurship Theory and Practice, 15(4), 13-31.

Rosenthal, R. & Rosnow, R.L. (1991). Essentials of behavioral research: Methods and data analysis. McGraw-Hill Inc: New York.

Rotter, J.B. (1966). General expectancies for internal versus external control of reinforcement. Psychological Monographs: General and Applied, 8(1),1-27.

Russel, C.J., Devlin, S.E., Mattson, J., & Atwater, D. (1990). Predictive validity of biodata items generated from retrospective life experience essays. Journal of Applied Psychology, 75(5), 569-580.

Schepers, J.M. (1995). Die Lokus van beheer vraelys: Konstruksie en evaluering van 'n nuwe meetinstrument. Tegniese verslag. Randse Afrikaanse Universiteit.

Siguaw, J.A. & Honeycutt, E. (1995). An examination of gender differences in selling behaviours and job attitudes. Industrial Marketing Management, 24, 45-52.

Stajkovic, A.D. & Luthans, F (1997). A meta-analysis of the effects of organizational behaviour modification on task performance. Academy of Management Journal, 40, 1122 - 1149.

Stanton, W.J. & Buskirk, R.H. (1987). Management of the salesforce (7th ed.). Homewood IL: Irwin.

Steward, K (1993). Marketing led, sales driven: Professional selling in a marketing environment. Butterworth-Heinemann Ltd: Oxford.

Tabachnick, B.G. & Fidell, L.S. (1989). Using multivariate statistics. (2nd ed.). Harper Collins Publishers: New York.

Tett, R.P., Jackson, D.N., Rothstein, M. (1991). Personality measures as predictors of job performance: A meta-analysis. Personnel Psychology, 44, 703-742.

Weiner, B. (1986). An attributional theory of motivation and emotion. New York: Springer- Verlag.

Zhou, J. (1998). Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance. Journal of Applied Psychology, 83, 261-276.