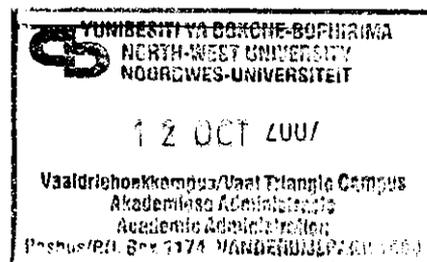


THE DEVELOPMENT AND EVALUATION OF AN EXECUTIVE COACHING PROGRAMME

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COMMENTS

The reader is reminded of the following:

- The references as well as the editorial style as prescribed by the *Publication Manual (5th edition)* of the American Psychological Association (APA) were followed. This is in line with the policy of the Programme in Industrial Psychology of the North-West University to use APA-style in all scientific documents as from January 1999.

- The thesis is submitted in the form of three research articles.

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SUMMARY

Title: The development and evaluation of an executive coaching programme.

Key terms: Executive coaching, wellbeing, performance measurement, dispositional sense of coherence, dispositional optimism, job demands, job resources, work-related wellness, burnout, engagement, situational sense of coherence, learned optimism, coping strategies, ecological measuring assessment.

The 21st century business environment can be described in terms of globalisation, intensified competitiveness on a global level, and ever-increasing customer expectations. In the changing nature of the world of work, with its increasing complexity, competition and accelerated pace, the issue of leadership development is critical. Executives are pressured to continuously improve their performance, skills and contribution to the organisation. In the mining industry, executives are experiencing ongoing skill shortage, increased job stress, increased job dissatisfaction and the need to redress social imbalances via affirmative action and accelerated career development. This highlights the need to find effective ways of developing executives. In South Africa more traditional forms of executive development, such as prescribed training programmes, courses and business schools are used. Training programmes, courses and business schools do not address specific individual needs but tend to be more generic in content. Over the course of the last 10 years, executive coaching, a one-on-one intervention with middle and senior managers for the purpose of improving or enhancing management skills, has become widely adopted by the corporate community. Executive coaching is one of the fastest growing executive development processes in adult learning. Recent literature in the field of coaching purports the advantages of coaching such as increased performance, job satisfaction, team effectiveness, self awareness, decreased job stress, higher optimism and change management.

The objectives of this study were to develop an executive coaching programme and to determine the effect of this programme on the general wellbeing, job characteristics, coping strategies, personality characteristics (both pervasive and situational), work-related wellness, as well as the performance of executives in the mining industry in South Africa. A longitudinal design was used. The participants ($n = 29$) consisted of General Managers, Mine Overseers and Production Managers from one area in a large mining company in South

Africa. The Maslach Burnout Inventory – General Survey (MBI-GS), the Utrecht Work Engagement Scale (UWES), the Life Orientation Test – Revised (LOT-R), the Job Characteristics Survey - Mining (JCM), the Learned Optimism Scale (LOS), the Situational Sense of Coherence Scale (SSOC), the Perceived Wellness Scale (PWS) and a 360° Performance Evaluation Measurement (PEM) were used.

The results showed that the Executive Coaching Programme developed for this study increased the general wellbeing, job characteristics, performance and coping strategies of the executives in the mining industry. The study also found an increase in the situational personality characteristics (situational sense of coherence and learned optimism) after the completion of the coaching programme. Furthermore, the results showed an increase in the positive affective evaluation of work (engagement) (vigour and professional efficacy), as well as a decrease in the negative affective evaluation of work (burnout) (exhaustion and cynicism). In terms of coping strategies passive coping decreased, while problem-focused coping and emotion-focused coping increased. Interestingly, the findings showed an increase in pervasive personality characteristics and a decrease in absorption of executives after completion of the coaching programme. The qualitative results from the diary study showed very positive reports in relation to the executives' experiences of the performance evaluation process and the executive coaching programme in relation to their development.

Recommendations for future research are made.

OPSOMMING

Titel: Die ontwikkeling en evaluering van 'n *coaching* program vir senior bestuurders.

Sleutelterme: Senior bestuurders, *coaching*, welsyn, prestasie-meting, disposisionele koherensiesin, disposisionele optimisme, werkseise, werks-hulpbronne, wekswelsyn, uitbranding, begeestering, situasionele koherensiesin, verworwe optimisme, coping-strategieë en ekologiese metingsevaluering.

Die 21st eeu besigheidsongewing kan beskryf word in terme van globalisasie, intense kompetisie op 'n globale skaal, en 'n toename in kliënte verwagtinge. In die veranderende aard van die werkende wêreld met sy toenemende kompleksiteit, kompetendheid en versnelde tempo, kom die leierskapsontwikkelingskwessie krities na vore. Bestuurders word onder druk geplaas om voortdurend hul prestasie, vaardighede en bydrae tot die organisasie te verbeter. In die mynbedryf ervaar senior bestuurders deurlopend vaardigheidstekorte, verhoogde werksstres, verhoogde werksontevredenheid en die behoefte aan regstelling van sosiale wanbalanse via regstellende aksie en versnelde loopbaanontwikkeling. Dit beklemtoon die behoefte om doeltreffende wyses te vind vir die ontwikkeling van senior bestuurders. In Suid Afrika word tradisionele vorme van leierskapontwikkeling soos byvoorbeeld: opleidingsprogramme, kursusse en besigheidskole gebruik. Opleidingsprogramme, kursusse en besigheidskole spreek nie spesifieke individuele behoeftes aan nie maar neig om meer generies in inhoud te wees. Oor die afgelope tien jaar het *coaching*, 'n direkte intervensie met middel- en senior bestuurders met die doel om bestuursvaardighede te verbeter of uit te brei, wyd uitgekring in die korporatiewe gemeenskap. *Coaching* is een van die vinnigste groeiende bestuursontwikkelingsprosesse in volwasse opleiding. Onlangse literatuur in die *coaching* veld hou voordele voor soos verhoogde prestasie, werks-tevredenheid, spandoeltreffendheid, selfkennis, verminderde werksstres, groter optimisme en bestuur van verandering.

Die doelstellings van hierdie studie was die ontwikkeling van 'n *coaching* program vir senior bestuurdes en om die invloed van hierdie program op die algemene welsyn, werkseienskappe, coping-strategieë, persoonlikheids-eienskappe (standhoudend sowel as situasioneel), werksverwante welsyn, sowel as die prestasie van senior bestuurdes in die mynbedryf in Suid-Afrika te bepaal. 'n Longitudinale ontwerp is gebruik. Die deelnemers ($n = 29$) het

bestaan uit Algemene Bestuurders, Myn-toesighouers sowel as Produksiebestuurders van een area van 'n groot mynmaatskappy in Suid-Afrika. Die Maslach-Uitbrandingsvraelys – Algemene opname (MBI-GS), die Utrecht Werksbegeesteringsvraelys (UWES), die Werkskenmerkeskaal – Mynbou (JCM), die Coping ten opsigte van Ervaarde Probleme vraelys (COPE), die Lewensoriëntasievraelys (OLQ), die Hersiende weergawe van die Lewensoriëntasietoets (LOT-R) en 'n 360° Prestasiemeting is gebruik.

Die resultate het aangetoon dat die *coaching* program vir senior bestuurders wat vir hierdie studie ontwikkel is, die algemene welsyn, werkeienskappe, prestasie, coping-strategieë van senior bestuurders in die mynbedryf verbeter het. Die studie het ook gevind dat daar na voltooiing van die *coaching* program 'n toename was in die situasionele persoonlikheidseienskappe (situasionele koherensiesin en verworwe optimisme). Die resultate het 'n verhoging aangetoon in die positief-afektiewe evaluering van werk (begeesting) (energie en professionele doeltreffendheid), asook 'n afname in die negatief-afektiewe evaluering van werk (uitbranding) (uitputting en sinisme). In terme van coping-strategieë is daar gevind dat passiewe coping afgeneem het, terwyl probleem-gefokusde coping en emosie-gefokusde coping toegeneem het. 'n Interessante bevinding is dat daar na voltooiing van die *coaching* program 'n toename in die standhoudende persoonlikheidseienskappe en 'n afname in absorpsie van senior bestuurders waargeneem is. Die kwalitatiewe resultate van die dagboek-studie het aangedui dat bestuurders se ervaringe van die prestasiemeting en die *coaching* program in terme van hul ontwikkeling positief was.

Aanbevelings vir toekomstige navorsing word aan die hand gedoen.

CHAPTER 1

INTRODUCTION

This thesis focuses on the development and evaluation of an executive coaching programme.

In this chapter the problem statement and the research objectives (including the general and specific objectives), as well as the research method utilised in the present study, are discussed.

1.1 PROBLEM STATEMENT

The earliest English use of the word “coach” in any context took place in the 1500s to refer to a type of carriage; the root of the word suggests the conveyance of a person from a current place to another desired destination (Evered & Selman, 1989). By the 1840’s the term was used in academic settings to refer, colloquially, to private tutors assisting students at Oxford University. The emergence of the term in a sports context occurred in the 1880s and denoted a person who assisted a team to win a race, typically a boat race. Eventually, the term coaching migrated from the sporting arena to areas such as “voice coach” and “speech coach”, ultimately becoming an accepted concept in the world of business (Evered & Selman, 1989).

Over the course of the last 10 years, executive coaching, a one-on-one intervention with middle and senior managers for the purpose of improving or enhancing management skills, - has become widely adopted by the corporate community (Koonce, 1994). According to Whitworth, Kimsey-House, and Sandahl (1998), the field of coaching is on the rise, and subsequently a number of academics and practitioners have attempted to define the relatively new concept of executive coaching. Various definitions regarding executive coaching can be found in the literature. According to Koonce (1994), executive coaching is an “intensive short-term process that helps the executive address behaviour and issues that are impeding their own job effectiveness”. Belf (1995) agrees with Koonce (1994) and added that executive coaching is “provided over a specific period of time to bring about the possibility of effective action, performance improvement and personal growth”. According to O’Neill (2000), executive coaching is the process of increasing the leader’s skills and effectiveness.

According to Mink, Owen, and Mink (1993), there appears to be no single definition to describe the entire nature of executive coaching. However, it is important to distinguish coaching as a distinct concept from the closely related counselling and mentoring concepts. In the literature, there seems to be confluence among the terms coaching, counselling and mentoring. While coaching is unlocking a person's potential to maximize their own performance, mentoring is referred to as the model for coaching. Mentoring is described as a series of processes such as career growth and personal advancement, carried out over a long period of time (Mink et al., 1993). Counselling, on the other hand, is a reflective process whereby clients can explore early life and current life experiences, where they have the opportunity to heal, grieve or otherwise reconcile emotional and psychological traumas, reframe cognitive distortions and construct new behavioural repertoires (Mink et al., 1993).

According to Lester (2002), the 21st century business environment can be described in terms of global market places, globalization, global competition, hyper-competitiveness, ever-increasing customer expectations, the digital economy and talent wars. Olesen's (1996) concept of executive differentiation as a key factor in shaping competitive advantage highlights the pressure on executives in the new world of work to continuously improve their performance and contribution to the organisation. In the changing nature of the world of work, with its increasing complexity, competition and accelerated pace, the issue of leadership development is critical. Kotter (1996) supports this notion by stating the following: "As the rate of change increases, the willingness and ability to keep developing become central to career success for individuals and to economic success for organisations. Leaders develop the capacity to handle a complex and changing environment. They grow to become unusually competent – they learn to be leaders."

International trends in training and development indicate that the future workforce will require a lifelong learning orientation, that skill building in the absence of performance improvement will be inadequate, and that people will need to develop the ability to acquire skills quickly due to the increasing pace of change (Lester, 2002). Conventional wisdom recognises that traditional forms of executive development have not produced the desired effect on executive performance. One reason put forward for this is that more traditional forms of development, such as prescribed training programmes do not address specific individual needs but tend to be more generic in content. When this generic focus is combined with the increasingly complex range of new business issues, it could result in the traditional

forms of development not being able to meet the needs of individual executives (Olesen, 1996). Consequently, personalised learning seems therefore needed at executive level.

In South Africa, like many other developing countries, companies are continuously being exposed more than ever to the effects of the world economy, technological advancement and tough international competition. In the mining industry, executives are experiencing ongoing skill shortage and the need to redress social imbalances via affirmative action and accelerated career development. This highlights the need to find effective ways of developing executives (Bagshaw, 1998).

According to Fletcher (1996), organisations become so focused on bottom-line improvement that wider aspects of the welfare and development of the individual are neglected. Maslach, Schaufeli, and Leiter (2001) are of the opinion that the impact of the changing world of work is perhaps most evident in changes regarding the psychological contract. Employees are expected to give more in terms of time, effort, skills and flexibility, whereas they receive less in terms of career opportunities, lifetime employment and job security. This violation of the psychological contract is likely to have a negative impact on the general wellbeing of employees and will lead to negative affective reactions to the experience of work (Maslach et al., 2001).

According to Ryff (1989), general wellbeing includes an affective, professional, social, cognitive, spiritual and psychological dimension. Affective wellbeing includes job satisfaction and organisational commitment. The professional wellbeing dimension taps aspects of job-related motivation, ambition, self-efficacy and achievement. In this regard, burnout and work engagement (work-related wellness) have been shown to represent a positive and negative affective evaluation of the experience of work (e.g. Jackson, Rothmann, & Van de Vijver, 2006; Schaufeli & Bakker, 2004). According to Ryff (1989), social wellbeing indicates the degree to which one functions well in one's social relations at work (for example emotional intelligence, interpersonal skills, etc.). According to Langer (1989), cognitive wellbeing is a flexible state of mind and openness to novelty. Cognitive weariness was devised as an analogue to Maslach and Leiter's (1997) emotional exhaustion concept (burnout). Whereas the latter concept taps feelings of work-related fatigue (thus reflecting the tiredness-vigour dimension of affect), cognitive weariness specifically reflects employees' cognitive functioning (especially the degree to which workers are able to take up new

information and are able to concentrate on their work). Spiritual wellbeing includes spiritual processes such as purposefulness in life which leads to optimal functioning (Adams, Bezner, & Steinhardt, 1997). Psychological wellbeing is defined as the perception that one will experience positive outcomes to circumstances and events in life (Artinan, 1997). According to Wissing and Van Eeden (1997), psychological wellbeing is a combination of specific qualities, such as a sense of coherence, satisfaction with life, affect-balance and a general attitude of optimism.

The literature on subjective wellbeing usually construes wellbeing as a primarily affective state (Diener, Suh, Lucas, & Smith, 1999). However, over the past 15 years several broader conceptualisations of wellbeing have been proposed, including not only affect, but also behaviour and motivation (Ryff, 1989; Ryff & Keyes, 1995; Warr, 1987, 1994). Some of the key outcome variables in work and occupational psychology tap aspects of affective wellbeing (e.g. job satisfaction, commitment and depression), whereas other outcomes measure broader conceptualisations of wellbeing (e.g. motivation, competence and efficacy).

According to Horn, Taris, Schaufeli, and Schreurs (2004), occupational wellbeing, like general wellbeing, may be understood as a multi-dimensional phenomenon. Occupational wellbeing comprises more than affect; it manifests itself in employee cognitions, motivations, behaviours and self-reported physical health as well. Horn et al. (2004) indicated that even though occupational wellbeing can be construed as a multidimensional phenomenon, affective wellbeing was found to be the best predictor of wellbeing in the occupational context. Warr (1999) in his triaxial approach to measure wellbeing characterises general wellbeing as an "active state" consisting of positive affect and high arousal. At work specifically, Warr (1999) considers job satisfaction, job involvement and organisational commitment as but a few of many measures of job-related wellbeing. Other researchers (e.g. Antonovsky, 1987; Code & Fox, 2001; Goleman, 1995; Maslach & Leiter, 1997; Seligman, 1991; Sujana, 1999) describe sense of coherence, optimism, personality characteristics, job characteristics, emotional intelligence and coping styles as indicators of general wellbeing at work.

According to Seligman (1991), the new employment relationship focuses on human strengths and optimal functioning. In line with the increased focus of psychology on human strengths and optimal functioning, an increasing number of studies have focused on job engagement

which could be viewed as the antithesis of burnout. Maslach and Leiter (1997) redefined burnout as an erosion of engagement with the job. Maslach et al. (2001) explain that work that started out as important, meaningful and challenging becomes unpleasant, unfulfilling and meaningless. Energy turns into exhaustion, involvement into cynicism and efficacy into ineffectiveness. Engagement, in contrast, is characterised by energy, involvement and efficacy. Schaufeli, Salanova, Gonzáles-Romá, and Bakker (2002) explain that vigour, which is the theoretical opposite of mental exhaustion, is characterised by high energy levels, mental resilience when working, a willingness to exert effort into one's work and to persist even in the face of adversity. Dedication, which is the theoretical opposite of cynicism, is related to enthusiasm, inspiration, pride, challenge and a sense of significance with what you are doing. Absorption refers to a state where time passes quickly and where the individual has difficulty in detaching him- or herself from work.

Recent evidence in personal goals literature indicated that the structure and organisation of personality could be viewed as an important determinant of general wellbeing. Because personality characteristics are by definition consistent across situations and life span, they may account for part of the stability of wellbeing (Diener & Lucas, 1999). Furthermore, these personality characteristics can provide useful information in the organisational context. For instance, concomitant measurements of sense of coherence, optimism and work experiences may offer explanations of additional variance in organisational data such as absenteeism and performance (Code & Fox, 2001).

According to Antonovsky (1987), the strength of sense of coherence is a relatively stable personality characteristic that predicts and explains one's movement along the health-disease continuum. In this regard, sense of coherence can be defined as a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected. The definition of sense of coherence includes three dimensions, namely comprehensibility, manageability and meaningfulness (Antonovsky, 1987). A strong sense of coherence is negatively related to certain personality characteristics such as anxiety and neuroticism (Frenz, Carey, & Jurgenson, 1993) and work stress (Feldt, 1997). A strong sense of coherence can also be related to competence and life satisfaction (Kalimo & Vuori, 1990), general wellbeing (Feldt, 1997), as well as emotional stability (Strümpfer, 1995).

Individuals with a strong sense of coherence should be able to make sense of the workplace, perceiving its stimulation as clear, ordered, structured, consistent and predictable information. Furthermore, they should experience their work as consisting of experiences that are bearable, with which they can cope and as challenges that they can meet by availing themselves of personal resources or resources under the control of legitimate others. They should also be able to make emotional and motivational sense of work demands as welcome challenges, worthy of engagement and investing their energies in. However, sense of coherence on its own without appropriate ability, skills, training and development would be of no avail (Strümpfer, 1995).

According to Artinian (1997), global sense of coherence is conceived to be develop over the life span, whereas, the situational sense of coherence describes the response that occur at the time when an attempt is made to deal with a serious life event. The relative strength or weakness of sense of coherence will influence how a person will respond to a serious life event. Dispositional sense of coherence is a global coping resource which precedes adaptive coping and is likely to reflect other, more specific coping styles (Antonovsky, 1987). Furthermore, dispositional sense of coherence would be a more stable, long term characteristic. Situational sense of coherence, on the other hand, provide an immediate assessment of sense of coherence at a specific point in time, e.g. during the experience of a serious life event. According to Diener and Lucas (1999), sense of coherence, optimism and coping strategies are by definition consistent across situations and the life span.

Seligman (1991) defines an optimist as a person who sees defeat as temporary, confined to a particular case and not as his or her own fault. A pessimist, on the other hand, believes bad events will last a long time and undermine everything he or she believes they could do, and that these events were his or her fault. Consequently, the manner in which a person attribute positive or negative events to him- or herself determines whether he or she is optimistic or pessimistic (Seligman, 1991). According to Scheier and Carver (1985), dispositional optimism can be defined as a generalised expectancy that good outcomes will prevail over bad ones. Dispositional optimism is a more stable, long term characteristic, whereas learned optimism is a more short-term and malleable concept. Learned optimism and situational sense of coherence are some of the situational measures of general wellbeing (Artinian, 1997; Seligman, 1991). These situational personality variables are less stable across situations and across life span. According to Sujana (1999), learned optimism has proven to be practically

beneficial for understanding the mechanisms of employee performance and turnover for instance. It focuses on protecting self-esteem and can be seen as the emotional consequence of attributing success to internal causes and failure to external causes. Sujan (1999) found that employees who apply learned optimism showed increased performance and happiness. Moreover, Papenhausen (2004) indicated that top managers' dispositional optimism positively influence their recognition of firm problems. However, there seems to be a lack of research in terms of situational personality variables such as situational sense of coherence and learned optimism in the organisational context, especially in the South African context. Studying situational personality characteristics are important for the field of psychology because they examine the natural, spontaneous reactions of people towards certain situations (Reis, 1994). Through the situational variables the experiences of the individual can be assessed continuously over a specific time-span, and as such a clear picture of wellbeing can be formed.

According to Johnson and Cooper (2003), work experiences translate directly into mental health outcomes, which indirectly affect employee's life satisfaction. Furthermore, the experience of work in terms of job demands, job resources and job characteristics influence job satisfaction, as well as personal accomplishments (Kelloway & Barling, 1991). According to the Job Characteristics Model, a job characteristic is an attribute of a job that creates conditions for high work motivation, satisfaction and performance. Hackman and Oldham (1980) proposed that five core job characteristics namely: skill variety, task identity, task significance, autonomy and feedback should be included in any job. This model links to wellbeing by assuming that there is a linear relationship between job characteristics and employee wellbeing (Hackman & Oldham, 1980). According to the Job Demands-Resources (JD-R) Model, demanding characteristics of the working environment such as work pressure, overload, emotional demands and poor conditions may lead to the impairment of health (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004). Furthermore, organisational stressors can be divided into job demands and lack of job resources (Schaufeli & Enzmann, 1998). Job demands refers to the tasks that have to be done, including physical, social and organisational aspects of the job that require sustained physical and mental effort. Job resources refer to those physical, psychological, social or organisational aspects of the job that reduce job demands, are functional in the achievement of work goals, and which stimulate personal growth, learning and development. According to

the literature, employee wellbeing is best predicted by job characteristics and job demands (Coetzer & Rothmann, 2006).

Organisational effectiveness can be measured in a variety of ways, one aspect being the manner in which organisations provide the necessary resources and ensure the balancing of demands. Executives for instance, need to operate at their full potential, and it is therefore important to find the most effective means of executive development in order to increase their performance (Bagshaw, 1998). Moreover, coaching is gaining recognition as an effective method of achieving performance enhancement and it seems to be fast becoming a popular tool for companies that are trying to help their executives to perform at a higher level (Stevens, 2000). The 360-degree type performance indicator is typically used in this development process and tends to be used within the business environment to indicate how peers, supervisors and subordinates view an individual's performance and skills (Shope, 2003).

In the literature, growing evidence can be found of the advantages of coaching such as increased performance, job satisfaction, team effectiveness, decreased job stress, self awareness, higher optimism and change management (Whitworth et al., 1998). Stevens (2000) investigated the impact of executive coaching on the behavioural change of executives over a period of six months. She found that participants experienced workplace behavioural change and that executive coaching as an intervention for behavioural change improved performance. However, recommendations in terms of future research included that future studies should be conducted over a longer period (e.g. a longitudinal design). Furthermore, bigger samples of executives from a specific company should be targeted, and the relative effectiveness of training, therapeutic counselling and coaching be compared in dealing with the performance issues of executives.

However, executive coaching in South Africa is a relatively new trend and not a lot of research has been undertaken regarding the effect of an executive coaching programme on the performance and wellbeing of executives. According to Lester (2002), younger people are moving into executive positions and although they have the potential, they do not necessarily have the experience and/or the interpersonal skills to achieve the best results. More skills need to be learned, with less time to support each other, which leads to the reliance on executive coaching as a way of imparting new skills and improving existing ones (Lester,

2002). Although the reactions towards executive coaching tend to be very positive in general, research should take into consideration the subtleties of the South African context such as the coming together of different cultures in the workplace, as well as the number of unskilled, untrained people who need to be developed quickly (Lester, 2002). There's also the huge challenge of AIDS, mergers and acquisitions and the pressure of South Africa to perform in the context of globalisation (Lester, 2002).

According to the literature, executive coaching in South Africa appears to follow similar trends in the United Kingdom and the United States and has become a recognised method of executive development (Lester, 2002). However, there seems to be a stronger emphasis on coaching as a means of fast-tracking performance and increasing wellbeing. This will not only give executives the competitive advantage required, but also increase their work-related wellness.

Consequently, the following research questions can be identified:

- How are executive coaching, general wellbeing, pervasive- and situational personality characteristics, job characteristics, coping strategies, work-related wellness and the relationship between these constructs conceptualised in the literature?
- What is the content and methodology of an executive coaching programme according to the literature?
- What is the relationship between general wellbeing, pervasive- and situational personality characteristics, job characteristics, coping strategies, work-related wellness and the performance of executives in the mining industry?
- What is the effect of executive coaching on the general wellbeing, pervasive- and situational personality characteristics, job characteristics, coping strategies, work-related wellness and performance of executives in the mining industry?
- How can the overall wellbeing and performance of executives in the mining industry be improved?

1.2 RESEARCH OBJECTIVES

The research objectives can be divided into general objectives and specific objectives.

1.2.1 General objectives

The general objectives of this research are to develop and evaluate a coaching programme for executives in the mining industry in South Africa, and to investigate the role of an executive coaching programme on the wellbeing and performance of executives.

1.2.2 Specific objectives

The specific objectives of this research are:

- to determine how executive coaching, general wellbeing, pervasive- and situational personality characteristics, job characteristics, coping strategies, work-related wellness and the relationship between these constructs are conceptualised in the literature
- to determine the content and methodology of an executive coaching programme according to the literature
- to determine the relationship between general wellbeing, pervasive- and situational personality characteristics, job characteristics, coping strategies, work-related wellness and the performance of executives in the mining industry
- to determine the effect of an executive coaching programme on the general wellbeing, pervasive- and situational personality characteristics, job characteristics, coping strategies, work-related wellness and the performance of executives in the mining industry
- to make recommendations for the improvement of the overall wellbeing and performance of executives in the mining industry

1.3 RESEARCH METHOD

This study will be presented in the form of three research articles, consisting of a literature review and an empirical study.

1.3.1 Literature review

The literature review will focus on executive coaching, general wellbeing, pervasive- and situational personality characteristics, performance, coping strategies, job characteristics, work-related wellness and the relationship between these constructs.

1.3.2 Empirical study

1.3.2.1 Research design

A longitudinal design will be utilised to reach the research objectives. This design involves the investigation of units of analysis over an extended period of time (Mouton & Marais, 1992). A cross-sectional survey design will be used in order to assess interrelationships among specific variables (Shaughnessy & Zechmeister, 1997). The longitudinal study will be conducted over a six month period.

The measurement of general wellbeing and performance levels of executives in the mining industry in South Africa are operationalised as a three-phase process with a before measurement (controlling variables of work-related wellness, coping strategies, pervasive personality characteristics, job characteristics and a 360-degree performance evaluation measure) followed by an executive coaching programme intervention and an after-measurement of the same controlling variables.

During the executive coaching programme intervention, ecological measuring assessment (by means of the diary sampling method) will be used where participants would be measured in terms of situational personality characteristics, as well as general wellbeing. Diary studies require participants to respond retrospectively over days, weeks and/months and to provide summary accounts of their psychological states and experiences over a specific period of time, e.g. for the duration of an intervention. Diaries are used for studying temporal dynamics and assist in determining the antecedents, correlates and consequences of daily experiences (Bolger, Davis, & Rafaeli, 2003).

1.3.2.2 Participants

The participants will consist of 29 mining executives from one area in a large South African mining company who volunteered to partake in the study. The participants will consist of General Managers, Production Managers and Mine Overseers.

The advantage of using a small sample size is the specificity and idiosyncrasy of the findings. The researcher will not only be able to explore the study population, but also settings, events and processes that might influence and/or explain the findings further (Miles & Huberman, 1994).

1.3.2.3 Measuring Instruments

The following standardised measuring will be used, namely, the Maslach Burnout Inventory – General Survey (MBI-GS) (Schaufeli, Leiter, Maslach, & Jackson, 1996), the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002), the Job Characteristics Survey - Mining (JCM), the Coping Orientations to Problems Experienced Questionnaire (COPE) (Carver, Scheier, & Weintraub, 1989), the Orientation to Life Questionnaire (OLQ) (Antonovsky, 1987), the Life Orientation Test – Revised (LOT-R) (Scheier, Carver, & Bridges, 1994), the Perceived Wellness Survey (PWS) (Adams et al., 1997), the Situational Sense of Coherence Scale (SSOC) (Artinian, 1997), the Learned Optimism Scale (LOS) (Schutte et al., 2005) and a 360° Performance Evaluation Measurement (PEM).

The *Maslach Burnout Inventory – General Survey (MBI-GS)* (Schaufeli et al., 1996) measures respondents' relationships with their work on a continuum from engagement to burnout. The MBI-GS has three subscales: Exhaustion (Ex) (5 items; e.g. "I feel used up at the end of the workday"), Cynicism (Cy) (5 items; e.g. "I have become less enthusiastic about my work") and Professional Efficacy (PE) (6 items; e.g. "In my opinion, I am good at my job"). Together the subscales of the MBI-GS provide a three-dimensional perspective on burnout. Internal consistencies (Cronbach coefficient alphas) reported by Schaufeli et al. (1996) varied from 0,87 to 0,89 for Exhaustion, 0,73 to 0,84 for Cynicism and 0,76 to 0,84 for Professional Efficacy. Test-retest reliabilities after one year were 0,65 (Exhaustion), 0,60 (Cynicism) and 0,67 (Professional Efficacy) (Schaufeli et al., 1996). All items are scored on a seven-point frequency rating scale ranging from 0 (*never*) to 6 (*daily*). High scores on Ex and

Cy, and low scores on PE are indicative for burnout.

The *Utrecht Work Engagement Scale (UWES)* (Schaufeli et al., 2002) will be used to measure levels of engagement. Initially engagement was viewed as the positive antithesis of burnout, but according to the scale developers, it can be operationalised in its own right. The UWES is scored on a seven-point frequency scale, ranging from 0 (*never*) to 6 (*every day*). Three dimensions of engagement can be distinguished, namely Vigour (6 items; e.g. “I am bursting with energy in my work”), Dedication (5 items; e.g. “I find my work full of meaning and purpose”) and Absorption (6 items; e.g. “When I am working, I forget everything else around me”). Engaged individuals are characterised by high levels of Vigour and Dedication and also elevated levels of Absorption. Empirically, certainty needs to be obtained whether burnout and engagement are indeed opposites of the same continuum, while theoretically there seems to be a dichotomous relationship. Burnout and Engagement can be described as related but distinct concepts (Schaufeli et al., 2002). In terms of internal consistency, reliability coefficients for the three subscales have been determined between 0,68 and 0,91. Improvement of the alpha coefficient (ranging from 0,78 to 0,89) seems possible without adversely affecting the internal consistency of the scale (Storm & Rothmann, 2003).

The *Orientation to Life Questionnaire (OLQ)* (Antonovsky, 1987) will be used to measure sense of coherence. The OLQ consists out of 29 items and three subscales: Comprehensibility, Manageability and Meaningfulness. Antonovsky (1987) reported alpha coefficients ranging between 0,84 and 0,93 for the OLQ. Coetzee and Rothmann (1999) found an alpha coefficient of 0,89 for the total score of the OLQ. Kalimo and Vuori (1990) found a test-retest reliability of 0,93 for the OLQ. Regarding construct validity, there seems to be an inverted relationship between the OLQ and stress experienced. The OLQ correlates negatively with the “State-Trait Anxiety Inventory-Trait” and the “Beck Depression Inventory” (Frenz et al., 1993).

The *Life Orientation Test – Revised (LOT-R)* (Scheier, et al., 1994), a 10-item measure, will be used to measure dispositional optimism and to assess generalised outcome expectancies. Six items contribute to the optimism score and four items are fillers. Half of the items of the LOT-R are phrased positively, while the other half is phrased negatively. The items enquire about the person's general expectations regarding the favourability of future outcomes (e.g., “I hardly ever expect things to go my way”, and “I’m always optimistic about my future”).

The original Life Orientation Test (Scheier & Carver, 1985) as well as the LOT-R had a two-factor structure (optimism and pessimism). Follow-up analyses, however, have demonstrated a one-factor structure, indicating that the LOT-R measures a continuum of high, average and low optimism/pessimism (Scheier et al., 1994). The LOT-R is measured on a five-point Likert Scale, ranging from 5 (*strongly agree*) to 1 (*strongly disagree*). The LOT-R was found to have adequate internal consistency and excellent convergent and discriminant validity (Scheier et al., 1994).

The *Coping Orientations to Problems Experienced Questionnaire (COPE)* (Carver et al., 1989) will be used to measure the participant's general coping strategies. The cope is a multidimensional 53-item questionnaire indicating the different ways in which individuals cope in different circumstances. Respondents rate themselves on a four-point frequency scale, ranging from 1 (*usually not doing it at all*) to 4 (*usually doing it a lot*). In total 13 different coping strategies are measured. Five sub-scales (4 items each) measure different aspects of problem-focused coping, namely Active Coping, Planning, Suppressing of Competing Activities, Restraint Coping and Seeking Social Support for Instrumental Reasons. Five sub-scales (4 items each) measure aspects of emotion-focused coping, namely Seeking Social Support for Emotional Reasons, Positive Reinterpretation and Growth, Acceptance, Denial and Turning to Religion. Lastly four sub-scales measure coping strategies, which are used less, namely Focus on and Venting of Emotions, Behavioural Disengagement, Mental Disengagement and Alcohol-drug Disengagement (Carver et al., 1989). The COPE has been proven both reliable and valid in different cultural groups (Clark, Bornman, Cropanzano, & James, 1995; Van der Wateren, 1997). Acceptable reliability and validity levels have been determined for the COPE in the South African context, rendering it suitable for usage in South Africa (Van der Wateren, 1997). Test-retest reliability varies from 0,46 to 0,86 and from 0,42 to 0,89 (applied after two weeks) (Pienaar & Rothmann, 2003). Eight items, measuring emotional processing and emotional expression (4 items each), as developed by Stanton, Kirk, Cameron, and Dnoff-Burg (2000), will be added in line with the recommendations of Pienaar and Rothmann (2003). Pienaar and Rothman (2003) subjected the COPE to a factor analysis and found a four-factor solution, namely problem-focused coping, emotion-focused, reappraisal and avoidance. Naudé (2003) recommended that future research regarding the psychometric properties of the COPE should explore the possibility of a four-factor solution, namely active coping, passive coping, social/emotional support coping, and religion and/or humor coping mechanisms.

The *Situational Sense of Coherence Scale (SSOC)* (Artinian, 1997) will be used to measure the response that occurs in the period of time in which the person is attempting to deal with a serious life event (Artinian, 1997). The SSOC is a 12-item instrument with 5 items measuring manageability, 4 items measuring meaningfulness, and 3 items measuring comprehensibility. The overall reliability was $\alpha = 0,95$. The reliability of individual components were significant: comprehensibility, $\alpha = 0,92$; meaningfulness, $\alpha = 0,97$; manageability, $\alpha = 0,93$ (Esslinger, 1994).

The *Perceived Wellness Survey (PWS)* (Adams et al., 1997) will be used to measure perceived wellness. The PWS is a 36-item instrument measuring an individual's wellness perceptions in six dimensions, namely physical, spiritual, psychological, social, emotional, and intellectual. There are six questions in each dimension, e.g. "I expect to always be physically healthy" (physical), "I believe there is a real purpose for my life" (spiritual). "In the past, I have expected the best" (psychological), "My friends will be there for me when I need help" (social), "In general I feel confident about my abilities" (emotional), and "In the past, I have generally found intellectual challenges to be vital to my overall wellbeing" (intellectual). Responses to the questions are given on a six-point Likert scale ranging from 1 (*very strongly disagree*) to 6 (*very strongly agree*) (Bezner, Adams, & Whistler, 1999). The PWS composite score is the sum of the subscale means divided by a denominator that includes the standard deviation among subscales. Higher scores indicate greater wellness, with a range of 3-29. Research by Adams et al. (1997) has shown that the PWS scale possess adequate reliability ($\alpha = 0,88 - 0,93$) and several types of validity. The internal consistency reliability coefficient was 0,92.

The *Learned Optimism Scale (LOS)* (Schutte et al., 2005) will be used to measure dispositional optimism or the generalised expectancy that one will experience positive outcomes in life. The *Learned Optimism Scale* is a 18-item instrument that was developed by Professor Marié Wissing from the North-West University (Schutte et al., 2005). The questions are rated on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Preliminary results show acceptable levels of reliability and validity (Schutte et al., 2005).

The *Job Characteristics Survey - Mining (JCM)* will be developed for the purposes of this

study. The JCM will be based on the Job Characteristics Theory (Hackman & Oldham, 1975; 1976; 1980). This theory described the relationship between job characteristics and individual response to work. The JCM will measure the characteristics of the work environment from the perspective of possible resources and demands that typifies the mining work environment. The JCM consists of 16 dimensions, namely pace and amount of work, mental load, emotional load, variety in your work, opportunities to learn, independence in your work, relationships with colleagues, relationship with your immediate supervisor, ambiguities about work, information, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities. The questions are rated on a four-point scale ranging from 1 (*never*) to 4 (*always*). The dimensions of the JCM include pace and amount of work, mental load, emotional load, variety in work, opportunities to learn, performance management, decision making, relationships with colleagues, relationship with immediate supervisor, ambiguities about work, information, communications, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities. Rothmann, Mostert, and Strydom (2006) in their meta-study of the job characteristics across various industries in South Africa report that job characteristics should be grouped into five dimensions of job demands and resources, namely overload, job insecurity, growth opportunities, advancement and organisational support.

A *360° Performance Evaluation Measurement* (PEM) will be developed for the purpose of the study. The PEM will be based on the competency-based approach (Byham, 1982; Weightman, 1994), consisting of job-related behaviours that are essential in order to meet job and organisational objectives, as well as generic behaviours derived from the General Manager, Production Manager and Mine Overseer job profiles. The face validity of the items of the PEM will be evaluated by subject matter experts. A pilot study will be conducted four months prior to the commencement of the study, consisting of one Production Manager, 3 Mine Overseers and eleven Shift Overseers. The measure is a 31-item instrument measuring an individual's performance on six dimensions, namely, job related performance (financial management, learning and growth, and business processes), functional (technical skills, administration, health and safety, human resources, quality orientation, computer skills, security, managing information, and industrial relations), cognitive (analytical thinking, judgement, broad perspective, flexibility, decision making, planning, and organizing), leadership (individual leadership, team leadership, and leadership of change) and personal and interpersonal effectiveness (innovation, assertiveness, tenacity, verbal communication,

written communication, development orientation, and culture awareness). The participant as well as the participant's supervisor(s), peers and subordinates will complete the 360° measurement.

1.3.2.4 Statistical Analysis

The data analysis will be carried out by means of the SPSS program (SPSS Inc., 2005). Descriptive statistics (e.g. median, standard deviation, skewness and kurtosis) as well as non-parametric statistics, namely the Wilcoxon signed-rank test (statistical significance, $p \leq 0,05$) will be used to determine differences in before- and after measurement. Cronbach alpha coefficients will be used to analyse the data, as well as Spearman product-moment correlations in order to specify the relationships between the variables. A cut-off point of 0,30 (medium effect, Cohen, 1988) will be set for the practical significance of correlation coefficients.

1.4. CHAPTER DIVISION

Chapter 1	Introduction
Chapter 2	A theoretical model of work-related wellbeing of executives in the mining industry
Chapter 3	Development and evaluation of an executive coaching programme
Chapter 4	Wellbeing of executives in the mining industry: A diary study
Chapter 5	Conclusions, limitations and recommendations

1.5 CHAPTER SUMMARY

This chapter provided details of the motivation for this study, as well as the methodology to be employed. In addition to the problem statement, the objectives of the research as well as the research method were outlined. Finally the envisaged chapter arrangement was indicated.

Chapter 2 focuses on a theoretical model of work-related wellbeing of executives in the mining industry.

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CHAPTER 2

A THEORETICAL MODEL OF WORK-RELATED WELLBEING OF EXECUTIVES IN THE MINING INDUSTRY

A THEORETICAL MODEL OF WORK-RELATED WELLBEING OF EXECUTIVES IN THE MINING INDUSTRY

ABSTRACT

The objective of this study was to construct a theoretical model of work-related wellbeing for executives in the mining industry in South Africa. A literature review of work-related wellbeing was conducted. It was evident from the literature review that work-related wellbeing can be understood as a multi-dimensional phenomenon that manifests itself in employee cognitions, motivations, behaviours and self-reported physical health. According to the literature, demanding characteristics of the working environment such as work pressure, overload, emotional demands and poor working conditions may impair the work-related wellbeing, health and performance of executives. Furthermore, both the negative (burnout) and positive (work engagement) experiences of work should also be included in the model of work-related wellbeing of executives. Finally, the literature indicated that moderators such as personality characteristics, psychological conditions, job resources and coping strategies impact on the negative outcomes associated with the demands of work, and should be incorporated in a theoretical model of work-related wellbeing.

OPSOMMING

Die doel van die studie was om 'n teoretiese model van werkswelstand vir senior bestuurders in die mynbedryf in Suid-Afrika te ontwikkel. 'n Literatuuroorsig van werkswelstand was uitgevoer. Die literatuuroorsig het daarop gedui dat werkswelstand beskryf kan word as 'n multi-dimensionele verskynsel wat manifesteer in werker kognisies, motivering, gedrag, prestasie en selfgerapporteerde fisieke gesondheid. Volgens die literatuur benadeel veeleisende eienskappe van die werksomgewing soos byvoorbeeld, werksdruk, oorkraging, emosionele eise en swak werkskondisies die werkswelstand, gesondheid en werkverrigting van bestuurders. Navorsing toon dat beide die negatiewe (uitbranding) en die positiewe (begeestering) werkservaringe ingesluit moet word in 'n teoretiese model van werkswelstand vir senior bestuurders. Laastens toon die literatuur aan dat modererende faktore soos persoonlikheidseienskappe, psigologiese kondisies, werks hulpbronne en coping-strategieë 'n impak het op die negatiewe uitkomst wat geassosieer word met werkseise, en behoort dus ook ingesluit te word in 'n teoretiese model van werkswelstand.

The modern world of work poses many challenges to the individual, especially in the case of business managers and executives. The effect of work on the wellbeing of employees is becoming quite clear in terms of increased levels of job insecurity, ill health, burnout and stress experienced by many managers and executives (Gavin, Cooper, Quick, & Quick, 2003). Executives play a central role in the creation of economic activity and wealth. According to Maslach, Schaufeli, and Leiter (2001), the impact of the changing world of work is perhaps most evident in changes of the psychological contract. Employees are expected to give more in terms of time, effort, skills and flexibility, while they receive less in terms of career opportunities, lifetime employment and job security. When the psychological contract is violated in this manner, it is likely to have a negative impact on the general wellbeing of employees, which could lead to negative affective reactions in the experience of work (Maslach et al., 2001).

In the last decade employment relationships have undergone significant changes, altering not only the type of work that people do, but also when they do work and how much they do of it (Barling & Zacharatos, 2000). For many people today, work increasingly involves part-time employment, contingent employment and multiple careers. Many organisations struggle to compete and are forced to adopt practices aimed at reducing cost and increasing productivity. It is often referred to as a “do-more-with-less” mentality that favours profits over the welfare of employees (Barling & Zacharatos, 2000). According to Patterson, West, and Wall (1999), familiar mantras like re-engineering, downsizing and lean production provide the illusion of organisational efficiency to the outside world, while often placing greater demands on remaining employees. More often than not, these initiatives fail to reach its intended purpose, namely an increase in productivity. The indirect costs associated with unchecked psychosocial stress from work ultimately results in substantial costs to organisations, for instance increased healthcare costs, lost productivity and employee turnover (Dale, 2004).

According to Keyes and Haidt (2003), workers’ performance and their quality of life are negatively affected by factors such as task overload and job insecurity. When job demands exceed resources, individuals experience undesirable affective states that hinder the quality and quantity of performance, as well as negatively affecting individual wellbeing. Wellbeing, however, is a multifaceted concept, which, according to the literature, includes physical, psychological, spiritual and ethical wellbeing (Quick, Gavin, Cooper, & Quick, 2000). In the literature, the operationalisation of general wellbeing seems to vary widely according to

context namely sense of coherence, optimism, job characteristics, autonomy and coping styles, to name but a few (Antonovsky, 1987; Code & Fox, 2001; Goleman, 1995; Maslach & Leiter, 1997; Seligman, 1991; Sujan, 1999). Furthermore, it seems to be influenced to some extent by determinants of personality (Cooper, Dewe, & O'Driscoll, 2001).

In line with the changes in the new economy, the mining industry in South Africa is downsizing, outsourcing and restructuring, leaving workers feeling stressed, insecure, misunderstood, undervalued and alienated. Considering the importance of the mining industry in the local economy, one could expect employees in this industry to be exposed to these challenges in a more direct manner and on a more regular basis. Mining executives are therefore constantly challenged to manage the effects of the changing economy. Furthermore, with fewer staff doing more work in nearly every industry, employees are experiencing exhaustion both mentally and physically (Quick et al., 2000). In addition, skilled labour in newly developed positions is also difficult to find, resulting in added workloads for existing employees. More pressure is loaded onto the individual to perform and "to be" the competitive advantage within the organisation (Price, 2005). In the case of senior managers, one strategy of coping with these and other demands seem to be the use of an executive coach (Paige, 2002).

Executive coaching seems to be gaining recognition in research and practice as an effective method of achieving performance, as well as the enhancement of wellbeing. According to Stevens (2000), coaching is fast becoming a popular tool for companies that are trying to help their executives perform at a higher level. Grant (2006) regards executive coaching as a particular field of study that could prove to be a major force in the promotion of wellbeing, productivity and performance enhancement for the individual, for organisations and corporations, as well as the broader community as a whole. However, there seems to be lack of research in terms of the factors that contribute to the work-related wellbeing of executives in the mining industry in South Africa.

Consequently, it was the objective of this study to construct a theoretical model of the work-related wellbeing of executives in the mining industry in South Africa. In order to understand work-related wellbeing, however, it is necessary to take a closer look at the general wellbeing literature.

General wellbeing

Traditionally, general wellbeing was not researched in a positive, holistic, systemic and integrated manner (Wissing & van Eeden, 1997, 2002). During the 20th century, the health and social sciences have been characterised by a pathogenic paradigm, an orientation towards abnormality, sickness, diseases and dysfunction as the direct opposite of wellness (Strümpfer, 1995). Rejecting the common view that a person can only be either well or ill, Antonovsky (1987) introduced the idea of a single, bipolar continuum of “health ease/dis-ease”. In parallel, to the “health ease/dis-ease continuum”, the construct of salutogenesis was formulated (Latin “salus” = health + Greek “gen-” in “genesis” = be produced), with pathogenesis (the origin of disease or illness) at the other end of the continuum (Antonovsky, 1987). Strümpfer (1995) expanded this construct to fortigenesis (Latin fortis = strong), referring to a process of producing strength at more endpoints than health only, for instance, in work, marriage, and parenthood. Continuing from there, Wissing and van Eeden (1997, 2002) suggested the need for a new sub-discipline, in which “not only the origins of psychological wellbeing should be studied, but also the nature, manifestations, and consequently ways to enhance psychological wellbeing and to develop human capacities”. To this end they introduced the term psychofortology (or more generally, fortology) (Strümpfer, 1995).

Some literature indicates that the terms wellbeing and health promotion are used synonymously and are intended to refer to good health, a balanced life and optimal wellbeing (Els, 2005). The Indivisible Self: an Evidence-Based Model of Wellness (IS-WEL) assesses characteristics of wellness as the basis of helping individuals make choices towards healthier living (Myers & Sweeney, 2005). This model described general wellbeing in term of the creative self (intelligence, control, emotions, work, positive humour), coping self (leisure, stress management, self-worth, realistic beliefs), social self (friendship, love), physical self (nutrition, exercise) and essential self (spirituality, gender identity, culture identity, self-care) (Myers & Sweeney, 2005). According to Ryff (1989), general wellbeing is a combination of affective, professional, social, cognitive, spiritual and psychological dimensions. The Perceived Wellness Model describes general wellbeing as being physically healthy, having a greater sense of meaning and purpose in life, expecting that positive things will occur no matter what the circumstances, being more connected with family and friends, being more secure and being intellectually vibrant. Illness, on the other hand, is not so much a state of

physiological disease as it is a perception of disconnection, poor self-esteem, poor physical health, pessimism, external frustration, lack of intellectual stimulation, or any combination of these (Adams et al., 2000). Witmer & Sweeney (1992) add a similar wellbeing perspective by expressing spirituality, self-regulation, work, love and friendship as life tasks that needs to be managed. Although many conceptualisations regarding general wellbeing have been offered in the literature there seems to be some agreement in terms of the constituting elements in the literature. Consequently, general wellbeing can be described as a mix of social, cognitive, spiritual, affective, psychological, professional and work-related wellbeing (Adams et al., 2000; Nelson & Simmons, 2003; Ryff, 1989; Witmer & Sweeney, 1992).

Social wellbeing indicates the degree to which one functions well in one's social relations (Ryff, 1989). Interestingly, findings regarding social support indicate that perceived support rather than received support has the most powerful influence on general wellbeing (Adams et al., 2000). According to Adams, Benzer, Garner, and Woodruff (1998), social wellbeing could be related positively to perceived wellbeing, which means that a person with high perceived wellness will value social harmony and equality, as well as other positive behavioural attributes such as tolerance, forgiveness, gratitude and generosity in their interaction with others. Social support has been positively correlated with physical and psychological wellbeing, cognitive wellbeing and overall life satisfaction but negatively correlated with distress symptoms and psychopathology (Adams et al., 2000; Sieberhagen & Rothmann, 2004).

According to Langer (1989), cognitive wellbeing is a flexible state of mind and openness to novelty, which enables sensitivity to the present context and perspectives. A closely related concept in the literature is cognitive weariness, which was devised as an analogue to Maslach and Leiter's (1997) emotional exhaustion concept (burnout). Cognitive weariness, however, specifically reflects employees' cognitive functioning (especially the degree to which workers are able to ingest new information and are able to concentrate on their work) (Maslach & Leiter, 1997). As such, cognitive weariness taps into feelings of work-related fatigue (thus reflecting the tiredness-vigor dimension of affect). In line with some firmly held beliefs in psychology, cognitive wellbeing strongly influences physical wellbeing. According to Pelletier and Herzing (1987), mental condition has a very real and powerful influence upon the health of the body. This evidence supports the belief that the mind and the body reciprocally interact, to influence overall health and wellbeing and provides the foundation

for what has been called a “mind-body” model (Pelletier & Herzing, 1987). In the literature, specific models integrating cognitive and biological components have been proposed by several authors (e.g. Jasnoski & Schwartz, 1985; Seeman 1989; Wilson & Cleary, 1995). Wilson and Cleary (1995) for instance developed a model of patient care that integrates several components including biological and physiological variables, symptom status, functional status, spirituality and general health perceptions, among others.

According to the literature, spirituality is regarded as another dimension of general wellbeing (Adams et al., 2000). Although conceptualisations of the spiritual dimension vary among theorists, some common threads exist. These include a sense of meaning and purpose in life; connectedness to self; the environment, or to God, as well as a belief in a unifying life force (Adams et al., 2000). According to Adams, Benzer, & Steinhardt (1997), spirituality seems to be positively related to general wellbeing. According to Fowler (1997), spirituality motivates, enables, empowers and provides hope. Research showed that spirituality is negatively related to loneliness and depression, and positively related to self-esteem, togetherness, social skills, coping beliefs and connectedness (Adams et al., 2000). Moreover, spirituality has the capacity to foster or impede subjective wellbeing (Zinnbauer, Pargament, & Scott, 1999).

In the literature, affective wellbeing is regarded as one of the primary components of subjective wellbeing (Diener, Suh, Lucas, & Smith, 1999). Happiness is indicator of affective wellbeing (Diener et al., 1999). According to Seligman and Csikszentmihalyi (2000), the concept of "the calculus of wellbeing", an indicator of happiness within different spheres of life, represents what can be done to be more consistently happy in life. Happiness is something that people have to make happen, and not something that happens to them. According to Diener and Lucas (1999), happiness could result from working for one's goals, from close social relationships, as well as renewable physical pleasures. In their two multinational studies of subjective wellbeing Diener et al. (1999) found that happy individuals weighted their best life domains (e.g. health, finances, family, friends, recreation, religion, self and education) more heavily than unhappy individuals did.

According to the literature, psychological wellbeing is defined as the perception that one will experience positive outcomes to circumstances and events in life (Artinan, 1997). According to Wissing and Van Eeden (1997), psychological wellbeing is a combination of specific personality characteristics, such as a sense of coherence, satisfaction with life, affect-balance

and a general attitude of optimism. Furthermore, recent evidence in personal goals literature indicates that the structure and organisation of personality is an important determinant of general wellbeing. Personality characteristics like sense of coherence, optimism and coping strategies are by definition consistent across situations and across life span, and it is therefore plausible to assume that personality characteristics may account for part of the stability of general wellbeing (Diener & Lucas, 1999). Recently, however research has been focused on the more situational determinants of wellbeing. Learned optimism and situational sense of coherence are some of the situational measures of general wellbeing (Adams et al., 1997; Artinian 1997; Seligman, 1991). These situational personality variables are less stable across situations and lifespan, and can be viewed as an indicator of wellbeing at a specific moment in time under specific circumstances. However, there seems to be a lack of research in terms of situational personality variables like situational sense of coherence and learned optimism in the occupational context, especially in the area of coaching.

According to Antonovsky (1993), sense of coherence is a global orientation that expresses the extent to which one has a pervasive enduring through dynamic feeling of confidence that the stimuli deriving from one's internal and external environment in the course of living are structured, predictable and explicable. The definition of sense of coherence includes three dimensions, namely comprehensibility, manageability and meaningfulness (Antonovsky, 1987). According to Antonovsky (1987), dispositional sense of coherence is a global coping resource that precedes adaptive coping and is likely to reflect other, more specific coping styles. Dispositional sense of coherence seems to stabilise by the end of young adulthood, thereafter showing only minor fluctuations. According to Burr (1991), situational sense of coherence includes cognitions and behavioural responses to a specific illness situation, and as such an immediate assessment of personality characteristics utilised in a specific situation, can be made. Situational sense of coherence could therefore provide an immediate assessment of sense of coherence, whereas dispositional sense of coherence would be a more stable, long term characteristic. The subsequent strength or weakness of sense of coherence will influence how a person will respond to a serious life event. A strong sense of coherence is negatively related to certain personality characteristics such as anxiety and neuroticism (Frenz, Carey, & Jurgenson, 1993) and work stress (Feldt, 1997). Furthermore, a strong sense of coherence is also related to life satisfaction (Kalimo & Vuori, 1990), general wellbeing (Antonovsky, 1987; Feldt, 1997; Malan, 2000; Malan & De Bruin, 2001; Rothmann, 2003), as well as emotional stability (Strümpher, 1995). Redelinghuys and Rothmann (2005) found

that ministers with a strong sense of coherence showed problem-focused, active coping to stressors.

An optimist, according to Seligman (1991), could be defined as a person who sees defeat as temporary, confined to a particular case, and not as his or her fault. A pessimist, on the other hand, believes that bad events will last a long time and undermine everything he or she believes they could do, and that these events were his or her fault. Consequently, the manner in which a person attributes positive or negative events to him- or herself determines whether he or she is optimistic or pessimistic (Seligman, 1991). The benefits of dispositional optimism in the occupational context are clear from the literature. As a dispositional variable, optimism has been of considerable interest as a potential moderator of the relationship between job stressors and psychological strain (Cooper et al., 2001). According to the learned optimism paradigm (Seligman & Schulman, 1986), negative experiences can be blocked from hurting future expectations if people attribute the outcome to external (something outside of the person), unstable (changes over time) or specific (changes over situations) causes. Should the person attribute the failure to internal, stable or global causes, the experience will cause expectations to drop. And, as a corollary, positive experiences can be used to raise future expectations if people attribute the outcome to internal, stable or global causes. Should people attribute the success to external, unstable or specific causes expectations will not be greater (Seligman & Schulman, 1986; Sujana, 1999). Learned optimism, has been proven to be practically beneficial for the performance and turnover of salespeople in two insurance industries (Seligman & Schulman, 1986). The optimistic salespeople sold 35 percent more insurance policies than the pessimistic salespeople. According to Seligman (1991), learned optimism enhances negotiation skills, assertiveness and relaxation. Dispositional optimism, on the other hand has been found to positively influence top managers' recognition of firm problems and coping strategies used (Papenhausen, 2004).

Coping strategies represent the efforts, both behavioural and cognitive, that people invest in order to deal with stressful encounters (Lazarus & Folkman, 1984). Coping has been differentially conceived in several ways (Livneh, Antonak & Gerhardt, 2000): 1) both as a personality trait and situationally determined response; 2) a dynamic process and a static construct; 3) a strategy, that is mature, adaptive and flexible, but also a reaction, that is neurotic, maladaptive and rigid; and 4) a global, generally dichotomous concept, but also an intricate, hierarchically structured, multilevel concept. Lazarus and Folkman (1984) defines

coping as "constantly changing cognitive and behavioural efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of a person". According to the coping literature, different coping strategies are used by optimists and pessimists (Mäkikangas & Kinnunen, 2003). Initial conceptualisations of the coping construct include a broad taxonomy of coping as direct efforts to change the demands posed by the stressful situation on the available resources of the individual (problem-focused coping), as well as regulatory attempts to manage the emotional aspects of the stressful encounter (emotion-focused coping) (Lazarus & Folkman, 1984). It appears that optimists differ from pessimists both in their stable coping tendencies and in the kinds of coping responses they spontaneously generate when confronted with stressful situations (Carver & Scheier, 2002). Optimists seem to use more problem-focused coping strategies (e.g. information seeking) in comparison with pessimists. Problem-focused strategies include such strategies as defining the problem, generating and weighing alternative solutions and following a plan of action, while emotion-focused strategies on the other hand include processes such as avoidance, denial, seeking emotional support and positive appraisal (Stanton, Parsa, & Austenfeld, 2002). According to the literature, two broad dimensions could be added to the study of coping, namely reappraisal and avoidance (Cox & Ferguson, 1992; Ferguson & Cox, 1997). However, it is important for the wellbeing of the individual to deal with challenges in the most effective manner. Research suggests that effective coping approaches to changes in the environment serve to increase mental, psychological, physical and professional wellbeing (Ben-Zur, 1999; Friedman & Vandebos, 1992; Stanton et al., 2000; Violanti & Paton, 1999).

Professional wellbeing consists of job-related motivation, ambition, self-efficacy and achievement (Ryff, 1989). Self-efficacy reflects the judgement of an individual's ability to accomplish a certain level of performance and is positively related to job attitudes, motivation on the job, as well as job performance (Bandura, 1997). According to the self-efficacy theory, job satisfaction is indirectly influenced by self-efficacy (Judge Locke, Durham, & Kluger, 1998). Furthermore, job-related attitudes relate to job satisfaction and business performance (Ryff, 1989). Empirical research has consistently found that self-efficacy has had a significant impact on performance on a variety of tasks as well as motivation, emotional reactions and persistence on a task (Gist & Mitchell, 1992). Thomas, Moore, and Scott (1996) found that high scores of self-efficacy related to work-related wellbeing.

According to Els (2005), work-related wellbeing could be described as a life orientation toward optimal health and wellbeing in which body, mind and spirit are integrated in organisations by including organisational factors and individual dispositions as part of the holistic working system. Kelloway and Barling (1991) defined job-related wellbeing as the mechanism through which the subjective experience of work affects context-free mental health. Furthermore, the experience of work in terms of job demands, job resources and job characteristics influence job satisfaction, as well as personal accomplishments (Kelloway & Barling, 1991). Some organisational behavioural researchers take it further and define work-related wellbeing as personal growth, purpose in life, having positive relations with others, environmental mastery and positive contributions at work (Harter, Schmidt, & Keyes, 2003).

Work-related wellbeing

The determinants of work-related wellbeing may differ within various working environments, depending on the unique demands and resources that exist in the specific work context (Rothmann, Mostert, & Strydom, 2006). Furthermore, it seems that every occupation or organisation has its own specific risk factors regarding wellbeing. De Jonge and Kompier (1997) found lack of autonomy and work overload to be important stressors for production workers. For educators, interaction with learners is the most important determinant of burnout (Van Horn, Schaufeli, & Enzmann, 1999). Studies have shown that occupational stressors may result in psychological, physical and behavioural reactions, such as burnout, depression and psychosomatic diseases (Houkes, Jansen, de Jonge, & Nijhuis, 2001; Lai, Chan, Ko, & Boey, 2000).

Various models have been used to understand the effects of work on the wellbeing of employees. One of the most well known and influential models of occupational stress is that proposed by the Job Demands-Control Model (Karasek, 1979). According to the Job Demands-Control Model, effective job control or decision making is an important resource that could moderate the negative effects of job stress (e.g. psychological strain and ill health) (Karasek & Theorell, 1990). Karasek (1979) combined job demands and job control in a two by two matrix of jobs namely, jobs low on demands and low on decision latitude (“passive” jobs), jobs low on demands and high on decision latitude (“low strain” jobs), jobs high on demands and low on decision latitude (“high strain” jobs) and jobs high on demands and high on decision latitude (“active” jobs). According to Karasek (1979), a combination of high

demands and low decision latitude in the “high strain” jobs is most detrimental for people’s health and well-being. The combination of high demands and high decision latitude in the “active jobs” however, are assumed to produce little harm for the individual. According to Fletcher and Jones (1993), the key feature of this model is the synergistic relationship between demands and control, such that the combination of high demand and lack of control produces a strain effect greater than the additive effect of the two variables. Furthermore, the Job Demand-Control Model predicted that enriched job characteristics are associated with job satisfaction and low depression, while impoverished jobs are associated with job dissatisfaction and depression (Karasek, 1979).

According to the holistic model of work-related wellness (Nelson & Simmons, 2003), demands and resources in an organisation may lead to distress (e.g. burnout) or eustress (e.g. engagement). This model incorporates a broad range of demands (stressors) and individual variables that may be salient for cognitive appraisal and coping. Warr (1987) proposed a Vitamin Model to specify the relationships between stressors and employee health and well-being. This model identified the environmental features that collectively determine a person’s affective wellbeing in the workplace. According to Warr (1987, 1994), there are nine features of jobs and environmental categories (e.g. opportunity for control, opportunity for skill use, externally generated goals, variety, environmental clarity, availability of money, physical security, opportunity for interpersonal contact and valued social position) that underlie affective wellbeing. As with the physical effects of vitamins this model is conceived as being analogous to aspects of the work environment. Collectively, vitamins have a beneficial effect (when the intake is moderate) or a detrimental effect (when the intake is excessive) on human physiology (Warr, 1987). Moreover, environmental features can promote or decrease affective wellbeing. Job features can impact negatively on affective wellbeing in a way similar to the toxic effects of the excessive use of Vitamin A and D. Conversely taking large doses of Vitamin C and E has no known adverse effect. According to this model, the availability of associated environmental features like money, valued social position and physical security is analogous to the effects of Vitamin C and E (Warr, 1987). Empirical studies (e.g. de Jonge & Schaufeli, 1998; Warr, 1990) found curvilinear relationships between job demands and several strain measures such as job related anxiety, job related depression, and low job satisfaction, and autonomy and job satisfaction.

According to the Job Demands-Resources (JD-R) Model, demanding characteristics of the working environment such as work pressure, overload, emotional demands and poor conditions may lead to the impairment of health (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Scheufeli & Bakker, 2004). This model divided organisational stressors into job demands and lack of job resources (Schaufeli & Enzmann, 1998). Job demands refers to the tasks that have to be done, including physical, social and organisational aspects of the job that require sustained physical and mental effort. According to Meijman and Mulder (1998), job demands may lead to job stress when employees are confronted by demands which require effort when they have not recovered from stress caused by previous demands. In this view, job stress can be viewed as the mind-body arousal resulting from the physical and psychological demands associated to the job (Rothmann, Steyn, & Mostert, 2005; Spielberger, Vagg, & Wasala, 2003). Job resources, on the other hand refer to those physical, psychological, social or organisational job aspects that are necessary, firstly to achieve work goals, secondly to reduce job demands and lessen physiological and psychological costs, and thirdly to stimulate personal growth and development (Demerouti et al., 2001). Coetzer and Rothmann (2006) found that the wellbeing of employees in an insurance industry was best predicted by job characteristics and job demands. The results of the multiple regression analysis showed that 16 percent of the variance in individual commitment to the individual and 29 percent of the variance in the organisational commitment to the individual were explained by occupational stress. Furthermore, 15 percent of the variance in physical ill health and 24 percent of the variance in psychological ill health was explained by occupational stress. The results also showed that three occupational stressors, namely work-life balance, overload and job characteristics obtained significant regression coefficients and are therefore the best predictors of physical and psychological ill health. Studies have shown that job demands are significantly related to burnout, while job resources are related to cynicism and reduced professional efficacy (Peeters & Le Blanc, 2001; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003).

Schaufeli and Bakker (2004) extended the Job Demands-Resources (JD-R) Model by adding engagement, health impairment, and organizational withdrawal in their Comprehensive Burnout and Engagement (COBE) Model. The COBE Model (Schaufeli & Bakker, 2004) focuses on two job-related psychological processes, namely an energetic and a motivational process. The energetic process links job demands with health problems via burnout. The motivational process links job resources via work engagement with organizational outcomes.

According to Schaufeli and Bakker (2004), job resources may play either an intrinsic motivational role (by fostering the employee's growth, learning and development), or they may play an extrinsic motivational role (by being instrumental in achieving work goals). One such a resource is social support, which has received considerable attention as a moderator in the stressor-strain relationship. Several studies over the years have confirmed that a lack of social support could be linked to burnout (Maslach et al., 2001; Peeters & Le Blanc, 2001). Schaufeli and Bakker (2004) reported empirical evidence in support for the COBE Model in an empirical study in the Netherlands. Job demands were associated with exhaustion, whereas job resources were associated with work engagement. Burnout was related to health problems and turnover intentions, and it mediated the relationship between job demands and health problems, while work engagement mediated the relationship between job resources and turnover intentions.

The intrinsic motivational potential of job resources is also recognised by the Job Characteristics Theory (Hackman & Oldham, 1980). According to this theory, every job has a specific motivational potential that depends on the presence of five core job characteristics, namely skill variety, task identity, task significance, autonomy, and feedback. Furthermore, these job characteristics are linked through so-called critical psychological states with positive outcomes such as high-quality work performance, job satisfaction, as well as low absenteeism and turnover. The job characteristics model assumes that there is a linear relationship between job characteristics and the affective evaluation of the experiences of work (Hackman & Oldham, 1980).

According to the literature, burnout and work engagement (work wellness) have been shown to represent a positive and negative affective evaluation of the experience of work (e.g. Jackson, Rothmann, & Van de Vijver, 2006; Schaufeli & Bakker, 2004). Maslach and Jackson (1986) defined burnout as a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment. Schaufeli and Enzmann (1998) also identified exhaustion as a core indicator of burnout and a sense of reduced effectiveness as an accompanying symptom, but added three additional general symptoms, namely distress (affective, cognitive, physical and behavioural), decreased motivation, and dysfunctional attitudes and behaviours at work. Maslach and Leiter (1997) defined burnout as an erosion of engagement with the job. Engagement, in contrast, is characterised by energy, involvement and efficacy. Schaufeli, Salanova, Gonzáles-Romá, and Bakker (2002) contend that vigour

(the opposite pole of mental exhaustion) is characterised by high energy levels, mental resilience when working, willingness to exert effort into one's work and to persist even in the face of adversity, while dedication (the opposite pole of cynicism) is related to enthusiasm, inspiration, pride, challenge and a sense of significance in one's work. Absorption refers to a state where time passes quickly and where the individual has difficulty in detaching him- or herself from work. Schaufeli and Bakker (2001) found that burnout and engagement are negatively related, sharing between 10 and 25 percent of their variance. Storm (2002) found a canonical correlation of 0,51 between burnout and engagement. A moderately negative correlation ($r = -0,42$) was found between cynicism and dedication. Vigour correlated negatively with exhaustion ($r = -0,28$). According to the model of work-related wellbeing for educators in South Africa, excessive job demands lead to burnout (exhaustion and cognitive weariness), ill-health and the incapability to perform (Jackson et al., 2006). The study also found that moderators, such as organisational support, growth and career opportunities lead to work-related wellbeing.

According to the occupational health literature, moderators are variables that impact on the negative outcomes associated with the demands of the work (Baron & Kenny, 1986; Dewe, Cox, & Ferguson, 1993) Many possible moderator or mediating variables have been identified in the literature i.e. self-efficacy, affectivity, dispositional optimism, social support, locus of control, psychological conditions and coping strategies. Based on the holistic model of work wellness (Nelson & Simmons, 2003), burnout and work engagement could be regarded as an outcome of job stress, moderated by individual different variables (e.g. sense of coherence, coping strategies and optimism). According to Strümpfer (1995) individual dispositions such as sense of coherence, self-efficacy, locus of control and positive emotions (optimism and hope) influence the experience of emotionally significant events at work, which in turn influence job satisfaction. Individuals with a strong sense of coherence should be able to make cognitive sense of the workplace, perceiving its stimulation as clear, ordered, structured, consistent and predictable information (Basson, Basson, Rothmann, & Rothmann, 2001). Optimism has been found to moderate the relationship between daily hassles and health outcomes (Fry, 1995, Sieberhagen & Rothmann, 2004), hassles and psychological symptoms (Lai, 1996) and perceived stress and depression (Sumi, Horie, & Haykawa, 1997). Studies (e.g. Bandura, 1989; Gist & Mitchell, 1992) found that self-efficacy, has had a significant impact on performance on a variety of tasks as well as motivation, emotional

reactions and persistence on a task. Thomas et al. (1996) found that self-efficacy mediated the relationship between personality and performance in self-managing work teams.

According to Kahn (1990), three psychological conditions namely, meaningfulness, safety and availability mediate the linkages between situational antecedent factors and job engagement. Meaningfulness is defined as the value of a work goal or purpose, judged in relation to one's own ideals (Hackman & Oldham, 1980). Job enrichment, work role fit and co-worker relations influence the degree of meaningfulness an employee experiences at work (Kahn, 1990). Psychological safety is defined as feeling able to show and employ one's self without fearing negative consequences to self-image, status, or career (Kahn, 1990). The determinants of psychological safety at work include supervisory relations, co-worker relations and behavioural norms. Supervisory and co-worker behaviours that are supportive and trustworthy in nature are likely to produce feelings of safety at work. Kahn (1990) defined psychological availability as an individual's belief that he has the physical, emotional or cognitive resources to engage the self at work. Individual's resources, work role insecurities and outside activities (e.g. school, other jobs or volunteer activities) may influence the individual's psychological availability at work. May, Gilson, and Harter (2004) found that psychological meaningfulness, availability and safety explained 73 percent of the variance in engagement.

The changes in the world economy, technological advancement and tough international competition are affecting the mining industry in South Africa. According to Fisher (1994), demands on executives have risen rapidly over recent years, together with a steady erosion of job resources. Lease (1999) indicated that quantitative job demands such as work overload, role conflict, role ambiguity and role overload have increased dramatically. These pressures lead to stress in the workplace, which could eventually affect the work-related wellbeing of employees. Consequently, these results seem to suggest a need to find effective ways of developing executives (Bagshaw, 1998). However, a review of the executive development literature reveals that it has not produced the desired effect on executive performance (Lester, 2002). In South Africa more traditional forms of executive development, such as prescribed training programmes, courses and business schools are used. Training is defined as the specific function of specific people traditionally, hence the establishment of training departments to promote various forms of expertise amongst trainees. The training agenda is typically compiled in response to a specific performance-related problem and aimed at

improving performance once the training programme has been completed (Lester, 2002). According to Olesen (1996), training programmes, courses and business schools do not address specific individual needs but tend to be more generic in content. When this generic focus is combined with the increasingly complex range of new business issues, it could result in the traditional forms of development not being able to meet the needs of individual executives. Personalised learning is therefore required at executive level (Olesen, 1996).

Over the course of the last ten years, executive coaching, a one-on-one intervention with middle and senior managers for the purpose of improving or enhancing management skills, - has become widely adopted by the corporate community (Koonce, 1994). Promising results from the literature reveals that coaching interventions seem to be quite effective in supporting changes in behaviour and wellbeing. Green, Oades, and Grant (2006) investigated the impact of life coaching on goal striving, wellbeing and hope of twenty-eight randomly selected participants. Participation in the program was associated with significant increases in goal striving, wellbeing and hope. Another example is the increases in productivity, quality, organisational strength, and customer service as a result of an executive coaching programme. The participants consisted of one hundred executives in the North-eastern and mid-Atlantic regions who had completed their coaching between 1996 and 2000 (McGovern et al., 2001). In South Africa executive coaching is a relatively new trend and not a lot of research has been undertaken regarding the effect of an executive coaching programme on the wellbeing of executives (Cilliers, 2005). In this regard there seems to be a call for more theoretical and empirical research regarding the contributions of different psychological determinants of wellbeing.

Accordingly, if one had to consider the evidence in the literature, the literature review showed that burnout and work engagement can be regarded as outcomes of job stress, moderated by personality characteristics, psychological conditions and job resources. The link between burnout, ill-health and poor performance is well supported in the literature. Furthermore, the literature seems to indicate a lack of research regarding the work-related wellbeing of executives in a mining industry in South Africa. Consequently, the following theoretical model of work-related wellbeing of executives in the mining industry in South Africa is proposed.

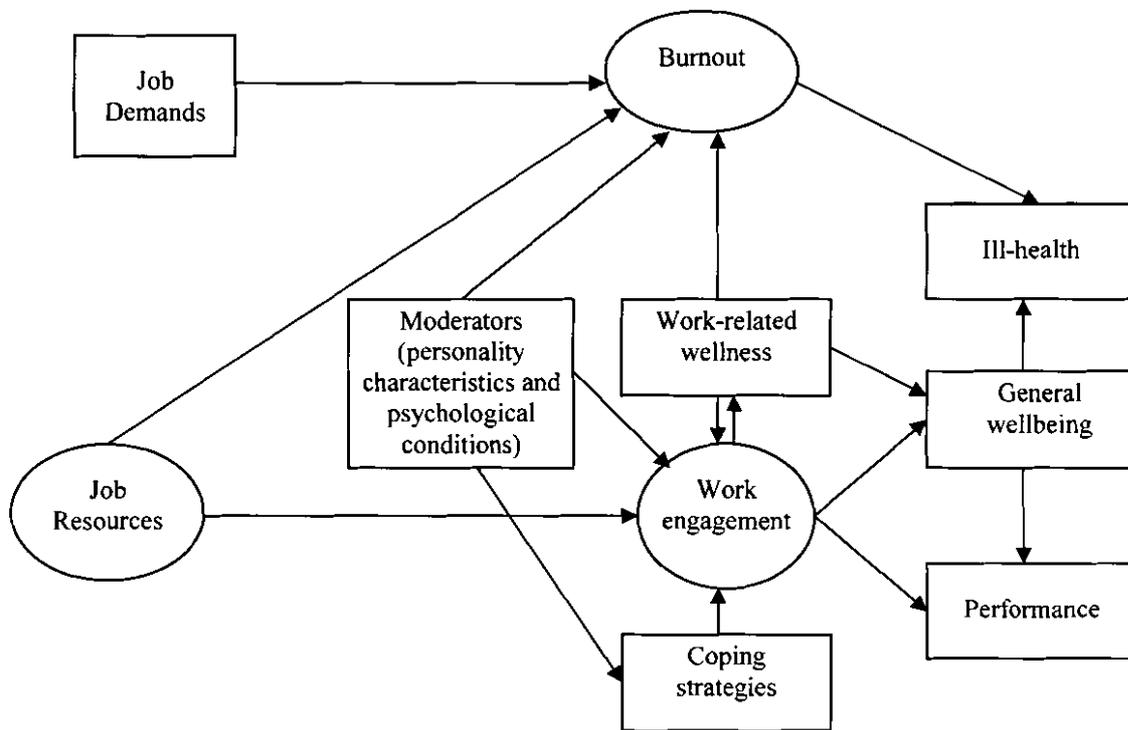


Figure 1. A theoretical model of work-related wellbeing of executives in the mining industry in South Africa.

According to Figure 1, work-related wellbeing may be understood as a multi-dimensional phenomenon that manifests itself in employee cognitions, motivations, behaviours, performance and self-reported physical health.

According to the model of work-related wellbeing of educators in the North-west Province in South Africa, burnout mediated the relationship between job demands or lack of resources and ill-health, while work engagement mediated the relationship between job resources and organisational commitment (Jackson et al., 2006). Furthermore, two organisational antecedents of burnout and work engagement were found, namely job demands and job resources. According to the Job Demand-Resources (JD-R) Model (Demerouti et al., 2001), demanding job characteristics of the working environment such as work pressure, overload, emotional demands and poor conditions may lead to poor performance and the impairment of health. Studies have shown that negative work-related wellbeing (burnout) might be caused by certain job characteristics, including high job demands and a lack of job resources (Demerouti et al., 2004; Schaufeli & Bakker, 2004). Coetzer and Rothmann (2006) in their study on occupational stress of employees in an insurance company found that physical ill health was best predicted by job characteristics and overload. The results also showed that

stressful job characteristics and overload were not only statistically significant predictors of physical ill health, but also of psychological unwell-being. Barkhuizen, Rothmann, and Tytherleigh (2004) found in their study of burnout of academic staff in a higher education institution in South Africa, that exhaustion was related to health problems. Maslach et al. (2001) indicated that perceived stressors lead to emotional reactions, which in turn, lead to ill health.

According to the occupational health literature moderators- or mediating variables i.e. self-efficacy, affectivity, dispositional optimism, social support, locus of control, psychological conditions and coping strategies impact on the negative outcomes associated with the demands of the work. According to Nelson and Simmons (2003), personality characteristics (e.g. sense of coherence and optimism) moderate the negative effects of burnout (e.g. ill health). Individual dispositions such as sense of coherence, self-efficacy, locus of control and positive emotions (optimism and hope) influence the experience of emotionally significant events at work, which in turn influence job satisfaction (Strümpfer, 1995). According to Rothmann (2001), locus of control, sense of coherence and self-efficacy predict a total of 30 percent of the variance of total job satisfaction. Rothmann et al. (2005) in their study of job stress, sense of coherence and work wellness of employees in an electricity supply organisation in South Africa, found that sense of coherence mediated the effect of job stress on work wellness and explained 26 percent of the variance in work wellness (consisting of both burnout and work engagement). Optimism has been mostly linked to active, persistent, health-orientated coping, while pessimism is more likely to be linked to emotional distress, health concerns and negative coping (Harju & Bolen, 1998). Studies indicate that effective coping approaches to changes in the environment serve to increase mental, psychological and physical wellbeing (Ben-Zur, 1999; Friedman & Vandebos, 1992; Stanton, Danoff-Burg, & Cameron, 2000; Violanti & Paton, 1999).

According to the literature (e.g. May et al., 2004; Khan, 1990) psychological conditions (e.g. meaningfulness, safety and availability) are positively related to positive work-related wellbeing (engagement). Research done by May et al. (2004) demonstrated that psychological meaningfulness displayed the strongest relation with engagement. According to the literature (Maslach et al., 2001; Peeters & Le Blanc, 2001), job resources have received considerable attention as moderators in the stressor-strain relationship. Bakker, Demerouti, De Boer, and Schaufeli (2003) found that several job resources (e.g., autonomy, social

support or supervisory coaching) lead to work engagement. According to the JD-R Model, job resources buffer the relationship between job demands and exhaustion (Demerouti et al., 2001).

DISCUSSION

It was the objective of this study to conduct an overview of the literature and to construct a theoretical model of work-related wellbeing of executives in the mining industry in South Africa. It is evident from the literature review that that work-related wellbeing, like general wellbeing, may be understood as a multi-dimensional phenomenon that manifests itself in employee cognitions, motivations, behaviours and self-reported physical health (Horn, Taris, Schaufeli, & Schreurs, 2004).

According to the literature, various models (COBE, Vitamin Model, Job Demand-Control Model and the Job-Demand Resources Model) suggest that demanding characteristics of the working environment such as work pressure, overload, emotional demands and poor working conditions may lead to the impairment of health (Demerouti et al., 2001; Karasek, 1979; Scheufeli & Bakker, 2004; Warr, 1987). The literature findings also suggest that both negative (burnout) and positive (engagement) experiences of work should be included in the theoretical model of work-related wellbeing of executives (Rothamnn, 2003). The positive and negative experiences of work in terms of job demands, job resources and job characteristics influence job satisfaction, performance and physical health (Kelloway & Barling, 1991; Rothmann, 2003). Regarding the positive aspects of work-related wellbeing, job resources lead to work-related wellbeing. Job resources may play either an intrinsic motivational role (by fostering the employee's growth, learning and development) or an extrinsic motivational role (by being instrumental in achieving work and personal goals). In terms of the negative aspects of work-related wellbeing, excessive job demands lead to exhaustion and mental distance (Demerouti et al., 2001). According to Jackson et al. (2006), the chain of negative high job demands, burnout and ill-health can lead to an incapability and unwillingness to perform.

The findings further suggested that various moderators (e.g. personality characteristics, job resources, psychological conditions and coping strategies), which may possibly influence job-related strain and burnout in the stressor-strain relationship, should be included in the model

of work-related wellbeing. Individual dispositions such as sense of coherence and optimism influence the experience of emotionally significant events at work, which in turn influence job satisfaction (Strümpfer, 1995). Employees with a strong sense of coherence will experience their work as consisting of experiences that are bearable, with which they can cope, and as challenges that they can meet by availing themselves of personal resources or resources under the control of legitimate others (Basson, Basson, Rothmann & Rothmann, 2001). Studies (Fry, 1995, Lai, 1996; Sieberhagen & Rothmann, 2004; Sumi et al., 1997) found that optimism moderate the relationship between daily hassles and health outcomes, between hassles and psychological symptoms, and also between perceived stress and depression.

Pervasive personality characteristics, such as sense of coherence and optimism are more stable across life span, while learned optimism and situational sense of coherence are some of the situational measures of general wellbeing. The latter are less stable across situations and lifespan (Adams et al., 1997; Artinian 1997; Seligman, 1991). Learned optimism has proven to be beneficial for the performance and turnover of employees in a sales environment (Seligman and Schulman, 1986). There seems to be a lack of research in terms of situational personality variables like situational sense of coherence and learned optimism in the occupational context. Also no studies including these factors in a model of work-related wellbeing of executives in a mining industry in South Africa could be found in the literature.

The role of coping in terms of wellbeing should also be considered in a theoretical model of work-related wellbeing. According to the literature, optimism has been mostly linked to active, persistent, health-orientated coping, while pessimism is more likely to be linked to emotional distress, health concerns and negative coping (Harju & Bolen, 1998). Effective coping strategies (Stanton et al., 2000) and job resources (Karasek & Theorell, 1990) have been found to be related to increased mental, psychological and physical wellbeing.

According to the literature the changes in the world economy, technological advancement and tough international competition, have increased the demands on executives dramatically in recent years, together with a steady erosion of job resources (Lease, 1999). These pressures lead to stress in the workplace, which could eventually affect the work-related wellbeing and performance of employees. There seems to be a need to find effective ways of developing executives (Bagshaw, 1998). Training programmes, courses and business schools do not

address specific individual needs but tend to be more generic in content. However, executive coaching is regarded as a more personalised learning approach to development. Regarding coaching interventions, there seems to be sufficient evidence in the literature regarding the effect of coaching interventions in terms of work performance and wellbeing (Green et al., 2006; McGovern et al., 2001). Green et al. (2006) found that the general wellbeing of twenty-eight randomly selected participants increased after a coaching intervention. Another example is research done by McGovern et al. (2001) which indicate that the productivity, quality, organisational strength, and customer service of participants increased as a result of an executive coaching programme. Pretorius (2006) also found that the wellbeing and performance of executives in a mining industry in South Africa increased after a coaching intervention.

RECOMMENDATIONS

It is recommended that future studies should test a casual model of work-related wellbeing of executives in the mining industry in South Africa. Furthermore, it is recommended that an executive coaching intervention should be developed and evaluated in terms of improving the wellbeing and performance of executives in the mining industry. Future coaching intervention studies should also consider the empirical testing of a work-related model of wellbeing of executives by including aspects such as work-related wellness, general wellbeing, personality characteristics, performance, job characteristics, work performance, as well as coping strategies. Future studies should also consider the inclusion of larger samples in different types of industries in South Africa, as well as the utilisation of experimental designs.

Research is needed regarding the causes, effects and underlying processes of work-related wellbeing (i.e. burnout and work engagement) for all occupational groups in South Africa. Measuring instruments of psychological strengths on cognitive, affective and behavioural levels should be developed and validated. Because of the problems associated with measurement in multicultural contexts, analyses should not only focus on internal consistency, test-retest reliability and construct validity, but also on bias and equivalence (Rothmann, 2003).

According to the literature, very little research has been done regarding positive aspects of the human behaviour in the work context. Future studies should focus less on the unhealthy and unhealthy aspects of human behaviour and more on the strengths of human beings (Rothmann & Jordaan, 2006).

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CHAPTER 3: DEVELOPMENT AND EVALUATION OF AN EXECUTIVE COACHING PROGRAMME

DEVELOPMENT AND EVALUATION OF AN EXECUTIVE COACHING PROGRAMME

ABSTRACT

The objective of this study was to develop and evaluate an executive coaching programme. A longitudinal design was used. The participants ($n = 29$) consisted of general managers, production managers and mine overseers from one area in a large mining company in South Africa. The Maslach Burnout Inventory – General Survey (MBI-GS), the Utrecht Work Engagement Scale (UWES), the Job Characteristics Survey - Mining (JCM), the Coping Orientations to Problems Experienced Questionnaire (COPE), the Orientation to Life Questionnaire (OLQ), the Life Orientation Test – Revised (LOT-R) and a 360° Performance Evaluation Measurement (PEM) were used as measuring instruments. The results showed an increase in terms of the general wellbeing, work-related wellness, job characteristics, coping strategies and pervasive personality characteristics. The results also showed an increase in terms of the performance of executives in the mining industry.

OPSOMMING

Die doel van hierdie studie was om 'n *coaching* program vir senior bestuurders te ontwikkel en te evalueer. 'n Longitudinale ontwerp is gebruik. Die deelnemers ($n = 29$) het bestaan uit algemene bestuurders, produksiebestuurders sowel as myn-toesighouers van een area van 'n groot mynmaatskappy in Suid-Afrika. Die Maslach-Uitbrandingsvraelys – Algemene opname (MBI-GS), die Utrecht Werksbegeesteringsvraelys (UWES), die Werkskenmerkeskaal – Mynbou (JCM), die Coping ten opsigte van Ervaarde Probleme vraelys (COPE), die Lewensorientasievraelys (OLQ), die Hersiende weergawe van die Lewensorientasietoets (LOT-R) en 'n 360° Prestasie meting is gebruik. Die resultate het 'n toename getoon in terme van algemene welsyn, werkswelstand, werkseienskappe, coping-strategieë en standhoudende persoonlikheids-eienskappe. Die resultate het verder ook 'n toename getoon in terme van die prestasie van senior bestuurders in die mynbedryf.

Executive coaching is one of the fastest growing executive development processes in adult learning. In personal training and organisational contexts executive coaching has increased considerably throughout the last decade (Carter, 2001). While it has been suggested by some authors that executive coaching developed into an industry overnight, the process appears to have been more gradual. There seems to be general agreement in the literature, however, that as a learning process, executive coaching is still “forming its identity” (Paige, 2002). Kilburg (1996) defined executive coaching as a helping relationship formed between a client, who has managerial authority and responsibility in an organisation, and a consultant. The term “coaching” seems to overlap in meaning with other constructs such as counselling, therapy, teaching, consulting and mentoring (O’Connor & Lages, 2004). However, it is important to distinguish coaching as a distinct concept from the closely related counselling and mentoring concepts. While the functions of coaching and mentoring relationships invariably overlap, in reality they represent two separate types of developmental relationships (Benabou & Benabou, 2000).

Coaching focuses on a wide variety of behavioural techniques and methods to help the client achieve a mutually identified set of goals to improve professional performance and personal satisfaction in order to improve the effectiveness of the client’s organisation within a formally defined coaching agreement (Kilburg, 1996). Coaching is directly concerned with the immediate improvement of performance and skills (Goldsmith, 2000; Whitmore, 2002), while mentoring, on the other hand, is concerned with the longer-term acquisition of skills in a developing career (Chao, 1997; Kram, 1985). Counselling is a reflective process where clients can explore early and current life experiences where they have the opportunity to heal, grieve or otherwise reconcile emotional and psychological traumas, reframe cognitive distortions and form new behaviours (Mink, Owen, & Mink, 1993).

The modern world of work is characterised by organisational transformations due to mergers, downsizing, acquisitions, and various other pressures which have become commonplace (Giglio, Diamante, & Urban, 1998). Executives who head public and private enterprises are expected to expand their knowledge base and skills to analyse and comprehend the many changes that are happening around them. Not all executives are, however, able to adjust easily to these expectations, or balance the many competing demands and pressures their position may entail. In order to compensate for this, organisations often revert to providing an executive coach for their senior managers (Paige, 2002). According to Prince (2005), life is

about return on investment, or the so-called “what’s in it for me” factor on the one hand, while the corporate world on the other hand is looking at the added value that coaching can offer. More pressure is loaded onto the individual to perform and “to be” the competitive advantage within the organisation (Prince, 2005).

The changes in the world economy, technological advancement and tough international competition are affecting more organisations in South Africa. Consequently, organisations have become so focused on bottom-line improvement that wider aspects of the welfare and development of the individual are often neglected (Fletcher, 1996). According to Maslach, Schaufeli, and Leiter (2001), the impact of the changing world of work is perhaps most evident in the changes in the psychological contract. Accordingly, employees are expected to give more in terms of time, effort, skills and flexibility, whereas they receive less in terms of career opportunities, lifetime employment and job security. This violation of the psychological contract is likely to have a negative impact on the general wellbeing of employees, which could lead to negative affective reactions to the experience of work (Maslach et al., 2001).

General wellbeing includes a professional, affective, cognitive, social, spiritual and psychological dimension (Ryff, 1989). The professional wellbeing dimension taps aspects of job-related motivation, ambition, self-efficacy and achievement. According to Ryff (1989), affective wellbeing includes job satisfaction and organisational commitment. Recent research in the domain of occupational wellbeing indicates that burnout and work engagement (work-related wellness) have been shown to represent a positive and negative affective evaluation of the experience of work (e.g. Jackson, Rothmann, & Van de Vijver, 2006; Schaufeli & Bakker, 2004). Cognitive wellbeing is a flexible state of mind and enables sensitivity to the present context and perspectives (Langer, 1989). Cognitive weariness taps feelings of work-related fatigue (thus reflecting the tiredness-vigour dimension of affect), cognitive weariness specifically reflects employees' cognitive functioning, especially the degree to which workers are able to take up new information and are able to concentrate on their work. According to Ryff (1989), social wellbeing indicates the degree to which one functions well in one's social relations at work.

According to Adams, Bezner, and Steinhardt (1997), general wellbeing entails spiritual processes such as purposefulness in life, which lead to optimal functioning. Twerski (1998)

defines spirituality as the quest for existential meaning. According to Slater, Hall, and Edwards (2000), spirituality is “the search for the sacred”. It could also be an individualistic matter, which provides a capacity for inner knowing and a source of inner strength, often found in, for instance, pantheism, humanism, ecology, the arts, or work. Spirituality motivates, enables, empowers and provides hope (Adams, Benzer, Drabbs, Zambarano, & Steinhardt, 2000). Furthermore, spirituality has the capacity to foster or impede wellbeing (Zinnbauer, Pargament, & Scott, 1999). According to Artinan (1997), psychological wellbeing is the perception that one will experience positive outcomes to circumstances and events in life. Psychological wellbeing is a combination of specific qualities, such as a sense of coherence, satisfaction with life, affect-balance and a general attitude of optimism (Wissing & Van Eeden, 1997).

Recent evidence in personal goals literature indicated that the structure and organisation of personality is an important determinant of general wellbeing. According to Diener and Lucas (1999), personality characteristics like sense of coherence and optimism are by definition consistent across situations and life span and therefore may account for part of the stability of general wellbeing. Furthermore, general wellbeing seems to be regarded as an important indicator of work wellness according to the literature (Diener & Lucas, 1999).

In the occupational literature, wellbeing at work has been linked to affective evaluations of the work environment and –experience. Warr (1994) conceptualised general wellbeing in his so-called tri-axial approach as an “active state” consisting of positive affect and high arousal. Work-related wellbeing takes into account job satisfaction, job involvement and organisational commitment as but a few of many measures of job-related wellbeing (Warr, 1994). Others regard psychological wellbeing, personality characteristics, job characteristics and coping styles as measures of wellbeing at work (e.g. Antonovsky, 1987; Code & Fox, 2001; Maslach & Leiter, 1997; Sujan, 1999).

According to Folkman and Lazarus (1984), coping refers to the perceptual, cognitive or behavioural responses used to manage, avoid or control situations that could be regarded as difficult. Initial conceptualisations of the coping construct include a broad taxonomy of coping as direct efforts to change the demands posed by the stressful situation on the available resources of the individual (problem-focused coping), as well as regulatory attempts to manage the emotional aspects of the stressful encounter (emotion-focused coping)

(Folkman & Lazarus, 1984). Problem-focused strategies include such strategies as defining the problem, generating and weighing alternative solutions, and following a plan of action, whereas emotion-focused strategies include processes such as avoidance, denial, seeking emotional support and positive appraisal (Stanton, Parsa, & Austenfeld, 2002). However, hierarchical factor analysis revealed a more fundamental distinction in terms of coping strategies, namely approach-orientated and avoidance-orientated processes in coping strategies (Tobin, Holroyd, Reynolds, & Wigal, 1989). Consequently, coping strategies could also be viewed from an active as well as a passive approach where movement towards or away from the stressor is taken as broad strategies.

According to Ferguson and Cox (1997), two broad dimensions could be added to the study of coping, namely reappraisal and avoidance. According to Pienaar and Rothmann (2003), coping strategies in the South African context could be viewed from the perspective of problem-focused coping, emotion-focused, reappraisal and avoidance. According to Naudé (2003), future research should explore the possibility of a four-factor solution, namely active coping, passive coping, social/emotional support coping and religion and/or humour coping mechanisms in different industries in South Africa. The stress and coping literature seem to suggest near-universally maladaptive consequences of emotion-focused coping. However, in their critical review of the stress and coping literature, Stanton, Kirk, Cameron, and Danoff-Burg (2000) reported that emotional-focused coping, and particularly coping through emotional processing and expression, could be associated with indicators of positive psychological adjustment.

The experience of the work environment plays a significant role in the wellbeing of employees. According to Johnson and Cooper (2003), work experiences translate directly into mental health outcomes that indirectly affect employee's life satisfaction. Furthermore, the effect of job characteristics and too great job demands such as task overload on the wellbeing of employees is also of great importance (Coetzer & Rothmann, 2006). According to the Job Characteristic Model, a job characteristic is an attribute of a job that creates conditions for high work motivation, satisfaction and performance. Hackman and Oldham (1980) proposed that five core job characteristics namely: skill variety, task identity, task significance, autonomy and feedback should be included in any job. A central premise is the assumption that there is a linear relationship between job characteristics and employee wellbeing (Hackman & Oldham, 1980). The Job Demands-Resources (JD-R) Model

recognise that demanding characteristics of the working environment such as work pressure, overload, emotional demands and poor conditions may lead to the impairment of health (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Scheufeli & Bakker, 2004). However, organisational stressors can be divided into job demands and lack of job resources (Schaufeli & Enzmann, 1998). Job demands refers to the tasks that have to be done, including physical, social and organisational aspects of the job that require sustained physical and mental effort. Job resources, on the other hand refer to those physical, psychological, social or organisational aspects of the job that reduce job demands, are functional in the achievement of work goals, and which stimulate personal growth, learning and development. The mining industry demands a lot from executives who have, amongst other things to face ongoing skill shortage and the need to redress social imbalances via affirmative action and accelerated career development. Consequently, it seems justified to emphasise the need to find effective ways of developing executives (Bagshaw, 1998).

In the international training and development context, trends seem to suggest that the future workforce will require a lifelong learning orientation, that skill building in the absence of performance improvement will be inadequate, and that people will need to develop the ability to acquire skills quickly due to the increasing rate of change (Olesen, 1996). Conventional wisdom recognises that traditional forms of executive development have not produced the desired effect on executive performance. One reason put forward for this is that more traditional forms of development, such as prescribed training programmes do not address specific individual needs but tend to be more generic in content. When this generic focus is combined with the increasingly complex range of new business issues, it could result in the traditional forms of development not being able to meet the needs of individual executives. According to Olesen (1996), personalised learning is needed at executive level.

According to Grant (2006), the field of executive coaching could benefit tremendously from the contributions of the positive psychology field, especially from a theory development point of view. This may particularly be the case in terms of health coaching, where the focus seems to be on pervasive personality characteristics, as well as physical and psychological wellbeing. According to the literature, results show increases in terms of the productivity, quality, organisational strength, and customer service of one hundred executives from fifty-six organisations in the north-eastern and mid-Atlantic regions (McGovern et al., 2001). The South African literature on executive coaching seems to focus on the practical “how to do”

executive coaching and claims that its practice will result in increased management and leadership competence, strategic thinking, intellectual thinking, wisdom, empowerment as well as the solving of business problems (Johnson & Cohen, 2004; Price, 2003b). According to Cilliers (2005), there seems to be a need for theoretical and empirical research in the South African context on the psychological effects of executive coaching. Consequently, the objective of this study was to develop an executive coaching programme and to determine the effect of an executive coaching programme on the work-related wellness, job characteristics, coping strategies and the performance of executives in the mining industry in South Africa. Furthermore, it is the objective of this study to investigate the effect of an executive coaching programme on the pervasive personality characteristics of executives in the mining industry in South Africa.

Executive coaching

Modern approaches to organisational development and coaching practices are primarily based on the conceptual foundations of general systems theory that are then applied to human organisations and behaviour. Furthermore, interventions based on this specific approach most often include organisational diagnosis, process consultation, socio-technical and structural changes, team building, coaching and other training technologies (Kilburg, 2000). Unlike most business processes, which tend to reduce information to abstractions, executive coaching engages people in customised ways to acknowledge and honour their individuality (Sherman & Freas, 2004). Coaching does not end with self-awareness. It is a form of active learning that transfers essential communication and relationship skills. Coaching integrates personal development and organisational needs, helping executives to adapt to new responsibilities, reduce destructive behaviours and improve productivity (Sherman & Freas, 2004). Executive coaching is centred on the dynamics and realities of being near or at the top of an organisation, as well as fully recognising the need for constant improvement (Cashman, 2003).

Coaches are not quick-fix agents, but rather catalysts for the emerging goals and purposes of individuals and organisations. They remain as resources, advocates, sponsors, evaluators and facilitators for connecting short-term plans to long-term goals. Coaching is the art of guiding another person, persons or human systems toward fulfilling futures (Hanson, 2003). "Coaching is centred on unlocking a person's potential to maximise his or her own

performance..., improving the individual with regard to performance and the development of skills” (Whitmore, 2002), and it can be described as “... a process that enables learning and development to occur and thus performance to improve.” (Parsloe, 1999).

The central (and somewhat tautological) aspect of executive coaching is that the coachee is an executive, in other words someone with managerial responsibilities and leadership commitments. In this context, executive coaching encompasses a vast range of services and specialties, namely coaching for enhanced strategic planning; presentation skills; anger- and stress management, as well as executive team building and leadership development. These types of coaching tend to be conducted in a more formal fashion, even though it could sometimes be masqueraded as “an informal chat”. The outcomes that executive coaching strives to achieve, are usually related to the work of the sponsoring organisation (Sherman & Freas, 2004).

Green, Oades, and Grant (2006) investigated the impact of life coaching on the goal striving, wellbeing and hope of twenty-eight randomly selected participants. Participation in the program was associated with significant increases in goal striving, wellbeing and hope. The findings of McGovern et al. (2001) are another example, where enhancement of productivity, quality, organisational strength and customer service were found as a result of an executive coaching programme. The participants consisted of one hundred executives in the north-eastern and mid-Atlantic regions who had completed their coaching between 1996 and 2000. Research on the effect of an executive coaching programme on the pervasive personality characteristics of executives seems to be lacking.

Many studies have been conducted on the process and phases of coaching, ranging from three to six phases (Kilburg, 1996; O’Neill, 2000; Whitmore, 2002; Zeus & Skiffington, 2003). According to O’Neill (2000), the process of coaching includes the following four distinct phases in general namely, contract, action plans/goals, life action and debriefing. The contracting phase can be the most important phase of the coaching relationship, as it is here that the coach and coachee build their relationship and establish credibility. Action plans are then developed and expressed in terms of specific behavioural goals. The established goals must be measurable, including defined roles and accountability. In this regard, different forms of live action coaching are available, for example, coaching in a group and coaching the coachee in a one-on-one session. In terms of executive coaching, a critical aspect to take

into consideration is evaluation time in order to allow enough time for the coachee to reflect. Finally, debriefing allows the coach and coachee to evaluate their effectiveness (O'Neil, 2000).

The literature on executive coaching seems to focus on the different aspects that could lead to the success of the coaching process. Such studies have examined the characteristics of successful coaches (Hall, Otazo, & Hollenbeck, 1999), business coaching (McGovern et al., 2001), executive coaching (Bowerman & Collins, 1999), the practice and techniques of coaching (Thach & Heinselman, 1999), as well as coaching and learning (Goldsmith, Lyons, & Freas, 2000; Zeus & Skiffington, 2000). However, as with all interventions, the context seems to be an important success-factor. According to Guskey (1985), the learning that has been undertaken, as well as the behaviour change that might have occurred, may be in vain if coaching is not accepted within an organisation as a viable personal development tool.

According to Grant (2006), coaching can be conceptualised as the systematic application of behavioural science to the enhancement of life experience, work performance and wellbeing for individuals, groups and organisations. In broad terms, executive coaching could be positioned at the intersection of sports, counselling, clinical, organisational and health psychology. While clinical and counselling psychologists tend to work with the client who is distressed and/or dysfunctional, coaching psychologists work with well-functioning clients, using theoretically grounded and scientifically validated techniques to help them reach goals in their personal and business lives. Coaching is a robust and challenging intervention, is results-driven, delivers tangible added value, is typically a short-term or intermittent engagement and enables the attainment of high standards or goals (Grant, 2006). Cobb et al. (2004) found that training programmes across three areas, namely clinical-, counselling- and educational psychology were more similar than different. Furthermore, many applied, clinical and counselling psychologists already consider themselves to be acting as 'coaches' and continue to work with clinical clients long after their initial treatment objectives have been met.

The vast majority of individuals presented for executive coaching are not remedial clients, but persons seeking support in terms of their personal development (Kauffman & Scoular, 2004). Thus, interventions and helping relationships based on a clinical or medical model may be highly inappropriate. However, in the public's mind, psychologists are often confused

with psychiatrists and have long been seen by the public as being focused on therapy and clinical work (Webb & Speer, 1986), rather than being proactive facilitators of human or organisational change. Moreover, there seems to be a clear need for psychologists to present their skills in a way that the public finds attractive and accessible (Coleman, 2003). However, many psychologists find coaching to be an appealing and personally rewarding alternative to therapeutic practice (Naughton, 2002). Rather than act as a coach, it makes more sense for psychologists to actually be a coach, to develop coaching skills and psychological frameworks that go beyond existing clinical or counselling frameworks and applications (Grant, 2006).

According to the literature, the field of coaching purports the advantages of coaching such as increased performance, job satisfaction, team effectiveness, decreased job stress, self-awareness, job characteristics, higher optimism and change management (Whitworth, Kimsey-house, & Sandahl, 1998). According to Grant (2006), one of the challenges of an emerging sub-discipline of coaching psychology will be to develop coaching interventions that utilise existing theory and technique, but also to do so in such a way that it is relevant and engaging for non-clinical populations. Furthermore, there seems to be a need for longitudinal studies on the effectiveness of executive coaching programmes which focuses on positive psychology constructs (Grant, 2006).

Executive coaching programmes

An Executive Coaching Programme was developed for the purposes of this study. The content of the executive coaching programme was determined by an extensive literature review on existing coaching programmes such as the Integrated Executive Experiential Learning Coaching Model (Chapman, 2004), the Coach Yourself Programme (Grant & Greene, 2001), a multi-modal approach to executive coaching (Richard, 1999) and the Integral Coaching Programme (Armstrong, Matthews, & McFarlane, 2006).

The Integrated Executive Experiential Learning Coaching Model (Chapman, 2004) conceptualises executive coaching as a form of consulting, combining Wilber's (1996, 2000) Integrative Model and the Experiential Learning Model (Kolb, 1985), while integrating the hierarchical evolution of consciousness. This coaching model operationalised coaching as the facilitation of self-organised learning in adults through experiential learning conversations in

order to grow and improve performance. The Coach Yourself Program is based on principles drawn from cognitive-behavioral clinical and counseling psychology (Beck, Rush, Shaw, & Emery, 1979), brief solution-focused therapy (O'Hanlon, 1998) and models of self-regulated learning (Zimmerman, 1989). According to Grant (2003), cognitive-behavioural approaches recognise the quadratic reciprocity between the four domains of human experience, namely behaviour, thoughts, feelings and the environment. Solution-focused therapy is a constructivist, humanistic approach that concentrates on the strengths that clients bring to therapy, and emphasizes the importance of solution construction rather than problem analysis. The focus of self-regulated learning is that the learner's experience is the basis for change and growth (Zimmerman, 1989). The core constructs of goal-directed self-regulation are a series of processes in which the individual sets a goal, develops a plan of action, begins action, monitors their performance, evaluates their performance by comparison to a standard and based on this evaluation changes their actions to further enhance their performance and better reach their goals (Grant, 2001). The Integral Coaching Programme uses Wilber's (1996, 2000) Integrative Model to highlight the coaching endeavour as a holistic and multi-dimensional activity. This programme consists out of three general approaches, namely experiential learning, strength-based psychology and spirituality (Armstrong et al., 2006). The multi-modal approach to executive coaching is based on principles drawn from the cognitive-behavioural framework. This approach to executive coaching focuses on seven dimensions namely, behaviour, affect, sensation (e.g., physical discomfort), imagery, cognitions, interpersonal and biological issues (e.g., drug and alcohol use) (Richard, 1999).

Based on the recommendations from Grant (2001) cognitive-behavioural coaching was used for the purpose of this study in a non-clinical adult population. The executive coaching programme developed for the purpose of this study was based on self-regulated learning, cognitive-behavioral coaching techniques, including self-monitoring, cognitive restructuring, and behavioral modification, and solution-focused techniques from the Coach Yourself Programme (Grant & Greene, 2001). The focus of the coaching programme developed for this study was different from the Coach Yourself Programme in that the focus was not only on life coaching but also on work-related coaching (e.g. job-related behaviours derived from job profiles). The executive coaching programme developed for the purpose of this study also focused on developing a collaborative relationship with mining executives in order to maximise their job-related performance and general wellbeing through self-directed learning and sustained behavioural change (Armstrong et al., 2006; Grant & Greene, 2001). Starting

with 360° performance evaluation measurement, work-related wellness and coping strategies assessments the executive coaching programme focused on enhancing the following competencies namely, interpersonal sensitivity, leadership, functional, team work, cultural awareness, problem solving, strategic thinking, intrapersonal effectiveness (self-regard, independence, assertiveness) and dynamism. The program targeted both behavioural skills (basic communication, doing presentations, keeping a diary, alcohol abuse and relaxation) and cognitive skills (dealing with problems and rejection, developing an optimistic outlook) in an organisational setting.

The Executive Coaching Programme was completed over a period of six months and consisted of one-on-one sessions. The first session consisted of setting individual goals for the coaching programme. The goals for each participant were based on the results of pre-assessments (e.g. work-related wellness, coping strategies, psychometric data and a 360° performance evaluation measurement). The follow up sessions focused on developing action plans, initiating action, monitoring performance (through self-reflection), as well as evaluating performance by comparing to a standard (gaining insight). Following this evaluation, actions are changed in order to further enhance performance and to reach goals which were set in the first session. Confidentiality principles were stipulated in order to protect the specific content of coaching sessions while keeping the stakeholders informed of goals and progress.

Although executive coaching in South Africa appears to follow similar trends to those in the United Kingdom and United States, where it has become a preferred method of executive development, there seems to be a need in the literature for a stronger emphasis on coaching as a means of fast-tracking performance, as well as increasing wellness (Lester, 2002). An extensive review of the South African literature revealed little evidence of the effectiveness of executive coaching in the South African context. There seems to be a lack of research in regards to the development of an executive coaching programme and the effect of an executive coaching programme on the work-related wellness, coping strategies, job characteristics, pervasive personality characteristics and performance of executives in the mining industry.

Consequently, the hypotheses of this study can be formulated as follows:

H1 : The executive coaching programme developed for executives in the mining industry in South Africa will improve the work-related wellness, coping strategies and job characteristics of executives in the mining industry.

H2 : The pervasive personality characteristics of executives in the mining industry in South Africa will be unaffected by the executive coaching programme developed for executives in the mining industry in South Africa.

H3 : The performance of executives in the mining industry in South Africa will be improved as a results of the their participation in the executive coaching programme.

METHOD

Research design

A longitudinal design was used in this study. This design involves the investigation of units of analysis over an extended period of time (Mouton & Marais, 1992). A cross-sectional survey design was also used in order to assess interrelationships among specific variables (Shaughnessy & Zechmeister, 1996). The longitudinal study was conducted over a six-month period.

The measurement of general wellbeing and performance levels of executives in the mining industry in South Africa were operationalised as a three-phase process with a before-measurement (controlling variables of work-related wellness, coping strategies, pervasive personality characteristics, job characteristics and a 360-degree performance evaluation measure) followed by an executive coaching programme intervention and an after-measurement of the same controlling variables.

Participants

The participants consisted of 29 mining executives from one area in a large South African mining company who volunteered to partake in the study. The participants consisted of General Managers, Production Managers and Mine Overseers. In terms of the composition of the sample, all of the participants are male, five participants are Black, and 24 are White. Descriptive information of the sample is given in Table 1.

Table 1

Characteristics of the Participants

Item	Category	Percentage
Language	Afrikaans	69
	English	17
	isiNdebele	4
	isiTsonga	10
Job Category	General manager	7
	Mine overseer	76
	Production manager	17
Education	Grade 12	70
	3-year degree	23
	4-year degree	7
Marital status	Single	7
	Married	85
	Divorced	8
Years in company	1-9 years	86
	10 years and more	14

The sample consisted mainly of Afrikaans-speaking (69%) males (100%) with a Grade 12 qualification (70%) in a senior management position (100%) with an average of 5 years' experience in the company.

Measuring Battery

The following standardised measurement instruments were used, namely the Maslach Burnout Inventory – General Survey (MBI-GS) (Schaufeli, Leiter, Maslach, & Jackson, 1996), the Utrecht Work Engagement Scale (UWES) (Schaufeli, Salanova, Gonzàles-Romà, & Bakker, 2002), the Job Characteristics Survey - Mining (JCM), the Coping Orientations to Problems Experienced Questionnaire (COPE) (Carver, Scheier, & Weintraub, 1989), the Orientation to Life Questionnaire (OLQ) (Antonovsky, 1987), the Life Orientation Test – Revised (LOT-R) (Scheier, Carver, & Bridges, 1994) and a 360° Performance Evaluation Measurement (PEM).

The *Maslach Burnout Inventory – General Survey (MBI-GS)* (Schaufeli et al., 1996) measures respondents' relationships with their work on a continuum from engagement to

burnout. The MBI-GS has three subscales: Exhaustion (Ex) (5 items; e.g. "I feel used up at the end of the workday"), Cynicism (Cy) (5 items; e.g. "I have become less enthusiastic about my work") and Professional Efficacy (PE) (6 items; e.g. "In my opinion, I am good at my job"). Together the subscales of the MBI-GS provide a three-dimensional perspective on burnout. Internal consistencies (Cronbach coefficient alphas) reported by Schaufeli et al. (1996) varied from 0,87 to 0,89 for Exhaustion, 0,73 to 0,84 for Cynicism and 0,76 to 0,84 for Professional Efficacy. Test-retest reliabilities after one year were 0,65 (Exhaustion), 0,60 (Cynicism) and 0,67 (Professional Efficacy) (Schaufeli et al., 1996). All items are scored on a seven-point frequency rating scale ranging from 0 (*never*) to 6 (*daily*). High scores on Ex and Cy and low scores on PE are indicative of burnout.

The *Utrecht Work Engagement Scale* (UWES) (Schaufeli et al., 2002) was used to measure levels of engagement. Initially, engagement was viewed as the positive antithesis of burnout, but according to the scale developers it can be operationalised in its own right. The UWES is scored on a seven-point frequency scale, ranging from 0 (*never*) to 6 (*every day*). Three dimensions of engagement can be distinguished, namely Vigour (6 items; e.g. "I am bursting with energy in my work"), Dedication (5 items; e.g. "I find my work full of meaning and purpose") and Absorption (6 items; e.g. "When I am working, I forget everything else around me"). Engaged individuals are characterised by high levels of Vigour and Dedication and also elevated levels of Absorption. Empirically, certainty needs to be obtained whether burnout and engagement are indeed opposites of the same continuum, while theoretically there seems to be a dichotomous relationship. Burnout and Engagement can be described as related but distinct concepts (Schaufeli et al., 2002). In terms of internal consistency, reliability coefficients for the three subscales have been determined between 0,68 and 0,91. Improvement of the alpha coefficient (ranging from 0,78 to 0,89) seems possible without adversely affecting the internal consistency of the scale (Storm & Rothmann, 2003).

The *Orientation to Life Questionnaire* (OLQ) (Antonovsky, 1987) was used to measure sense of coherence. The OLQ consists out of 29 items and three subscales: Comprehensibility, Manageability and Meaningfulness. Antonovsky (1987) reported alpha coefficients ranging between 0,84 and 0,93 for the OLQ. Coetzee and Rothmann (1999) found an alpha coefficient of 0,89 for the total score of the OLQ. Kalimo and Vuori (1990) reported a test-retest reliability of 0,93 for the OLQ. Regarding construct validity, it was found that there is an inverted relationship between the OLQ and stress experienced. The OLQ correlates

negatively with the “State-Trait Anxiety Inventory-Trait” and the “Beck Depression Inventory” (Frenz, Carey, & Jorgensen, 1993).

The *Life Orientation Test – Revised (LOT-R)* (Scheier, et al., 1994), a 10-item measure, was used to measure dispositional optimism and to assess generalised outcome expectancies. Six items contribute to the optimism score and four items are fillers. Half of the items of the LOT-R are phrased positively, while the other half is phrased negatively. The items enquire about the person's general expectations regarding the favourability of future outcomes (e.g., “I hardly ever expect things to go my way”, and “I'm always optimistic about my future”). The original Life Orientation Test (Scheier & Carver, 1985) like the Life Orientation Test – Revised had a two-factor structure namely optimism and pessimism. Follow-up analyses have demonstrated a one-factor structure, indicating that the LOT-R measures a continuum of high, average and low optimism/pessimism (Scheier et al., 1994). The LOT-R is measured on a five-point Likert Scale, ranging from 5 (*strongly agree*) to 1 (*strongly disagree*). The LOT-R was found to have adequate internal consistency and excellent convergent and discriminant validity (Scheier et al., 1994).

The *Coping Orientations to Problems Experienced Questionnaire (COPE)* (Carver et al., 1989) was used to measure the participant's general coping strategies. The cope is a multidimensional 53-item questionnaire indicating the different ways in which individuals cope in different circumstances. Respondents rate themselves on a four-point frequency scale, ranging from 1 (*usually not doing it at all*) to 4 (*usually doing it a lot*). In total 13 different coping strategies are measured. Five sub-scales (4 items each) measure different aspects of problem-focused coping, namely Active Coping, Planning, Suppressing of Competing Activities, Restraint Coping and Seeking Social Support for Instrumental Reasons. Five sub-scales (4 items each) measure aspects of emotion-focused coping, namely Seeking Social Support for Emotional Reasons, Positive Reinterpretation and Growth, Acceptance, Denial and Turning to Religion. Four sub-scales measure coping strategies, which are used less, namely Focus on and Venting of Emotions, Behavioural Disengagement, Mental Disengagement and Alcohol-drug Disengagement (Carver et al., 1989). The COPE has been proven both reliable and valid in different cultural groups (Clark, Bornman, Cropanzano, & James, 1995; Van der Wateren, 1997). Acceptable reliability and validity levels have been determined for the COPE in the South African context, rendering it suitable for usage in South Africa (Van der Wateren, 1997). Test-retest reliability varies from 0,46 to 0,86 and

from 0,42 to 0,89 (applied after two weeks) (Pienaar & Rothmann, 2003). Eight items, measuring emotional processing and emotional expression (four items each), as developed by Stanton et al., (2002), were added. Pienaar and Rothman (2003) subjected the COPE to a factor analysis and found a four-factor solution, namely problem-focused coping, emotion-focused, reappraisal and avoidance. Furthermore, Naudé (2003) recommends that future research regarding the psychometric properties of the COPE in South Africa should consider a four-factor solution, namely active coping, passive coping, social/emotional support coping, and religion and/or humour coping mechanisms.

The *Job Characteristics Survey - Mining* (JCM) was developed for the purposes of this study. The JCM is based on the Job Characteristics Theory (Hackman & Oldham, 1975; 1976, 1980), which describes the relationship between job characteristics and individual response to work. The JCM measures the characteristics of the work environment from the perspective of possible resources and demands that typifies the mining work environment. The JCM consists of 16 dimensions, namely pace and amount of work, mental load, emotional load, variety in your work, opportunities to learn, independence in your work, relationships with colleagues, relationship with your immediate supervisor, ambiguities about work, information, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities. The questions are rated on a four-point scale ranging from 1 (*never*) to 4 (*always*). Rothmann, Mostert, and Strydom (2006), in their meta-study of the job characteristics across various industries in South Africa report that job characteristics can be grouped into five dimensions of job demands and resources, namely overload, job insecurity, growth opportunities, advancement and organisational support.

A *360° Performance Evaluation Measurement* (PEM) was developed for the purposes of this study. The PEM is based on the competency-based approach (Byham, 1982; Weightman, 1994). The PEM consists of job-related behaviours that are essential in order to meet job and organisational objectives, as well as generic behaviours derived from General Manager, Production Manager and Mine Overseer job profiles. The face validity of the items of the PEM was evaluated by subject matter experts. A pilot study was conducted four months prior to the commencement of the study, and consisted of one production manager, 3 mine overseers and eleven shift overseers. After the pilot study it was decided to exclude the following items, namely cross functional awareness, project management and commercial awareness in order to avoid duplication. The items measured the same job-related behaviours

as being measured by financial management and the functional dimensions. The measure is a 31-item instrument measuring an individual's performance on six dimensions, namely, job related performance (financial management, learning and growth, and business processes), functional (technical skills, administration, health and safety, human resources, quality orientation, computer skills, security, managing information, and industrial relations), cognitive (analytical thinking, judgement, broad perspective, flexibility, decision making, planning, and organizing), leadership (individual leadership, team leadership, and leadership of change) and personal and interpersonal effectiveness (innovation, assertiveness, tenacity, verbal communication, written communication, development orientation, and culture awareness). The participant as well as the participant's supervisor(s), peers and subordinates completed the 360° measurement.

Statistical Analysis

The data analysis was carried out by means of the SPSS program (SPSS Inc., 2005). Descriptive statistics (e.g. median, standard deviation, skewness and kurtosis) as well as non-parametric statistics, namely the Wilcoxon signed-rank test (statistical significance, $p \leq 0,05$) were used to determine differences in before- and after measurement. Cronbach alpha coefficients were used to analyse the data, as well as Spearman product-moment correlations in order to specify the relationships between the variables. A cut-off point of 0,30 (medium effect, Cohen, 1988) was set for the practical significance of correlation coefficients.

RESULTS

Descriptive statistics, alpha coefficients and inter-item correlations of the scales for general wellbeing, work-related wellness, coping strategies, job characteristics, pervasive personality characteristics and performance are given in Table 2.

Table 2

Descriptive Statistics, Alpha Coefficients and Inter-Item Correlations of the MBI-GS, COPE, UWES, OLQ, LOT-R and JCM

Item	Mean	SD	Skewness	Kurtosis	r(mean)	α_{t1}	α_{t2}
Vigour	30,79	4,91	-0,95	0,10	0,32	0,72	0,72
Dedication	26,32	4,41	-1,77	3,02	0,33	0,69	0,59
Absorption	24,89	5,52	-0,23	0,13	0,16	0,50	0,45
Exhaustion	9,90	7,00	0,47	-0,88	0,47	0,83	0,76
Cynicism	8,21	4,92	2,00	-0,38	0,22	0,53	0,73
Professional Efficacy	31,54	3,53	-0,52	-0,59	0,06	0,21	0,35
Cognitive Weariness	11,75	6,69	0,33	-1,15	0,30	0,72	0,82
Dispositional Optimism	18,11	4,27	0,04	-0,49	0,30	0,72	0,68
Comprehensibility	54,61	10,75	-0,27	-0,80	0,26	0,78	0,83
Manageability	51,04	9,52	-0,17	-1,02	0,25	0,76	0,76
Meaningfulness	44,75	10,91	-2,68	10,19	0,29	0,74	0,75
Overload	21,36	3,20	0,35	-0,18	0,17	0,46	0,44
Growth Opportunities	26,14	4,16	0,33	-0,23	0,24	0,75	0,37
Organisational Support	60,43	10,57	1,56	1,50	0,39	0,94	0,92
Advancement	17,71	2,67	-0,15	-0,99	0,16	0,52	0,32
Job Insecurity	7,89	2,17	0,83	-0,58	0,79	0,92	0,88
Problem-Focused Coping	76,07	7,69	-0,22	0,13	0,10	0,73	0,52
Seeking Emotional Support	23,36	4,93	-0,56	0,37	0,37	0,83	0,81
Passive Coping	24,11	6,41	-0,14	-0,04	0,22	0,77	0,73
Turning to religion	12,93	2,00	-0,43	-0,49	0,15	0,43	0,62
Emotional Processing and - Expressing	24,25	3,59	0,13	-0,53	0,13	0,56	0,70

Table 2 indicates that most of the scales are normally distributed with the exception of Dedication, Cynicism, Manageability, Meaningfulness, and Organisational Support, which could indicate that the assumptions associated with parametric statistical techniques could have been violated. With regard to the internal consistency of the scales, most of the scales seem to demonstrate consistent, acceptable coefficient alphas for the pre-test and the post-test around the 0,50 guideline for basic research (Kerlinger & Lee, 2000). In terms of this guideline, it would seem that the MBI-GS, COPE, UWES, OLQ, LOT-R and JCM seem to satisfy to some extent the requirements of homogeneity and test-retest reliability. However, considering the apparent violations of normality assumptions and the small sample size of the study, it would be more appropriate to take the mean inter-item correlations into account. In

this regard, the scales seem to demonstrate acceptable internal consistency ($0,15 \leq r \leq 0,50$, Clarke & Watson, 1995), with the exception of the Job Insecurity scale.

In the next step, exploratory descriptive analyses of the scales were conducted. The results showed significant violations of the assumption of normality, which indicate that the samples could be viewed as being drawn from a non-normal population. Consequently, Spearman correlation coefficients were calculated for the scales of work-related wellness, coping strategies, job characteristics, pervasive personality characteristics and performance. The results are given in Table 3.

Table 3

Spearman Correlation Coefficients of MBI-GS, COPE, UWES, OLQ, LOT-R and JCM

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Vigour	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Dedication	0,64**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Absorption	-0,10	0,04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Exhaustion	-0,54**	-0,56**	0,24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Cynicism	-0,31'	-0,28	0,34'	0,33'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. Professional Efficacy	0,40'	0,27	0,91	-0,26	0,05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Cognitive Weariness	-0,22	0,03	0,31'	0,05	0,18	-0,42'	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8. Dispositional Optimism	0,13	0,08	0,04	-0,13	-0,47**	-0,04	0,02	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Comprehensibility	0,07	0,25	-0,09	-0,38'	-0,34'	0,27	-0,16	0,42'	-	-	-	-	-	-	-	-	-	-	-	-
10. Manageability	0,14	0,21	-0,17	-0,23	-0,42'	0,08	-0,29	0,26	0,67**	-	-	-	-	-	-	-	-	-	-	-
11. Meaningfulness	0,18	0,22	-0,11	-0,29	-0,33'	-0,01	-0,08	0,13	0,34'	0,66**	-	-	-	-	-	-	-	-	-	-
12. Overload	-0,17	-0,25	-0,04	0,46**	-0,04	-0,33'	0,29	-0,12	-0,39'	-0,25	-0,31'	-	-	-	-	-	-	-	-	-
13. Growth Opportunities	-0,28	-0,13	0,25	0,14	-0,17	-0,04	-0,07	-0,02	0,00	0,02	0,04	-0,11	-	-	-	-	-	-	-	-
14. Organisational Support	0,13	0,21	0,18	-0,21	-0,22	0,23	0,10	0,05	0,17	0,11	0,23	-0,17	0,54**	-	-	-	-	-	-	-
15. Advancement	-0,16	0,10	0,00	-0,28	-0,19	-0,14	0,10	0,08	0,16	0,19	0,22	-0,53**	0,57**	0,44'	-	-	-	-	-	-
16. Job Insecurity	-0,06	0,10	0,28	0,12	-0,26	0,09	0,04	-0,01	0,11	0,11	-0,04	0,31'	0,57**	0,51**	0,03	-	-	-	-	-
17. Problem-focused Coping	0,02	0,11	0,05	0,13	0,20	-0,05	-0,26	-0,21	0,20	0,22	0,13	-0,03	-0,26	-0,17	-0,16	-0,16	-	-	-	-
18. Seeking Social Support	-0,27	-0,26	-0,07	0,01	0,44**	0,19	-0,10	-0,27	0,08	-0,03	-0,15	-0,21	-0,08	-0,02	0,12	-0,42'	0,16	-	-	-
19. Passive Coping	-0,13	-0,12	0,20	0,11	0,50**	0,04	0,39'	-0,00	-0,06	-0,39'	-0,25	0,00	-0,30'	-0,37'	-0,07	-0,40'	0,11	0,30'	-	-
20. Turning to Religion	0,08	-0,04	-0,08	0,15	0,28	-0,29	0,05	-0,17	-0,05	0,04	0,21	-0,23	-0,27	-0,19	0,05	-0,44'	0,31'	0,29	0,26	-
21. Emotional Processing and Expression	0,03	0,08	0,07	-0,16	0,32'	0,44'	0,01	-0,09	-0,00	-0,17	-0,12	-0,20	-0,11	0,20	0,20	-0,16	0,07	0,46**	0,28	-0,06

* $p \leq 0,01$
 ** statistically significant
 † $r > 0,30$
 †† practically significant (medium effect)
 ††† $r > 0,50$
 †††† practically significant (large effect)

According to Table 3, Vigour showed statistically significant relationships of large effect with Dedication, and Exhaustion (inverse). Dedication showed a statistically significant relationship of large effect with Exhaustion (inverse). Cynicism showed a statistically significant relationship of large effect with Passive Coping. Comprehensibility showed a statistically significant relationship of large effect with Manageability. Manageability is positively related to Meaningfulness (statistically significant, large effect). Overload showed a statistically significant relationship of large effect with Advancement (inverse). Growth Opportunities showed statistically significant relationships of large effect with Organisational Support, Advancement and Job Insecurity. Organisational Support is positively related to Job Insecurity (statistically significant, large effect). Exhaustion showed a statistically significant positive relationship of medium effect with Overload. Cynicism showed statistically significant relationships of medium effect with Dispositional Optimism (inverse) and Seeking Social Support. Organisational support is positively related to Advancement (statistically significant, medium effect). Seeking Social Support showed statistically significant relationships of medium effect with Emotional Processing and Expression. These findings are practically significant.

Next, the differences in pre- and post-tests were analysed. The results of the Wilcoxon signed-rank tests for the scales of work-related wellness, coping strategies, job characteristics and pervasive personality characteristics are reported in Table 4.

Table 4

Wilcoxon signed-rank tests of the pre- and post-test of the MBI-GS, COPE, UWES, OLQ, LOT-R and JCM

Item	Median t1	Median t2	Z	p	r
Vigour	32	33	-2,66	0,01*	-0,35 ⁺
Dedication	28	27	-0,13	0,90	-0,02
Absorption	25	23	-3,10	0,00*	-0,41 ⁺
Exhaustion	9	6	-3,98	0,00*	-0,52 ⁺⁺
Cynicism	8	5	-4,40	0,00*	-0,58 ⁺⁺
Professional Efficacy	32	33	-3,25	0,00*	-0,43 ⁺
Dispositional Optimism	18	21	-4,21	0,00*	-0,55 ⁺⁺
Comprehensibility	54	57	-3,00	0,00*	-0,39 ⁺
Manageability	51	53	-2,46	0,01*	-0,32 ⁺
Meaningfulness	45	47	-1,38	0,17	-0,18
Overload	21	21	-1,92	0,05*	-0,25
Growth Opportunities	26	29	-4,22	0,00*	-0,55 ⁺⁺
Organisational Support	57	71	-4,62	0,00*	-0,61 ⁺⁺
Advancement	18	20	-4,22	0,00*	-0,55 ⁺⁺
Job Insecurity	7	8	-0,54	0,68	-0,07
Problem-focused Coping	77	78	-1,66	0,10	-0,22
Seeking Social Support	23	25	-3,21	0,00*	-0,42 ⁺
Passive Coping	25	21	-3,80	0,00*	-0,50 ⁺⁺
Turning to Religion	13	13	-2,14	0,03*	-0,28 ⁺
Emotional Processing and Expression	24,50	26	-3,77	0,00*	-0,49 ⁺

- * $p \leq 0,05$ – statistically significant
 • $r > 0,30$ – practically significant (Medium effect)
 ++ $r > 0,50$ – practically significant (Large effect)

According to Table 4, work-related wellness showed a statistically significant increase of medium effect for Vigour and Professional Efficacy ($T = 32,33$, $p \leq 0,05$, $r = -0,35$; $T = 32,33$, $p \leq 0,05$, $r = -0,43$ respectively). Absorption showed a statistically significant decrease of medium effect ($T = 25,23$, $p \leq 0,05$, $r = -0,41$). Exhaustion and Cynicism showed a statistically significant decrease of large effect ($T = 9,6$, $p \leq 0,05$, $r = -0,52$; $T = 8,5$, $p \leq 0,05$, $r = -0,58$), while a statistically significant increase of large effect was found for Dispositional Optimism ($T = 18,21$, $p \leq 0,05$, $r = -0,55$). In terms of Sense of Coherence, there was a statistically significant increase of medium effect for

Comprehensibility and Manageability ($T = 54,57, p \leq 0,05, r = -0,39$; $T = 51,53, p \leq 0,05, r = -0,32$). In terms of job characteristics, there was a statistically significant increase of large effect for Growth Opportunities, Organisational Support and Advancement ($T = 26,29, p \leq 0,05, r = -0,55$; $T = 57,71, p \leq 0,05, r = -0,61$; $T = 18,20, p \leq 0,05, r = -0,55$). Seeking Social Support and Emotional Processing and Expression showed a statistically significant increase of medium effect ($T = 23,25, p \leq 0,05, r = -0,42$; $T = 24,50, 26, p \leq 0,05, r = -0,49$). Passive Coping showed a statistically significant decrease of large effect ($T = 25,21, p \leq 0,05, r = -0,50$).

In summary, the results indicate that positive work-related wellness (Vigour and Professional Efficacy), Dispositional Optimism, Sense of Coherence, Growth Opportunities, Organisational Support, Advancement, Seeking Social Support and Emotional Processing and Expression are based on negative ranks, while negative work-related wellness (Exhaustion and Cynicism) and Passive Coping are based on positive ranks. Therefore, positive work-related wellness (Vigour and Professional Efficacy), Dispositional Optimism, Sense of Coherence, Growth Opportunities, Organisational Support, Advancement, Seeking Social Support and Emotional Processing and Expression increased significantly, while negative work-related wellness (Exhaustion and Cynicism) and Passive Coping decreased significantly. These findings are practically meaningful.

Consequently, these results provide support for Hypothesis 1 in terms of the improvement of work-related wellness, coping strategies and job characteristics of executives in the mining industry. Hypothesis 2, however, is not supported.

Next, the differences between the pre- and post-test in terms of performance were determined. The results of the Wilcoxon signed-rank tests for the 360° Performance Evaluation Measurement (PEM) are given in Table 5.

Table 5

Wilcoxon signed-rank tests of the pre-test and post-test of the 360°PEM

Item	Median t1	Median t2	z	p	r
Finance	3,25	3,75	-3,97	0,00*	-0,52 ⁺⁺
Customer Focus	3,50	3,75	-4,38	0,00*	-0,57 ⁺⁺
Business Processes	3,25	3,50	-2,87	0,04*	-0,38 ⁺
Learning and Growth	3,00	3,50	-4,16	0,00*	-0,56 ⁺⁺
Functional	29,25	31,50	-4,63	0,00*	-0,61 ⁺⁺
Cognitive	23,25	25,50	-4,71	0,00*	-0,62 ⁺⁺
Leadership	10,75	11,50	-4,36	0,00*	-0,57 ⁺⁺
Personal and Interpersonal	26,25	28,25	-4,54	0,00*	-0,60 ⁺⁺

* $p \leq 0,05$ – statistically significant+ $r > 0,30$ – practically significant (Medium effect)++ $r > 0,50$ – practically significant (Large effect)

Table 5 indicates a statistically significant increase of large effect for the performance dimensions of Finance (T = 3,25, 3,75, $p \leq 0,05$, $r = -0,52$), Customer Focus (T = 3,50, 3,75, $p \leq 0,05$, $r = -0,57$), Learning and Growth (T = 3,00, 3,50, $p \leq 0,05$, $r = -0,56$), Functional (T = 29,25, 31,50, $p \leq 0,05$, $r = -0,61$), Cognitive (T = 23,25, 25,50, $p \leq 0,05$, $r = -0,62$), Leadership (T = 10,75, 11,50, $p \leq 0,05$, $r = -0,57$), Personal and Interpersonal (T = 26,25, 28,25, $p \leq 0,05$, $r = -0,60$). Furthermore, a statistically significant increase of medium effect was confirmed for Business Processes (T = 3,25, 3,50, $p \leq 0,05$, $r = -0,38$). In summary, the results show that the performance dimensions of Finance, Customer Focus, Learning and Growth, Functional, Leadership, Business Processes, Cognitive, as well as Personal and Interpersonal are based on negative ranks and have therefore increased. These findings are practically meaningful.

Consequently, Hypothesis 3 is supported.

DISCUSSION

The objectives of this study were to determine the relationship between executive coaching, pervasive personality characteristics, job characteristics, coping strategies, work-related wellness and the performance of executives in the mining industry.

Secondly, to evaluate the effect of an executive coaching programme on the work-related wellness, pervasive personality characteristics, job characteristics, coping strategies and performance levels of executives in the mining industry in South Africa.

The results seem to support the notion that the executive coaching programme developed for this study was indeed successful in terms of the enhancement of work-related wellness, job characteristics, coping strategies and performance of executives in the mining industry in South Africa. Overall, the results showed an increase in positive work-related wellness and a decrease in negative work-related wellness after the coaching intervention. More specifically, the results showed an increase in the positive affective evaluation of work (vigour and professional efficacy) and a decrease in the negative affective evaluation of work (exhaustion and cynicism). This finding is consistent with the findings of Kauffman & Scoular (2004) in that it demonstrated an increase in the positive affective evaluation of work of executives after the completion of an executive coaching programme.

The results showed a decrease in absorption of the executives after the executive coaching programme. Based on the qualitative information recorded, the executives reported experiencing work overload, lack of resources and autonomy due to the restructuring that took place at that time. The increase in the work overload experienced by the executives may have caused them to experience difficulty focusing on their work. This finding is supported in the literature. According to Job Demands-Resources Model lack of resources affects the psychological wellbeing, organisational commitment and the experience of work by employees (Coetzer & Rothmann, 2006; Demerouti et al., 2001; Schaufeli and Bakker, 2004).

In terms of coping strategies, the results seem to show an increase in emotion-focused coping namely seeking social support, and the processing of emotions and the expression thereof, while passive coping decreased. Furthermore, the results suggest that executives seem to use less passive coping strategies and more problem-focused and emotional-focused coping strategies after completion of the executive coaching programme.

According to the literature, effective coping approaches (e.g. problem-focused coping) to changes in the environment increases mental and physical wellbeing (Stanton et al., 2000). Consequently, it seems fair to infer that executives might be in a better position to deal with challenges in their work. Interestingly, the results also showed that the executives who evaluate their professional competency positively, are also likely to resort to the processing and expression of emotions as a strategy to deal with the demands of the job. Furthermore, those who use this type of coping strategy also seem more likely to use social support strategies as well.

In terms of job characteristics, the results showed an increase in experiencing opportunities for growth and development in their work environment, opportunities for promotion, as well as support from the organisation in the completion of goals. This finding is supported in the literature. According to Whitworth et al. (1998), executive coaching has the potential to increase job satisfaction, the ability to effectively lead a team, the managing of job resources and job demands, and the ability to effectively manage changes in the environment.

An interesting finding of this study is the significant increase in pervasive personality characteristics of executives after the coaching programme. Although the literature reports several gains of coaching interventions, such as general life satisfaction, quality of life, mental (Grant, 2003), as well as increases in wellbeing, with gains maintained up to thirty weeks after the coaching intervention (Green et al., 2006), this finding seem to a unique one. The increase in dispositional optimism and sense of coherence is contrary to the literature. According to Diener and Lucas (1999), sense of coherence and dispositional optimism are by definition consistent across situations and life span. A possible explanation of these conflicting results may be due to error of measurement of the measuring instruments, which seem to be accentuated by the small sample size (Kerlinger & Lee, 2000). Considering the limitations of this study, it is necessary to investigate this finding further in other studies, especially in larger samples in different settings. Furthermore, the suitability of looking at pervasive personality characteristics in diary studies needs to be investigated further in future studies.

The results showed an increase in the performance of executives. Executives reported an increase regarding their understanding of the key business issues and relevant external factors impacting on the success of the organisation, sustaining productive client relationships, understanding organisational issues (organisational functioning, internal politics, power relationships, social networks etc.), analysis of problems and determining the possible causes for a problem, leading and empowering of others to reach organisational goals, as well as to inspire others to work towards a desired future state by taking their needs into account. This finding is consistent with the findings by McGovern et al. (2001) which demonstrated increases in productivity, quality, organisational strength and customer service after the completion of an executive coaching programme.

An important consideration regarding these findings is the fact that the performance of executives in this study was evaluated by means of a 360-degree performance evaluation measurement. This allows employees to express opinions relevant to the performance appraisal decision, thus providing them with a “voice” as it is termed in the organisational justice literature (Lind & Tyler, 1988). By using a 360-degree performance evaluation measurement in the coaching process, the self awareness of executives were increased. Furthermore, the information obtained from the performance assessment process was used in addressing specific performance areas of the individual executives for the duration of the coaching programme intervention.

The results also showed that executives in the mining industry in South African who are willing to invest their energy and identify strongly with their work, could also be prone to experience mental and emotional exhaustion, as well as a lack of commitment to their work. Moreover, executives who experience emotional and mental exhaustion seem to experience task overload, and appear to be less likely to make sense of their experiences on a cognitive level. These findings are consistent with the findings of Schaufeli and Bakker (2004) which indicated that job demands were associated with exhaustion. According to Job-Demands Resources Model, job demands (i.e., physical demands, time pressure, task overload, shift work) could be associated with negative work wellness (exhaustion), as well as decreased affective connection and engagement with the job

(Demerouti et al., 2001). This finding is also consistent with the findings of Coetzer and Rothmann (2006) in that it demonstrated that two occupational stressors namely, overload and job characteristics showed significant regression coefficients and are therefore the best predictors of physical and psychological ill health.

Furthermore, executives who are experiencing cynical and detached attitudes towards others and their working environment, are likely to seek support from others to cope with challenges, are likely to postpone dealing with issues, and are less likely to appear optimistic that things will turn out as well as could be reasonably expected. These findings seem to be supported in the literature. According to Mashlach et al. (2001), cynicism is related to pessimism. Carver and Scheier (2002) indicated that pessimists tend to use passive coping strategies.

A limitation of this study was the lack of a control group. Furthermore, the total population of one area within a large mining company was selected for this study as a result of realistic constraints in terms of resources. This means that the effects could have occurred naturalistically, rather than being caused by the intervention, as well as the fact that these findings could be limited to this area and/or organisation only. Another limitation is the size of the sample, which also has significant limitations in terms of the generalisation of the findings. Finally, the design may have induced a demand effect where the participants may have felt that they had to report making progress and enhanced wellbeing in order to please the researcher (Grant, 2003).

RECOMMENDATIONS

The results showed an increase in work-related wellness, pervasive personality characteristics and performance levels of executives in the mining industry. Consequently, it is recommended the Executive Coaching Programme developed and used for the purposes of this study could be effectively used for executive development in the Mining Industry of South Africa.

However, based on the limitations of this study, it is recommended that future studies use larger samples in other mining contexts in South Africa. Furthermore, future studies should use an experimental design and also compare the effectiveness of the executive coaching programme across different industries in South Africa. Moreover, there seems to be a lack of research on the relationship between executive coaching and situational variables. Consequently, it is recommended that future coaching intervention research should include the impact of an executive coaching programme on the general wellbeing, as well as situational personality characteristics of executives in the mining industry. Considering the interesting findings regarding the nature of more pervasive personality indicators in the present study, more research seemed to be needed in the arena of personality indicators (both pervasive and situational), wellbeing and coaching.

Future research could also consider comparisons of the effectiveness of various types of coaching, for example, whether a group programme is just as effective as individual programmes, or whether tele-coaching is just as effective as face-to-face coaching (Grant, 2006). Finally, future studies should also involve measuring whether the gains attained as a result of the executive coaching programme is maintained over extended periods of time.

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**CHAPTER 4: WELLBEING OF EXECUTIVES IN THE MINING INDUSTRY: A
DIARY STUDY**

WELLBEING OF EXECUTIVES IN THE MINING INDUSTRY: A DIARY STUDY

ABSTRACT

The objective of this study was to determine the wellbeing of executives in one area of a large mining company in South Africa. A longitudinal-design was used. The participants ($n = 29$) consisted of general managers, production managers and mine overseers. The Perceived Wellness Survey (PWS), the Situational Sense of Coherence Scale (SSOC), the Learned Optimism Scale (LOS), the Maslach Burnout Inventory – General Survey (MBI-GS), the Utrecht Work Engagement Scale (UWES) and a 360° Performance Evaluation Measurement were used as measuring instruments. The results showed that the executive coaching programme developed for the purpose of this study improved the general wellbeing, situational personality characteristics and work-related wellness of executives. The results also showed that the performance of executives in the mining industry improved after the completion of the executive coaching programme.

OPSOMMING

Die doel van die studie was om die welsyn van senior bestuurders van een area van 'n groot mynmaatskappy in Suid-Afrika te bepaal. 'n Longitudinale ontwerp is gebruik. Die deelnemers ($n = 29$) het bestaan uit algemene bestuurders, produksiebestuurders sowel as myn-toesighouers van een area van 'n groot mynmaatskappy in Suid-Afrika. Die Waargenome welsyn skaal (PWS), die Situationele Koherensiesin skaal (SSOC), die Aangeleerde Optimisme skaal (LOS), die Maslach-Uitbrandingsvraelys – Algemene opname (MBI-GS), die Utrecht Werksbegeesteringsvraelys (UWES) en 'n 360° Prestasiemeeting is in die studie gebruik. Die resultate het getoon dat die *coaching* program wat vir die doel van hierdie studie ontwikkel is, die algemene welsyn, situasionele persoonlikheidseienskappe en werk-verwante welsyn van senior bestuurders verbeter het. Die resultate het ook aangetoon dat die prestasie van senior bestuurders in die mynbedryf na die verloop van die *coaching* programme verbeter het.

Our world is constantly changing. Global market places, globalisation, global competition, hyper-competitiveness, ever-increasing customer expectations, the digital economy and talent wars are characteristics of business in the 21st century (Lester, 2002). The challenges facing top executives are diverse and substantial. Executives are facing a workforce that is growing smaller and more diverse. They must lead their organisations in an environment of increasing trade liberalisation and the globalisation of economies. One of the most important activities for executives is to achieve and maintain a strong state of general health and wellbeing to face the rigours and demands of their jobs (Quick, Gavin, Cooper, & Quick, 2000).

There is a long tradition of concern for the health and wellbeing of executives. Occupational health and safety research at the beginning of the 20th century was among the first to develop research programs and practice in this regard. An unhealthy executive may do real damage, not only to him- or herself, but also by the toxic effect they have on those they interact with (Quick et al., 2000). The role of the executive brings many physical demands, as most executives work long hours with demanding schedules. They often face a daily agenda of non-stop meetings with few breaks. They often have to endure hectic travel schedules that leave them drained and jet-lagged (DeFrank & Ivancevich, 1998). These demanding workloads often prevent participation in regular exercise and may lead to poor diets. Furthermore, the executives are challenged to find ways to live healthy lives on the road and in constant meetings. Psychological demands of leadership are another threat to the wellbeing and performance of executives. Consequently, there is an increase in the ill health, burnout and stress among executives (Quick et al., 2000).

South African companies are being exposed more than ever to the effects of the world economy, technological advancement and tough international competition. Considering the importance of the mining industry in the local economy, one could expect employees in this industry to deal with the associated challenges on a regular basis. Furthermore, mining executives are constantly challenged to manage the effects of the changing economy and the need to redress social imbalances by means of equitable employment,

practices, accelerated career development of designated group employees, as well as empowerment initiatives, to name but a few. These environments often force organisations to become so focused on bottom-line improvement that the welfare of the individual takes a back seat (Fletcher, 1996). According to Maslach, Schaufeli, and Leiter, (2001) the impact of the changing world of work is perhaps most evident in changes regarding the psychological contract. Employees receive less in terms of career opportunities, lifetime employment and job security. This violation of the psychological contract is likely to have a negative impact on the general wellbeing of employees and could lead to negative affective evaluations of their work environment (Maslach et al., 2001).

While life at the top may sound enviable, the pressures that come along with it are enormous. Executives are often isolated in terms of classified knowledge and decision-making responsibility, which can be neither shared nor delegated (DeFrank & Ivancevich, 1998). Colleagues who were once peers and confidants may no longer be accessible because of confidentiality requirements. What once could be discussed with co-workers is now private, inside information (DeFrank & Ivancevich, 1998). Social support is often diminished or even becomes non-existent. However, if one considers the general health and wellbeing of executives, it is useful to take into account the multifaceted nature of wellbeing. According to Quick et al. (2000) wellbeing consists of various dimensions, namely physical, psychological, spiritual and ethical wellbeing.

Organisations need executives to operate to their full potential and it is therefore important to find the most effective means of executive development in order to increase their performance (Bagshaw, 1998). Given the changes in work environment, coaching is gaining recognition as an effective method of achieving this performance enhancement. Coaching is fast becoming a popular tool for companies that are trying to help their executives to perform at a higher level (Bagshaw, 1998). Grant (2006) believes that executive coaching has the tremendous innate potential for the promotion of wellbeing, productivity and performance enhancement for the individual, organisations and corporations, as well as the broader community as a whole. According to Witworth,

Kimsey-House, and Sandahl (1998), the advantages of coaching include increased performance, job satisfaction, team effectiveness, decreased job stress, self-awareness, higher optimism and change management.

The executive coaching programme

According to the literature there has been an increasing interest in the use of executive coaching interventions to enhance performance and life experiences. Typically coaching interventions employ techniques from clinical psychology (Grant, 2001). Although these techniques are effective within the clinical context little is known about their effectiveness in non-clinical environments. According to the South African literature on executive coaching, the focus seems to be on the practical “how to do” executive coaching and claims that its practice will result in increased management and leadership competence, strategic thinking, intellectual thinking, wisdom, empowerment as well as the solving of business problems (Johnson & Cohen, 2004; Price, 2003b). However, there seems to be a need for theoretical and empirical research in the South African context on the psychological effects of executive coaching (Cilliers, 2005). Consequently, an Executive Coaching Programme was developed for the purpose of this study from an extensive literature review on existing coaching programmes such as the Integrated Executive Experiential Learning Coaching Model (Chapman, 2004), the Coach Yourself Programme (Grant & Greene, 2001), a multi-modal approach to executive coaching (Richard, 1999) and the Integral Coaching Programme (Armstrong, Matthews, & McFarlane, 2006). An analysis on the existing coaching programmes indicated that executive coaching is generally studied from the behaviouristic, humanistic and positive psychology paradigms (Cilliers, 2005).

According to Chapman (2004), the Integrated Executive Experiential Learning Coaching model conceptualises executive coaching as a form of consulting, combining the Wilber’s (1996, 2000) Integrative Model and the Experiential Learning Model (Kolb, 1985), while integrating the hierarchical evolution of consciousness. This model describes coaching as facilitating self-organised learning in adults through experiential learning conversations

in order to grow and improve performance. The Coach Yourself Program is based on principles drawn from cognitive-behavioral clinical and counseling psychology (Beck, Rush, Shaw, & Emery, 1979), brief solution-focused therapy (O'Hanlon, 1998), and models of self-regulated learning (Zimmerman, 1989). The cognitive-behavioural approaches recognise the quadratic reciprocity between the four domains of human experience, namely behaviour, thoughts, feelings and the environment (Grant, 2003). Solution-focused therapy focuses on the strengths that clients bring to therapy, and emphasizes the importance of solution construction rather than problem analysis. According to Bandura (1986), self-observation, self-evaluation and self-reaction are the three key processes involved in instigating directed change and goal-directed self-regulation. The multi-modal approach to executive coaching is based on principles drawn from the cognitive-behavioural framework and focuses on seven dimensions namely, behaviour, affect, sensation (e.g., physical discomfort), imagery, cognitions, interpersonal and biological issues (e.g., drug and alcohol use) (Richard, 1999). The Integral Coaching Programme uses Wilber's (1996, 2000) Integrative Model to highlight the coaching endeavour as a holistic and multi-dimensional activity. This programme uses three general approaches to coaching, namely experiential learning, strength-based psychology and spirituality (Armstrong et al., 2006).

The content of the executive coaching programme developed for this study was based on the techniques drawn from the Coach Yourself Programme (Grant & Greene, 2001). The Coach Yourself Programme uses self-regulated learning, cognitive-behavioral coaching techniques, including self-monitoring, cognitive restructuring, behavioral modification and environmental structuring, and solution-focused techniques (Kilburg, 2000; Zeus & Skiffon, 2000; Zimmerman, 1989). The focus of the executive coaching programme developed for this study was different from the Coach Yourself Programme in that the focus was not only on life coaching but also on work-related coaching (e.g. job-related behaviours derived from the job profiles). The executive coaching program developed for this study targeted both behavioural skills (basic communication, doing presentations, keeping a diary, taking up a hobby, less drinking and more exercising) and cognitive skills (dealing with problems and rejection, developing an optimistic outlook) in an

organisational setting. The executive programme focused on enhancing the following competencies namely, interpersonal sensitivity, leadership, functional, team work, cultural awareness, problem solving, strategic thinking, intrapersonal effectiveness (self-regard, independence, assertiveness) and dynamism. The coaching programme consisted of one-on-one sessions, following standard assessment procedures and was completed over a period of six months. The initial coaching encounter focused on setting individual goals for the executive coaching programme. The goal setting phase was based on the results of pre-assessments (e.g. work-related wellness, coping strategies, psychometric data and a 360° performance evaluation measurement). According to Grant (2001), goal setting ignites the coaching cycle. The following sessions focused on planned action toward the achievement of the goals. Confidentiality principles were stipulated in order to protect the specific content of coaching sessions while keeping the stakeholders informed of goals and progress.

In South Africa, however, executive coaching is a new trend and research regarding the effect of an executive coaching programme on the wellbeing, situational personality characteristics and performance of executives in the mining industry appears to be lacking. Consequently, the objective of this study was to determine the effect of executive coaching on the general wellbeing, situational personality characteristics, work-related wellness and performance levels of executives in the mining industry.

Wellness at work

In the wellness literature, several broad conceptualisations of wellbeing can be found, which seem to have informed our understanding of wellbeing at work in a significant manner. According to the literature, general wellbeing includes an affective, professional, social, cognitive, spiritual and psychological dimension (Ryff, 1989). Affective wellbeing includes job satisfaction and organisational commitment. Happiness is one such an indicator of affective wellbeing. According to Seligman and Csikszentmihalyi (2000), the concept of “the calculus of wellbeing”, an indicator of happiness with different spheres of life represents what can be done to be more consistently happy in life. Happiness is

something that people have to make happen, and not something that happens to them. According to Diener and Lucas (1999), happiness could result from working for one's goals, from close social relationships, as well as renewable physical pleasures. The professional wellbeing dimension taps aspects of job-related motivation, ambition, self-efficacy and achievement. In this regard, burnout and work engagement (work wellness) have been shown to represent a positive and negative affective evaluation of the experience of work (e.g. Jackson, Rothmann, & Van de Vijver, 2006; Schaufeli & Bakker, 2004). Burnout can be defined as “a persistent, negative, work-related state of mind in “normal” individuals that are primarily characterised by exhaustion, as well as distress, a sense of reduced effectiveness, decreased motivation and the development of dysfunctional attitudes and behaviours at work” (Schaufeli & Enzmann, 1998). Engagement, in contrast, is characterised by energy, involvement and efficacy.

According to Ryff (1989), social wellbeing indicates the degree to which one functions in one's social relations at work (for example emotional intelligence, interpersonal skills, etc.). Cognitive wellbeing is a flexible state of mind and openness to novelty that enables sensitivity to the present context and perspectives (Langer, 1989). A closely related concept in the literature in this regard is cognitive weariness, which was devised as an analogue to Maslach and Leiter's (1997) emotional exhaustion concept (burnout). Where exhaustion taps feelings of work-related fatigue (thus reflecting the tiredness-vigour dimension of affect), cognitive weariness on the other hand reflects employees' cognitive functioning (especially the degree to which workers are able to take up new information and are able to concentrate on their work). Spiritual wellbeing entails spiritual processes such as purposefulness in life that lead to optimal functioning (Adams, Bezner, & Steinhardt, 1997). Although conceptualisations of the spiritual dimension vary among theorists, some common threads exist. These include a sense of meaning and purpose in life, connectedness to self, the environment or to God, and a belief in a unifying life force (Adams et al., 2000). Spirituality motivates, enables, empowers and provides hope. A sense of connectedness to “God” or a higher consciousness has consistently been found to engender hope among people with chronic illness (Fowler, 1997). According to Zinnbauer, Pargament, and Scott (1999), spirituality has the capacity to foster or impede

subjective wellbeing. The final sphere of general wellbeing relate to psychological wellbeing. According to Wissing and Van Eeden (1997), psychological wellbeing is a combination of specific qualities, such as a sense of coherence, satisfaction with life, affect-balance and a general attitude of optimism.

The literature on subjective wellbeing usually construes wellbeing as a primarily affective state (Diener, Suh, Lucas, & Smith, 1999). Happiness, defined scientifically in terms of subjective wellbeing, is the sum of life satisfaction and affect-balance (balance of positive and negative affect) (Linley & Joseph, 2004). However, over the past fifteen years several broader conceptualisations of wellbeing have been proposed, including not only affect, but also behaviour and motivation (Ryff, 1989; Ryff & Keyes, 1995; Warr, 1987, 1994). Some of the key outcome variables in work and occupational psychology tap aspects of affective wellbeing (e.g. job satisfaction, commitment, anxiety and depression), whereas other outcomes measure broader conceptualisations of wellbeing (e.g. motivation, competence and efficacy).

According to Horn, Taris, Schaufeli, and Schreurs (2004), occupational wellbeing, like general wellbeing, may be understood as a multi-dimensional phenomenon that manifests itself in employee cognitions, motivations, behaviours and self-reported physical health. Furthermore, a spill-over effect is observed into other areas of functioning on the individual level as a result of the individual-work interaction. Although the occupational wellbeing literature considers job satisfaction, job involvement and organisational commitment to be a few of many measures of job-related wellbeing, findings seem to suggest that affective wellbeing is the best predictor of occupational wellbeing (Horn et al., 2004; Warr, 1994). Gavin and Mason (2004) for instance reported that a workplace designed and managed to create meaning for their employees would increase their happiness, wellbeing and productivity.

According to Seligman (1991), the new employment relationship focuses on human strengths and optimal functioning. In line with the increased focus of psychology on human strengths and optimal functioning, an increasing number of studies have focused

on job engagement that could be viewed as the antithesis of burnout. Maslach and Leiter (1997) have redefined burnout as an erosion of engagement with the job. Energy turns into exhaustion, involvement into cynicism and efficacy into ineffectiveness. Engagement, in contrast, is characterised by energy, involvement and efficacy. Schaufeli, Salanova, González-Romá, and Bakker (2002) contend that vigour (the opposite pole of mental exhaustion) is characterised by high energy levels, mental resilience when working, willingness to exert effort into one's work and to persist even in the face of adversity, while dedication (the opposite pole of cynicism) is related to enthusiasm, inspiration, pride, challenge and a sense of significance in one's work. Absorption refers to a state where time passes quickly and where the individual has difficulty in detaching him- or herself from work. For instance, Hart (1999) found that job-related wellbeing affects employees' overall life satisfaction and contributes to maintaining physical health at work (e.g. staying injury-free and helping to keep co-workers safe).

Recent evidence in personal goals literature indicated that the structure and organisation of personality are important determinants to general wellbeing. Furthermore, general wellbeing seems to be regarded as an important indicator of work wellness according to the literature (Diener & Lucas, 1999). Because personality characteristics like sense of coherence and optimism are by definition consistent across situations and lifespan, it seems plausible to assume that personality characteristics may account for part of the stability of general wellbeing (Diener & Lucas, 1999). Learned optimism and situational sense of coherence, however are some of the situational measures of general wellbeing (Adams et al., 1997; Artinian, 1997; Seligman, 1991). These situational personality variables are less stable across situations and the life span. However, there seems to be a lack of research in terms of situational personality variables like situational sense of coherence and learned optimism in the occupational context. Studying situational personality characteristics by means of a diary study is important for the field of psychology because they examine the natural, spontaneous reactions of people towards certain situations (Reis, 1994).

According to Code and Fox (2001), the concurrent measurement of sense of coherence,

optimism and work experiences may explain additional variance in organisational data such as absenteeism and performance. Sense of coherence, for instance provides more information in terms of one's movement along the health-disease continuum (Antonovsky, 1987). It can be defined as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic, feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can be reasonably be expected. The definition of sense of coherence includes three dimensions, namely comprehensibility, manageability and meaningfulness (Antonovsky, 1987). A strong sense of coherence is negatively related to certain personality characteristics such as anxiety and neuroticism (Frenz, Carey, & Jurgenson, 1993) and work stress (Feldt, 1997). A strong sense of coherence, on the other hand, is related to competence and life satisfaction (Kalimo & Vuori, 1990), general wellbeing (Feldt, 1997), as well as emotional stability (Strümpher, 1995).

Individuals with a strong sense of coherence should be able to make sense of the workplace, perceiving it as clear, ordered, structured, consistent and predictable information. They should experience their work as consisting of experiences that are bearable, with which they can cope, and as challenges that they can meet by availing themselves of personal resources or resources under the control of legitimate others. They should also be able to make emotional and motivational sense of work demands as welcome challenges, worthy of engagement and investing their energies in. However, sense of coherence on its own without appropriate ability, skills, training and development would be of no avail (Strümpfer, 1995). Kabat-Zinn and Skillings (1992) found that improvements in sense of coherence lead to better psychological and physical health of patients.

According to Artinian (1997), global sense of coherence is conceived to be developed over the lifespan, whereas situational sense of coherence describes the response that occurs at the time when an attempt is made to deal with a serious life event. The relative strength or weakness of sense of coherence will influence how a person will respond to a serious life event. Dispositional sense of coherence is a global coping resource that

precedes adaptive coping and is likely to reflect other, more specific coping styles (Antonovsky, 1987). Situational sense of coherence, however could therefore provide an immediate assessment of sense of coherence, whereas dispositional sense of coherence would be a more stable, long term characteristic. According to Burr (1991), situational sense of coherence includes cognitions and behavioural responses to a specific illness situation, and as such an immediate assessment of personality characteristics utilised in a specific situation can be made.

Seligman (1991) defines an optimist as a person who sees defeat as temporary, confined to a particular case and not as his or her fault. A pessimist, on the other hand, believes bad events will last a long time and undermine everything he or she believes they could do and that these events were his or her fault. Consequently, the manner in which persons attribute positive or negative events to themselves determines whether they are optimistic or pessimistic (Seligman, 1991). While dispositional optimism is a more stable, long-term characteristic, learned optimism is a more short-term and malleable concept. According to Papenhausen (2004), dispositional optimism can be defined as a generalised expectancy that good outcomes will prevail over bad outcomes. Learned optimism has proven to be practically beneficial for employee performance and turnover. Sujan (1999) for instance found that the performance and happiness of employees improved enormously through the application of learned optimism. According to Seligman (1991), learned optimism enhances negotiation skills, assertiveness and relaxation.

In the literature there seems to be a call for more longitudinal studies regarding the wellness of leaders in organisations (Barling, Loughlin, & Kelloway, 2002). In terms of South African studies, there seems to be a lack of research regarding the wellbeing of executives in the mining industry, especially longitudinally by means of the diary method. Diaries are self-report instruments used repeatedly to examine ongoing experiences, which offer the opportunity to investigate socio-psychological processes within daily situations and experiences (Bolger, Davis, & Rafaeli, 2003). At the same time, they recognise the importance of the contexts in which these processes unfold. A fundamental benefit of diary methods is that they permit the examination of reported

events and experiences in their natural, spontaneous context, providing information complementary to that obtainable by more traditional designs (Reis, 1994). Furthermore, a dramatic reduction in the likelihood of retrospection is achieved by minimising the amount of time elapsed between experiences. Diaries provide the field of psychology with a powerful set of methods for studying various human phenomena, including personality processes, physical symptoms and mental health.

Consequently, the hypotheses of this study can be formulated as follows:

H1 : The executive coaching programme developed for executives in the mining industry in South Africa will improve the general wellbeing, situational personality characteristics and work-related wellness of executives in the mining industry.

H2 : The performance of executives in the mining industry in South Africa will be improved as a results of the their participation in the executive coaching programme, which have been developed for this purpose.

METHOD

Research design

A longitudinal design was used in this study. This design involves the investigation of units of analysis over an extended period of time (Mouton & Marais, 1996). A cross-sectional survey design was also used in order to assess interrelationships among specific variables (Shaughnessy & Zechmeister, 1996). The longitudinal study was conducted over a six-month period.

The wellbeing of executives in the mining industry was measured by using the diary sampling method. A continuous measurement of personality states and general wellbeing was conducted. Diaries are self-report instruments used repeatedly to examine ongoing experiences, which offer the opportunity to investigate socio-psychological processes

within daily situations and experiences (Bolger et al., 2003). During the course of this study four measurements were conducted by means of the diary sampling method.

Participants

The participants consisted of 29 mining executives from one area of a large South African mining company who volunteered to partake in the study. The participants consisted of General Managers, Production Managers and Mine Overseers. In terms of the composition of the sample, all of the participants are male, five participants are Black, and 24 are White. Descriptive information of the sample is given in Table 1.

Table 1
Characteristics of the Participants

Item	Category	Percentage
Language	Afrikaans	69
	English	17
	isiNdebele	4
	isiTsonga	10
Job Category	General manager	7
	Mine overseer	76
	Production manager	17
Education	Grade 12	70
	3-year °	23
	4-year °	7
Marital status	Single	7
	Married	85
	Divorced	8
Years in company	1 year 1-9 years	86
	10 years and more	14

The sample consisted mainly of Afrikaans-speaking (69 %) males (100 %) with a matric qualification (70 %) in a senior management position (100 %) with an average of 5 years' experience in the company.

Measuring battery

The following standardised measuring instruments were used, namely, the Perceived Wellness Survey (PWS) (Adams et al., 1997), the Situational Sense of Coherence Scale (SSOC) (Artinian, 1997), the Learned Optimism Scale (LOS) (Schutte et al., 2005), the Maslach Burnout Inventory – General Survey (MBI-GS) (Schaufeli, Leiter, Maslach, & Jackson, 1996), the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002), a 360° Performance Evaluation Measurement (PEM), a diary method (Bolger et al., 2003) and unstructured qualitative interviews (Botha, 2001).

The *Perceived Wellness Survey (PWS)* (Adams et al., 1997) was used to measure perceived wellness (general wellbeing). The PWS is a 36-item instrument measuring an individual's wellness perceptions in six dimensions, namely physical, spiritual, psychological, social, emotional and intellectual. There are six questions in each dimension, e.g. "I expect to always be physically healthy" (physical), "I believe there is a real purpose for my life" (spiritual). "In the past, I have expected the best" (psychological), "My friends will be there for me when I need help" (social), "In general I feel confident about my abilities" (emotional), and "In the past, I have generally found intellectual challenges to be vital to my overall wellbeing" (intellectual). Responses to the questions are given on a six-point Likert scale ranging from 1 (*very strongly disagree*) to 6 (*very strongly agree*) (Bezner, Adams, & Whistler, 1999). The PWS composite score is the sum of the subscale means divided by a denominator that includes the standard deviation among subscales. Higher scores indicate greater wellness, with a range of 3-29. Research by Adams et al. (1997) has shown that the PWS scale possess adequate reliability ($\alpha = 0,88 - 0,93$) and several types of validity. The internal consistency reliability coefficient was 0,92.

The *Situational Sense of Coherence Scale (SSOC)* (Artinian, 1997) was used to measure the response that occurs in the period of time in which the person is attempting to deal with a serious life (Artinian, 1997). The SSOC is a 12-item instrument with 5 items measuring manageability, 4 items measuring meaningfulness, and 3 items measuring

comprehensibility. The overall reliability was $\alpha = 0,95$. The reliability of individual components were significant: comprehensibility, $\alpha = 0,92$; meaningfulness, $\alpha = 0,97$; manageability, $\alpha = 0,93$ (Esslinger, 1994).

The *Learned Optimism Scale (LOS)* (Schutte et al., 2005) was used to measure dispositional optimism or the generalised expectancy that one will experience positive outcomes in life. The *Learned Optimism Scale* is a 18-item instrument that was developed by Professor Marié Wissing from the North–West University (Schutte et al., 2005). The questions are rated on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Preliminary results show acceptable levels of reliability and validity (Schutte et al., 2005).

The *Maslach Burnout Inventory – General Survey (MBI-GS)* (Schaufeli et al., 1996) measures respondents' relationships with their work on a continuum from engagement to burnout. The MBI-GS has three subscales: Exhaustion (Ex) (5 items; e.g. "I feel used up at the end of the workday"), Cynicism (Cy) (5 items; e.g. "I have become less enthusiastic about my work") and Professional Efficacy (PE) (6 items; e.g. "In my opinion, I am good at my job"). Together the subscales of the MBI-GS provide a three-dimensional perspective on burnout. Internal consistencies (Cronbach coefficient alphas) reported by Schaufeli et al. (1996) vary from 0,87 to 0,89 for Exhaustion, 0,73 to 0,84 for Cynicism and 0,76 to 0,84 for Professional Efficacy. Test-retest reliabilities after one year were 0,65 (Exhaustion), 0,60 (Cynicism) and 0,67 (Professional Efficacy) (Schaufeli et al., 1996). All items are scored on a seven-point frequency rating scale ranging from 0 (*never*) to 6 (*daily*). High scores on Ex and Cy and low scores on PE are indicative of burnout.

The *Utrecht Work Engagement Scale (UWES)* (Schaufeli et al., 2002) was used to measure levels of engagement. Initially engagement was viewed as the positive antithesis of burnout, but according to the scale developers, it can be operationalised in its own right. The UWES is scored on a seven-point frequency scale, ranging from 0 (*never*) to 6 (*every day*). Three dimensions of engagement can be distinguished, namely Vigour (6

items; e.g. “I am bursting with energy in my work”), Dedication (5 items; e.g. “I find my work full of meaning and purpose”) and Absorption (6 items; e.g. “When I am working, I forget everything else around me”). Engaged individuals are characterised by high levels of Vigour and Dedication and also elevated levels of Absorption. Empirically, certainty needs to be obtained whether burnout and engagement are indeed opposites of the same continuum, while theoretically there seems to be a dichotomous relationship. Burnout and Engagement can be described as related but distinct concepts (Schaufeli et al., 2002). In terms of internal consistency, reliability coefficients for the three subscales have been found to range between 0,68 and 0,91. Improvement of the alpha coefficient (ranging from 0,78 to 0,89) seems possible without adversely affecting the internal consistency of the scale (Storm & Rothmann, 2003).

A *360° Performance Evaluation Measurement* (PEM) was developed for the purposes of this study. The PEM is based on the competency-based approach (Byham, 1982; Weightman, 1994). The PEM consists of job-related behaviours that are essential in order to meet job and organisational objectives, as well as generic behaviours derived from General Manager, Production Manager and Mine Overseer job profiles. The face validity of the items of the PEM was evaluated by subject matter experts. A pilot study was conducted four months prior to the commencement of the study, and consisted of one production manager, 3 mine overseers and eleven shift overseers. After the pilot study it was decided to exclude the following items, namely cross functional awareness, project management and commercial awareness in order to avoid duplication. The items measured the same job-related behaviours as being measured by financial management and the functional dimensions. The measure is a 31-item instrument measuring an individual’s performance on six dimensions, namely, job related performance (financial management, learning and growth, and business processes), functional (technical skills, administration, health and safety, human resources, quality orientation, computer skills, security, managing information, and industrial relations), cognitive (analytical thinking, judgement, broad perspective, flexibility, decision making, planning, and organizing), leadership (individual leadership, team leadership, and leadership of change) and personal and interpersonal effectiveness (innovation, assertiveness, tenacity, verbal

communication, written communication, development orientation, and culture awareness). The participant as well as the participant's supervisor(s), peers and subordinates completed the 360° measurement.

A *diary method* (Bolger et al., 2003) and *unstructured qualitative interviews* (Botha, 2001) were used to elicit the experiences of executives in the mining industry during the coaching session. Diaries are self-report instruments used repeatedly to examine ongoing experiences, which offer the opportunity to investigate socio-psychological processes within daily situations and experiences (Bolger et al., 2003). Qualitative interviews are described as an interaction process between the researcher and the subject (Oakley, 1981). In a qualitative interview the researcher is seen as the measuring instrument (Jones, 1985; Lincoln & Guba, 1985). The qualitative interviews were done with “theoretical sensitivity” (Strauss & Corbin, 1990) and focused on the research objectives of this study in order to ensure the credibility, transferability and dependability of the data recorded (Botha, 2001; Lincoln & Guba, 1985). Confirmability of the qualitative research was demonstrated by means of a confirmability trail audit consisting of raw data, analysis notes and personal notes (Lincoln & Guba, 1985). Based on the theoretical model of work-related wellbeing for executives in the mining industry (Pretorius, 2007) a thematic analysis with a wellness perspective was used to analyse the qualitative results from the diary study. The qualitative data analysis was done in a systematic, comprehensive and rigorous manner (Botha, 2001).

Statistical analysis

The data analysis was carried out by means of the SPSS program (SPSS Inc., 2005). Descriptive statistics (e.g. median, standard deviation, skewness and kurtosis) as well as non-parametric statistics, namely the Wilcoxon signed-rank test (statistical significance at $p \leq 0,05$) were used to determine differences in the before- and after measurement as well as the four diary measurements. The cut-off point for effect sizes were of taken at $r = 0,30$ (medium effect).

RESULTS

The descriptive statistics, alpha coefficients and inter-item correlations of general wellbeing and situational personality variables are given in Table 2.

Table 2

Descriptive Statistics, Alpha Coefficients and Inter-Item Correlations of the PWS, SSOC and LOS

Item	Mean	SD	Skewness	Kurtosis	$r(\text{mean})$	$\alpha 1$	$\alpha 2$	$\alpha 3$	$\alpha 4$
Psychological Wellbeing	22,59	3,81	-0,01	-1,08	0,61	0,91	0,76	0,74	0,81
Emotional Wellbeing	23,62	4,20	-0,28	-1,90	0,66	0,91	0,84	0,79	0,81
Social Wellbeing	25,31	4,43	0,51	-0,87	0,58	0,89	0,91	0,90	0,88
Physical Wellbeing	24,17	3,40	-0,88	0,49	0,55	0,81	0,63	0,39	0,24
Spiritual Wellbeing	23,79	3,66	-0,13	-0,85	0,58	0,39	0,87	0,90	0,81
Intellectual Wellbeing	23,07	3,70	-0,20	-1,07	0,48	0,83	0,80	0,62	0,70
Comprehensibility	12,45	0,69	1,27	0,41	0,26	0,59	0,61	0,85	0,66
Manageability	10,72	1,63	-0,27	-1,00	0,53	0,82	0,74	0,69	0,78
Meaningfulness	12,00	1,17	1,17	3,91	0,27	0,60	0,70	0,83	0,85
Learned Optimism	53,00	7,38	-0,58	0,10	0,45	0,94	0,90	0,91	0,87

Table 2 indicates that the most of the dimensions are not normally distributed. However, with regards to the internal consistency of the scales, most of the scales seem to demonstrate acceptable coefficient alphas for the four measurements above the 0,50 guideline for basic research (Kerlinger & Lee, 2000). Consequently, the scales seem to satisfy the requirements of homogeneity. However, considering the apparent violations of normality assumptions and the small sample size of the study, it would be more appropriate to take the mean inter-item correlations into account. The mean inter-item correlations of the Comprehensibility, Manageability, Meaningfulness, and Learned Optimism scales are acceptable ($0,15 \leq r \leq 0,50$, Clarke & Watson, 1995). Most of the inter-item correlations of the general wellbeing scales, however, seem somewhat elevated.

Next, the differences between the first and the fourth measurements were analysed. The results of the Wilcoxon signed-rank tests of the first and fourth measurements of general wellbeing, situational sense of coherence, as well as learned optimism are reported in Table 3.

Table 3

Wilcoxon signed-rank tests of the SSOC, LOS and PWS at t1 and t4

Item	Median t1	Median t4	Z	p	r
Psychological Wellbeing	24	26	-4,18	0,00*	-0,55 ⁺⁺
Emotional Wellbeing	26	29	-3,91	0,00*	-0,51 ⁺⁺
Social Wellbeing	25	30	-3,37	0,00*	-0,44 ⁺
Physical Wellbeing	25	27	-4,31	0,00*	-0,57 ⁺⁺
Spiritual Wellbeing	24	28	-3,96	0,00*	-0,52 ⁺⁺
Intellectual Wellbeing	24	26	-4,34	0,00*	-0,57 ⁺⁺
Comprehensibility	12	16	-4,63	0,00*	-0,61 ⁺⁺
Manageability	11	16	-4,50	0,00*	-0,59 ⁺⁺
Meaningfulness	12	16	-4,55	0,00*	-0,60 ⁺⁺
Learned Optimism	53	72	-4,64	0,00*	-0,61 ⁺⁺

* $p \leq 0,05$ – statistically significant
⁺ $r > 0,30$ – practically significant (Medium effect)
⁺⁺ $r > 0,50$ – practically significant (Large effect)

In terms of general wellbeing, there was a statistically significant increase of large effect for Psychological Wellbeing (T = 24,26, $p \leq 0,05$, $r = -0,55$), Emotional Wellbeing (T = 26,29, $p \leq 0,05$, $r = -0,51$), Physical Wellbeing (T = 25,27, $p \leq 0,05$, $r = -0,57$), Spiritual Wellbeing (T = 24,28, $p \leq 0,05$, $r = -0,52$), Intellectual Wellbeing (T = 24,26, $p \leq 0,05$, $r = -0,57$), as well as a statistically significant increase of medium effect for Social Wellbeing (T = 25,30, $p \leq 0,05$, $r = -0,44$). Furthermore, the results show a statistically significant increase of large effect for Learned Optimism (T = 53,72, $p \leq 0,05$, $r = -0,61$). In terms of situational sense of coherence, there was a statistically significant increase with large effect for Comprehensibility (T = 12,16, $p \leq 0,05$, $r = -0,61$), Manageability (T = 11,16, $p \leq 0,05$, $r = -0,59$) and Meaningfulness (T = 12,16, $p \leq 0,05$, $r = -0,60$). Overall, the results show that general wellbeing, situational sense of coherence, as well as

learned optimism are all based on negative ranks, which means that they all increased from the first to the fourth measurement. These findings are practically significant.

Next, the differences between the first and the second measurements were analysed. The results of the Wilcoxon signed-rank tests of the first and second measurements of general wellbeing, situational sense of coherence, as well as learned optimism are reported in Table 4.

Table 4

Wilcoxon signed-rank tests of the PWS, SSOC, and LOS at t1 and t2

Item	Median t1	Median t2	Z	p	r
Psychological Wellbeing	24	21	-0,21	0,86	-0,03
Emotional Wellbeing	26	22	-0,78	0,45	-0,10
Social Wellbeing	25	24	-0,07	0,91	-0,01
Physical Wellbeing	25	25	-0,68	0,51	-0,09
Spiritual Wellbeing	24	22	-0,74	0,47	-0,10
Intellectual Wellbeing	24	24	-2,58	0,01*	-0,34 ⁺
Comprehensibility	12	12	-1,59	0,13	-0,21
Manageability	11	10	-1,04	-0,30	-0,14
Meaningfulness	12	12	-0,87	0,41	-0,11
Learned Optimism	53	51	-0,28	0,80	-0,04

- * $p \leq 0,05$ – statistically significant
- $r > 0,30$ – practically significant (Medium effect)
- ** $r > 0,50$ – practically significant (Large effect)

Table 4 indicates a statistically significant increase of medium effect for Intellectual Wellbeing ($T = 24,24$, $p \leq 0,05$, $r = -0,34$) only. None of the other dimensions showed a significant increase or decrease.

Next, the differences between the second and the third measurements were analysed. The results of the Wilcoxon signed-rank tests of the second and third measurements of general wellbeing, situational sense of coherence, as well as learned optimism are reported in Table 5.

Table 5

Wilcoxon signed-rank tests of the PWS, SSOC, and LOS at t2 and t3

Item	Median t2	Median t3	Z	p	r
Psychological Wellbeing	21	25	-4,30	0,00•	-0,56 ⁺⁺
Emotional Wellbeing	22	25	-2,63	0,01•	-0,35 ⁺
Social Wellbeing	24	26	-2,52	0,01•	-0,33 ⁺
Physical Wellbeing	25	27	-4,06	0,00•	-0,53 ⁺⁺
Spiritual Wellbeing	22	25	-3,82	0,00•	-0,50 ⁺⁺
Intellectual Wellbeing	24	25	-3,21	0,00*	-0,41 ⁺
Comprehensibility	12	15	-4,26	0,00•	-0,56 ⁺⁺
Manageability	10	13	-4,47	0,00•	-0,59 ⁺⁺
Meaningfulness	12	15	-4,74	0,00•	-0,62 ⁺⁺
Learned Optimism	51	68	-4,72	0,00•	-0,62 ⁺⁺

- $p \leq 0,05$ – statistically significant
• $r > 0,30$ – practically significant (Medium effect)
⁺⁺ $r > 0,50$ – practically significant (Large effect)

In terms of general wellbeing, there was a statistically significant increase of large effect for Psychological Wellbeing ($T = 21,25$, $p \leq 0,05$, $r = -0,56$), Physical Wellbeing ($T = 25,27$, $p \leq 0,05$, $r = -0,53$), and Spiritual Wellbeing ($T = 22,25$, $p \leq 0,05$, $r = -0,50$), while statistically significant increases of medium effect were found for Intellectual Wellbeing ($T = 24,25$, $p \leq 0,05$, $r = -0,41$), Emotional Wellbeing ($T = 22,25$, $p \leq 0,05$, $r = -0,35$) and Social Wellbeing ($T = 24,26$, $p \leq 0,05$, $r = -0,33$). Furthermore, the results show a statistically significant increase of large effect for Learned Optimism ($T = 51,68$, $p \leq 0,05$, $r = -0,62$). In terms of situational sense of coherence, there was a statistically significant increase of large effect for Comprehensibility ($T = 12,15$, $p \leq 0,05$, $r = -0,56$), Manageability ($T = 10,13$, $p \leq 0,05$, $r = -0,59$) and Meaningfulness ($T = 12,15$, $p \leq 0,05$, $r = -0,62$). Overall, the results show that general wellbeing, situational sense of coherence, as well as learned optimism are all based on negative ranks, meaning that they increased from the second to the third measurement. These findings are practically significant.

Next, the differences between the third and fourth measurements were analysed. The results from the Wilcoxon signed-rank tests of the third and fourth measurements of general wellbeing, situational sense of coherence, as well as learned optimism are reported in Table 6.

Table 6

Wilcoxon signed-rank tests of the PWS, SSOC, and LOS at t3 and t4

Item	Median t3	Median t4	Z	p	r
Psychological Wellbeing	25	26	-4,20	0,00*	-0,55 ⁺⁺
Emotional Wellbeing	25	29	-4,40	0,01*	-0,57 ⁺⁺
Social Wellbeing	26	30	-3,63	0,01*	-0,48 ⁺
Physical Wellbeing	27	27	-2,36	0,02*	-0,31 ⁺
Spiritual Wellbeing	25	28	-4,41	0,00*	-0,58 ⁺⁺
Intellectual Wellbeing	25	26	-3,92	0,00*	-0,52 ⁺⁺
Comprehensibility	15	16	-4,03	0,00*	-0,53 ⁺⁺
Manageability	13	16	-4,32	0,00*	0,57 ⁺⁺
Meaningfulness	15	16	-4,01	0,00*	-0,53 ⁺⁺
Learned Optimism	68	72	-4,56	0,00*	-0,60 ⁺⁺

* $p \leq 0,05$ – statistically significant
⁺ $r > 0,30$ – practically significant (Medium effect)
⁺⁺ $r > 0,50$ – practically significant (Large effect)

In terms of general wellbeing, there was a statistically significant increase of large effect for Psychological Wellbeing ($T = 25,26$, $p \leq 0,05$, $r = -0,55$), Spiritual Wellbeing ($T = 25,28$, $p \leq 0,05$, $r = -0,58$), Intellectual Wellbeing ($T = 25,26$, $p \leq 0,05$, $r = -0,52$), Emotional Wellbeing ($T = 25,29$, $p \leq 0,05$, $r = -0,57$), while statistically significant increases of medium effect were found for Physical Wellbeing ($T = 27,27$, $p \leq 0,05$, $r = -0,31$) and Social Wellbeing ($T = 26,30$, $p \leq 0,05$, $r = -0,48$). Furthermore, the results show a statistically significant increase of large effect for Learned Optimism ($T = 68,72$, $p \leq 0,05$, $r = -0,60$). In terms of situational sense of coherence, there was a practically significant increase of large effect for Comprehensibility ($T = 15,16$, $p \leq 0,05$, $r = -0,53$), Manageability ($T = 13,16$, $p \leq 0,05$, $r = -0,57$) and Meaningfulness ($T = 15,16$, $p \leq 0,05$, $r = -0,53$). Overall, the results indicate that general wellbeing, situational sense of coherence, as well as learned optimism are all based on negative ranks, which means that they increased from the third to the fourth measurement. These findings are practically significant.

Next, the differences between the pre- and post-test were determined for work-related wellness and performance. The results of the Wilcoxon signed-rank tests for work-related wellness and performance are reported in Table 7.

Table 7

Wilcoxon signed-rank tests of the MBI-GS, UWES, and the 360° Performance Evaluation Measurement

Item	Median t1	Median t2	Z	p	r
Vigour	32	33	-2,66	0,01*	-0,35 ⁺
Dedication	28	27	-0,13	0,90	-0,02
Absorption	25	23	-3,10	0,00*	-0,41 ⁺
Exhaustion	9	6	-3,98	0,00*	-0,52 ⁺⁺
Cynicism	8	5	-4,40	0,00*	-0,58 ⁺⁺
Professional Efficacy	32	33	-3,25	0,00*	-0,43 ⁺
Finance	3,25	3,75	-3,97	0,00*	-0,52 ⁺⁺
Customer Focus	3,50	3,75	-4,38	0,00*	-0,57 ⁺⁺
Business Processes	3,25	3,50	-2,87	0,04*	-0,38 ⁺
Learning and Growth	3,00	3,50	-4,16	0,00*	-0,56 ⁺⁺
Functional	29,25	31,50	-4,63	0,00*	-0,61 ⁺⁺
Cognitive	23,25	25,50	-4,71	0,00*	-0,62 ⁺⁺
Leadership	10,75	11,50	-4,36	0,00*	-0,57 ⁺⁺
Personal and Interpersonal	26,25	28,25	-4,54	0,00*	-0,60 ⁺⁺

* $p \leq 0,05$ – statistically significant
⁺ $r > 0,30$ – practically significant (Medium effect)
⁺⁺ $r > 0,50$ – practically significant (Large effect)

In terms of work-related wellness, there was a statistically significant increase of medium effect for Vigour and Professional efficacy ($T = 32,33$, $p \leq 0,05$, $r = -0,35$; $T = 32,33$, $p \leq 0,05$, $r = -0,43$ respectively). Statistically significant decreases of large effect were found for Exhaustion ($T = 9,6$, $p \leq 0,05$, $r = -0,52$) and Cynicism ($T = 8,5$, $p \leq 0,05$, $r = -0,58$), while a statistically significantly decrease of medium effect was found for Absorption ($T = 25,23$, $p \leq 0,05$, $r = -0,41$). A statistically significant increase of large effect for the performance dimensions of Finance ($T = 3,25, 3,75$, $p \leq 0,05$, $r = -0,52$), Customer Focus ($T = 3,50, 3,75$, $p \leq 0,05$, $r = -0,57$), Learning and Growth ($T = 3,00, 3,50$, $p \leq 0,05$, $r = -0,56$), Functional ($T = 29,25, 31,50$, $p \leq 0,05$, $r = -0,61$), Cognitive ($T = 23,25, 25,50$, $p \leq 0,05$, $r = -0,62$), Leadership ($T = 10,75, 11,50$, $p \leq 0,05$, $r = -0,57$), Personal and Interpersonal ($T = 26,25, 28,25$, $p \leq 0,05$, $r = -0,60$). A statistically significant increase of medium effect was confirmed for Business Processes ($T = 3,25, 3,50$, $p \leq 0,05$, $r = -$

0,38). Overall, the results show that positive work-related wellness (Vigour and Professional Efficacy) are based on negative ranks, except for absorption which is based on positive ranks. The results show that negative work-related wellness (Exhaustion and Cynicism) is based on positive ranks. The results also indicate that the performance dimensions of Finance, Customer Focus, Learning and Growth, Functional, Leadership, Cognitive, as well as Personal and Interpersonal, are based on negative ranks and have therefore increased. The results also show that work-related wellness increased except for Absorption and burnout decreased. These findings are practically significant.

Consequently, these results provide support for Hypotheses 1 and 2 in terms of the improvement of general wellbeing, situational personality characteristics, work-related wellness, as well as performance of executives in the mining industry in South Africa.

The qualitative results from the diary study are reported in Table 8.

Table 8

Qualitative Results from the Diary Study

Performance management

“The 360° performance evaluation measurement really increased my self-awareness and I received really positive feedback from my team on my development after the coaching programme.”

“The performance 360° performance evaluation measurement worked because the executive coach was an outside person objectively observing and giving feedback on behaviour.”

“At first I was a bit sceptical about the evaluation process as well as the intervention. However, the approach used by the executive coach was very positive, open and objective.”

Management style

“The coaching sessions really challenged my beliefs about managing people and I enjoy doing the activities and experiencing the outcomes.”

“The coaching really helped me to realise the importance of allowing my team members to take part in decision making and planning.”

“The coaching sessions helped me to understand the impact of my management style on the performance and commitment of my team.”

Interpersonal sensitivity

“The coaching session helped me to integrate cultural and individual differences to improve team performance.”

“Before the coaching sessions I really struggled to remain sensitive to group differences. The session on diversity management really helped me to be more cognisant of the diversity of my team members and show more empathy towards them.”

“The coaching sessions helped me to be more tolerant towards the personal needs of my team.”

Problem solving

“Coaching gave me time to reflect on my approach to problem solving and I gained more confidence in my ability to effectively solve a problematic situation.”

“The coaching session gave me more clarity and guided new ways of looking at situations and internal and external factors impacting on situations.”

“The coaching sessions helped me to focus more on realistic goals for myself and my team.”

Job demands and Job resources

“I am working more than 12 hours a day and there is no support from senior management or my colleagues.”

“How can we meet our production targets if the targets set are too high for the current workforce to achieve?”

“I do not always know what is expected of me seeing that the production targets set for my Area keeps on changing.”

“How are we suppose to achieve the production targets now that the budgets and the number of employees at the working places were cut?”

“The company is going through a difficult time and I am not allowed to manage my own Area or employees”

“Senior management needs to focus more on allowing us to do our job and less on controlling us.”

Work-life balance

“You will not be considered for promotion if you do not work overtime and on weekends. However, the coaching sessions helped me to realise that I need to spend more time with my family and friends.”

“After I was diagnosed with prostate cancer I made a promise to myself to take it easier and spend more quality time with friends and family. However, with the restructuring going on I am unable to keep to my promise and I really feel drained.”

“The coaching session really helped me to realise that having a solid support system is essential for coping with stressful situations.”

Table 8 indicates that from the qualitative results from the diary study the following themes were identified namely, Performance management, Management style, Interpersonal sensitivity, Problem solving, Job demands and Job resources and Work-life balance. The results indicate positive reports in terms of Performance management (“The 360° performance evaluation measurement really increased my self-awareness and I received really positive feedback from my team on my development after the coaching programme”). Furthermore, the results show reported improvement of Management style (“The coaching really helped me to realise the importance of allowing my team members to take part in decision making and planning”), Interpersonal sensitivity (“The coaching session helped me to integrate cultural and individual differences to improve team performance”), Problem solving (“Coaching gave me time to reflect on my approach to problem solving and I gained more confidence in my ability to effectively solve a problematic situation”) and Work-life balance (“The coaching session really helped me to realise that having a solid support system is essential for coping with stressful situations”). Finally, the results also show negative reports in terms of Job demands and Job resources (“I am working more than 12 hours a day and there is no support from senior management or my colleagues”).

DISCUSSION

The objective of this study was to evaluate the effect of an executive coaching programme on the general wellbeing, situational personality characteristics, work-related wellness, as well the performance of executives in the mining industry. The results showed that the executive coaching programme developed for this study enhanced the general wellbeing, situational personality characteristics, work-related wellness, as well as the performance of executives in the mining industry.

Overall, the qualitative results seem to indicate that the 360° performance evaluation measurements increased the self-awareness of the executives and support very positive reports in relation to the experience of the performance evaluation process, especially regarding the executives’ own development. The results indicate that the executives

experienced an improvement of their management style, interpersonal sensitivity and problem solving after the coaching sessions. The results also indicate that the work-life balance of the executives in the mining industry was affected by their work environment. However, improvements in terms of work-life balance after the coaching sessions were reported.

The results also showed that learned optimism, situational sense of coherence and perceived wellbeing increased from the first to the fourth measurements, which took place during the executive coaching programme intervention. After the second measurement only intellectual wellbeing increased significantly, while the other dimensions of learned optimism, situational sense of coherence and perceived wellbeing decreased, albeit not significantly. From the qualitative information recorded at the time of the second measurement, the executives reported that the executive coaching sessions stimulated their approach to problem solving (“The coaching session gave me more clarity and guided new ways of looking at situations and internal and external factors impacting on situations”). The executives also reported a lack of job resources, namely work overload (“I am working more than 12 hours a day and there is no support from senior management or my colleagues”; “How can we meet our production targets if the targets set are too high for the current workforce to achieve?”), lack of physical and financial resources (“How are we suppose to achieve the production targets now that our budgets are cut and the number of employees at the working places are reduced?”) and autonomy (“The company is going through a difficult time and I am not allowed to manage my own Area or employees”; “Senior management needs to focus more on allowing us to do our job and less on controlling us”) while a significant restructuring took place within the mining company at that time. These findings seem to be consistent with the literature. According to Schaufeli and Bakker (2004), job demands and resources might affect the physical health, psychological wellbeing and organisational commitment of employees. The increase in general wellbeing is consistent with the findings of Green, Oades, and Grant (2006) which indicate that the subjective wellbeing and psychological wellbeing of participants increased with gains maintained up to thirty weeks after the completion of a coaching programme.

In terms of personality characteristics, the results indicate that executives' confidence in their situational assessment of predictability of their internal and external environments, and their expectancy that things would turn out as well as can reasonably be expected, as well as their situational belief that good outcomes will prevail over bad ones, increased after completion of the programme. The findings seem to be consistent with the literature. Grant (2003) reported that a coaching programme enhanced the general life satisfaction, quality of life and mental health of participants.

Based on the qualitative information recorded, the executives experienced their work as unstructured, unclear and inconsistent before the executive coaching process started. Most of them struggled to cope with work challenges ("I do not always know what is expected of me seeing that the production targets set for my area keeps on changing"). This finding seems to be consistent with the literature. De Jonge and Kompier (1997) found lack of autonomy and work overload to be important stressors for production workers. After completion of the programme the executives reported being more able to make emotional and motivational sense of work demands ("The coaching sessions helped me to effectively manage and resolve conflict situations without using threats, demands and unnecessary criticism."; "I am more motivated now to pursue the production targets set for my area than what I was before we started the coaching process"). This finding is supported in the literature. Richard (1999) reported that an executive coaching programme increased the ability of a female senior executive to handle stress and conflict at work and enhanced satisfaction in personal areas of life.

The results of this study showed an increase in positive work-related wellness and a decrease in negative work-related wellness after the coaching intervention. More specifically, the results showed an increase in the positive affective evaluation of work (vigour and professional efficacy) and a decrease in the negative affective evaluation of work (exhaustion and cynicism). This finding is consistent with the findings of Kauffman & Scoular (2003) in that it demonstrated an increase in the positive affective evaluation of work of executives after the completion of an executive coaching programme. Gyllensten and Palmer (2005) reported a decrease in anxiety and work-related stress of

thirty-one employees from a UK financial organisation after the completion of an executive coaching programme.

The results showed a decrease in absorption of the executives after the executive coaching programme. The qualitative results support this finding. The increase in the work overload experienced by the executives may have caused the executives to experience difficulty focusing on their work. This finding is consistent with the findings of Jackson et al. (2006) in that it demonstrated job demands lead to burnout (e.g. exhaustion and mental distancing).

The results showed an increase in the performance of executives. Executives reported an increase regarding their understanding of the key business issues and relevant external factors impacting on the success of the organisation, sustaining productive client relationships, understanding organisational issues (organisational functioning, internal politics, power relationships, social networks etc.), analysing a problem and determining the possible causes for a problem, leading and empowering others to reach organisational goals, as well as to inspire others to work towards a desired future state while taking the needs of others into account. This finding is consistent with the findings by McGovern et al. (2001) where increases in productivity, quality, organisational strength and customer service were demonstrated after completion of an executive coaching programme.

An important consideration regarding these findings is the fact that the performance of the executives in this study was evaluated by means of a 360° performance evaluation measurement. This allows employees to express opinions relevant to the performance appraisal decision, thus providing them with a “voice” as it is termed in the organisational justice literature (Lind & Tyler, 1988). By using a 360° performance evaluation measurement, the self-awareness of executives was increased. The qualitative results seem to support very positive reports in relation to the experience of the performance evaluation process, especially regarding their own development.

Despite the strengths of this study in relation to momentary assessment of wellbeing for instance, several limitations of this study could be identified. Firstly, there is no control group. This is due to the fact that the total population of executives in one area was selected for the study, as well as capacity constraints in terms of coaching resources. This means that the effects could have occurred naturalistically, rather than being caused by the intervention. Another limitation is the size of the sample, which has significant limitations in terms of the generalisation of the findings. Furthermore, the design may have induced a demand-effect where the participants may have felt that they had to report making progress and enhanced wellbeing in order to please the researcher (Grant, 2003). A further limitation in this regard is that the sample included only one large mining house in South Africa.

RECOMMENDATIONS

Based on the results of this study, the executive coaching programme developed and used for this study could be recommended for use in executive development in the Mining Industry in South Africa. However, considering the limitations of this study, it is recommended that future studies should be conducted by means of experimental designs and by using larger samples in different types of industries in South Africa. Not only will the effects of the intervention be properly controlled for and the resultant effects related more directly to respective independent variables, but it could also enable comparisons between industries.

It is recommended that future intervention research include the middle managers and supervisors of the different departments in the Mining Industry. Furthermore, the effect of the executive coaching programme on the situational characteristics of executives should be compared across different industries. Moreover, specific aspects of the executive coaching programme should be related to specific affective states. Future studies could also benefit by investigating the return on investment of an executive coaching programme in the Mining Industry in South Africa. It is important to determine which aspects of the business are affected by the respective behavioural changes of

executives after completion of an executive coaching programme. Furthermore, the effect of the executive coaching on the financial performance of the mining industry could also be determined and motivated by such a study design. This would effectively position executive coaching within the organisation as a positive initiative, but also to serve as a symbol of the organisation's commitment to leadership development (McGovern et al., 2001).

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CHAPTER 5: CONCLUSIONS, LIMITATIONS & RECOMMENDATIONS

CHAPTER 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter encompasses conclusions regarding the specific objectives of the study. The limitations of the study are highlighted and recommendations are made for further research.

5.1 CONCLUSIONS

The first objective was to determine how executive coaching, general wellbeing, pervasive- and situational personality characteristics, coping strategies, work-related wellness, job characteristics and the relationship between these constructs are conceptualised in literature. According to Carter (2001), executive coaching is one of the fastest growing executive development processes in adult learning. Coaching is directly concerned with the immediate improvement of performance and skills (Goldsmith, 2000). The field of executive coaching could benefit tremendously from the contributions of the positive psychology field, especially from a theory development point of view. This may particularly be the case in terms of health coaching, where the focus is on pervasive personality characteristics, physical and psychological wellbeing (Grant, 2006).

The conceptualisation of general wellbeing seem to vary widely according to context in the literature, namely sense of coherence, optimism, job characteristics, autonomy and coping styles, to name but a few (Antonovsky, 1987; Code & Fox, 2001; Goleman, 1995; Maslach & Leiter, 1997; Seligman, 1991; Sujan, 1999). Furthermore, it seems to be influenced to some extent by determinants of personality. Recent evidence in personal goals literature indicates that the structure and the organisation of personality is an important determinant of general wellbeing (Diener & Lucas, 1999). Pervasive personality characteristics (e.g sense of coherence and optimism) are more stable across situations whereas, situational personality characteristics (e.g situational sense of coherence and learned optimism) are less stable across situations. A strong sense of coherence can be

related to competence and life satisfaction (Kalimo & Vuori, 1990), general wellbeing (Feldt, 1997), as well as emotional stability (Strümpher, 1995). Sujan (1999) found that through the application of learned optimism the performance and happiness of employees improved enormously. Redelinguys and Rothmann (2005) found that ministers with a strong sense of coherence showed problem-focused, active coping to stressors.

Coping is regarded as perceptual, cognitive or behavioural responses used to manage, avoid or control situations that are experienced as difficult. Initial conceptualisations of the coping construct included a broad taxonomy of coping as direct efforts to change the demands posed by the stressful situation on the available resources of the individual to cope with it (problem-focused coping), as well as regulatory attempts to manage the emotional aspects of the stressful encounter (emotion-focused coping) (Folkman & Lazarus, 1984). The literature also demonstrates that the manner in which one cope with life challenges directly affects one's general wellbeing. An effective coping approach is related to increased life satisfaction, physical health and decreased depressive symptoms.

In the occupational literature, it is evident that a clear relationship between wellbeing and performance at work exists. According to Wright and Cropanzano (2004), psychological wellbeing could be viewed as an indicator of both a subjective measure of performance and supervisory performance evaluations, as well as a more objective indicator of performance and actual pay. Although the occupational wellbeing literature considers job satisfaction, job involvement and organisational commitment to be a few of many measures of job-related wellbeing, findings seem to suggest that affective wellbeing is the best predictor of occupational wellbeing (Horn, Taris, Schaufeli, & Schreurs, 2004; Warr, 1994). Affective wellbeing consists of both positive (engagement) and negative (burnout) affective evaluation of work. Burnout is defined as an erosion of engagement with the job (Maslach & Leiter, 1997). It consists of exhaustion, cynicism and professional efficacy, which indicates the extent to which pleasant and meaningful tasks turn into unpleasant, unfulfilling, and meaningless tasks (Maslach, Schaufeli, & Leiter, 2001). Engagement, in contrast, is characterised by energy, involvement and efficacy.

Hart (1999) found that job-related wellbeing affects employees' overall life satisfaction and physical health at work (e.g. staying injury-free and helping to keep co-workers safe). The individual's work environment can be categorised in terms of job demands and job resources. Job demands refer to the "things that have to be done" and include the physical, social or organisational aspects of the job that require sustained physical and mental effort (Schaufeli & Enzmann, 1998). Job resources refer to those physical, psychological, social, or organisational job aspects that are firstly necessary to achieve work goals, secondly to reduce job demands and lessen psychological costs and thirdly, to stimulate personal growth and development. Job demands and job resources serve as potential organisational stressors and an imbalance between these two elements (i.e. high demands and a lack of resources) can manifest in negative work-related evaluations, such as burnout (Schaufeli & Enzmann, 1998).

Many possible moderator- or mediating variables that impact on the negative outcomes associated with the demands of the work have been identified in the literature i.e. self-efficacy, affectivity, dispositional optimism, social support, locus of control, psychological conditions and coping strategies. Based on the holistic model of work wellness (Nelson & Simmons, 2003), burnout and work engagement are moderated by personality characteristics such as sense of coherence, self-efficacy, locus of control and positive emotions (optimism and hope). Positive emotions influence the experience of emotionally significant events at work, which in turn influence job satisfaction (Strümpfer, 1995). Rothmann (2001) found that locus of control, sense of coherence and self-efficacy predict a total of 30 percent of the variance of total job satisfaction. According to Rothmann, Steyn, and Mostert (2005), sense of coherence mediated the effect of job stress on work wellness and explained 26 percent of the variance in work wellness (consisting of both burnout and work engagement). According to the self-efficacy theory (Judge, Locke, Durham, & Kluger, 1998; Sadri & Robertson, 1993), self-efficacy perceptions lead to enhanced task performance. Optimism has been mostly linked to active, persistent, health-orientated coping, while pessimism is more likely to be linked to emotional distress, health concerns and negative coping (Harju & Bolen, 1998). Seligman and Schulman (1986) found that learned optimism improved the sales

performance and turnover of employees in two insurance industries. However, there seems to be a lack of research in terms of situational personality variables like situational sense of coherence and learned optimism in the occupational context. Job resources have received considerable attention as moderators in the stressor-strain relationship (Maslach et al., 2001; Peeters & Le Blanc, 2001). According to Schaufeli and Bakker (2004), engagement mediated the relationship between job resources and turnover intentions. Job resources play either an intrinsic motivational role (by fostering the employee's growth, learning and development) or they may play an extrinsic motivational role (by being instrumental in achieving work goals).

According to Kahn (1990), three psychological conditions namely, meaningfulness, safety and availability mediate the linkages between situational antecedent factors and job engagement. Meaningfulness is defined as the value of a work goal or purpose, judged in relation to one's own ideals (Hackman & Oldham, 1980). May, Gilson, and Harter (2004) found that psychological meaningfulness, availability and safety explained 73 percent of the variance in engagement.

The second objective was to determine the content and methodology of an executive coaching programme according to the literature. Executive coaching is characterised as a helping relationship between a client who has managerial authority and responsibility in an organisation and a consultant. The vast majority of individuals presented for executive coaching are not remedial clients, but persons seeking support in terms of their personal development (Kauffman & Scoular, 2004). Thus, interventions and helping relationships based on a clinical or medical model may be highly inappropriate. Despite the confusion of the role of the psychologist in the public's mind, there seems to be a clear need for psychologists to present their skills in a way that the public finds attractive and accessible (Coleman, 2003; Webb & Speer, 1986). Many psychologists find coaching to be an appealing and personally rewarding alternative to therapeutic practice (Naughton, 2002). Rather than act as a coach, it makes more sense for psychologists to actually be a coach, to develop coaching skills and psychological frameworks that go beyond existing clinical or counselling frameworks and applications (Grant, 2006).

The content of the executive coaching programme developed for the purpose of this study was determined by an extensive literature review on existing coaching programmes such as the Integrated Executive Experiential Learning Coaching Model (Chapman, 2004), the Coach Yourself Programme (Grant & Greene, 2001), a multi-modal approach to executive coaching (Richard, 1999) and the Integral Coaching Programme (Armstrong, Matthews, & McFarlane, 2006).

The Integrated Executive Experiential Learning Coaching Model operationalised coaching as the facilitation of self-organised learning in adults through experiential learning conversations in order to grow and improve performance (Chapman, 2004). The Coach Yourself Program is based on principles drawn from cognitive-behavioral clinical and counseling psychology (Beck, Rush, Shaw, & Emery, 1979), brief solution-focused therapy (O'Hanlon, 1998) and models of self-regulated learning (Zimmerman, 1989). Cognitive-behavioural approaches recognise the quadratic reciprocity between the four domains of human experience, namely behaviour, thoughts, feelings and the environment. Solution-focused therapy is a constructivist, humanistic approach that concentrates on the strengths that clients bring to therapy, and emphasizes the importance of solution construction rather than problem analysis (Grant, 2003). The focus of self-regulated learning is that the learner's experience is the basis for change and growth (Zimmerman, 1989). The Integral coaching programme consists out of three general approaches, namely experiential learning, strength-based psychology and spirituality (Armstrong et al., 2006). According to Richard (1999), the multi-modal approach to executive coaching focuses on seven dimensions namely, behaviour, affect, sensation (e.g., physical discomfort), imagery, cognitions, interpersonal and biological issues (e.g., drug and alcohol use).

The executive coaching programme developed for the purpose of this study was based on the self-regulated learning model, cognitive-behavioral coaching techniques and solution-focused techniques from the Coach Yourself Programme (Grant & Greene, 2001). However, the focus of the coaching programme developed for this study was different from the Coach Yourself Programme in that the focus was not only on life coaching but

also on work-related coaching (e.g. job-related behaviours derived from job profiles). The Coach Yourself Programme is also used in a non work or organisational setting and presented in a group context by means of workshops (Grant & Greene, 2001).

The third objective was to determine the relationship between general wellbeing, pervasive- and situational personality characteristics, coping strategies, work-related wellness, job characteristics and the performance of executives in the mining industry. It is clear that the executives in the mining industry in South African who are willing to invest their energy and identify strongly with their work, could also be prone to experience mental and emotional exhaustion, as well as a lack of commitment to their work. Moreover, executives who experience emotional and mental exhaustion seem to experience task overload, and appear to be less likely to make sense of their experiences on a cognitive level. These findings are consistent with the findings of Schaufeli and Bakker (2004) which indicated that job demands were associated with exhaustion. According to Demerouti, Bakker, Nachreiner, and Schaufeli (2001), job demands (i.e., physical demands, time pressure, task overload, shift work) could be associated with negative work wellness (exhaustion), as well as decreased affective connection and engagement with the job. Furthermore, executives who are experiencing cynical and detached attitudes towards others and their working environment, are likely to seek support from others to cope with challenges, are likely to postpone dealing with issues, and are less likely to appear optimistic that things will turn out as well as could be reasonably expected. These findings seem to be supported in the literature. According to Maslach et al. (2001), cynicism is related to pessimism. Carver and Scheier (2002) indicated that pessimists tend to use passive coping strategies.

A further objective was to determine the effect of an executive coaching programme on the general wellbeing, pervasive- and situational personality characteristics, coping strategies, work-related wellness, job characteristics and the performance of executives in the mining industry. Promising results from the literature reveals that coaching interventions seem to be quite effective in supporting changes in behaviour and wellbeing (Grant & Greene, 2001). Recent research results found increases in terms of the

productivity, quality, organisational strength, and customer service of employees as a result of an executive coaching programme (McGovern et al., 2001). It was also found that executive coaching is positively related to general wellbeing (Grant, 2003).

The executive coaching programme developed for this study can be related to increases in general wellbeing, pervasive personality characteristics, problem- and emotion-focused coping, as well as performance. Furthermore, the coaching programme can be related to decreases in negative work-related wellness and passive coping. These results are supported by Green, Oades, and Grant (2006) where it was found that participation in a life coaching programme increased goal striving, wellbeing and hope. Furthermore, based on the qualitative information recorded, it is clear that the performance and situational personality characteristics could have been affected by certain contextual aspects and – events. During the coaching programme the Mining company went through a restructuring exercise. The executives reported experiencing their work as unstructured, unclear and inconsistent before the executive coaching process started. Most of them struggled to cope with work challenges. However, after the completion of the programme they reported being more able to make emotional and motivational sense of work demands.

In terms of work-related wellness, the results showed a significant increase in the positive affective evaluation of work (vigour and dedication) and a significant decrease in the negative affective evaluation of work (exhaustion and cynicism). This finding is consistent with the findings of Kauffman and Scoular (2003) in that it demonstrated an increase in the positive affective evaluation of work of executives after completion of an executive coaching programme. Interestingly, the results of this study showed a decrease in the levels of absorption of executives after the executive coaching programme. However, if one considers the qualitative information recorded, executives reported experiencing work overload, as well as lack of resources and autonomy due to the restructuring that took place at that time. The increase in work overload experienced by executives may have caused them to experience difficulty focusing on their work. This finding is supported in the literature. According to Schaufeli and Bakker (2004), lack of

resources affects the psychological wellbeing, organisational commitment and the experience of work of employees.

Another interesting finding of the study is the increase in pervasive personality characteristics of executives after completion of the coaching programme. Although the literature reports several gains of coaching interventions, such as general life satisfaction, quality of life, mental health (Grant, 2003), as well as increases in wellbeing, with gains maintained up to thirty weeks after a life-coaching programme (Green, Oades, & Grant, 2006), this finding seem to a unique one. The statistically significant increase in dispositional optimism and sense of coherence is contrary to the literature. According to Diener and Lucas (1999), sense of coherence and dispositional optimism are by definition consistent across situations and life span. A possible explanation of these findings could be attributed to the measurement error of the measuring instruments. This is not surprising if one considers the repeated measurement of these variables before and after the intervention in the context of the limitations regarding sample size and the lack of an experimental design. Consequently, it seems warranted to further investigate situational variables in these settings in future studies, especially considering the limitations of this study. The diary study approach provides the field of psychology with a powerful set of methods for studying various human phenomena, including personality processes, physical symptoms and mental health. According to Bolger, Davis, and Rafaeli (2003), diaries are self-report instruments used repeatedly to examine ongoing experiences, which offer the opportunity to investigate socio-psychological processes within daily situations and experiences. At the same time, they recognise the importance of the contexts in which these processes unfold. A fundamental benefit of diary methods is that they permit the examination of reported events and experiences in their natural, spontaneous context, providing information complementary to that obtainable by more traditional designs (Reis, 1994).

In terms of job characteristics, the results seem to suggest that high levels of task overload of executives in the mining industry in South Africa could be related to perceived organisational support, opportunities for advancement, as well as perceptions

of insecurity regarding their work. According to De Jonge and Kompier (1997), overload and lack of autonomy seems to be important stressors for production employees. The findings seem to be in line with the findings of Rothmann, Mostert, and Strydom (2006) in their meta-analytical study of the various job characteristics across different industries in South Africa where strong organisational support was found to be related to opportunities for growth. Furthermore, the increase in job insecurity experienced by executives might be related to the transformation that is taking place in the Mining industry in South Africa at the present time.

The results showed an increase in the performance of executives regarding their understanding of the key business issues and relevant external factors impacting on the success of the organisation, sustaining productive client relationships, understanding organisational issues (organisational functioning, internal politics, power relationships, and social networks), analysing a problem and determine the possible causes for a problem, leading and empowering others to reach organisational goals and to inspire others to work towards a desired future state, while taking their needs into account. This finding is consistent with the findings by McGovern et al. (2001) that demonstrated increases in productivity, quality, organisational strength, and customer service after the completion of an executive coaching programme.

During the executive coaching programme four diary measurements of situational personality characteristics were completed. The results showed that learned optimism, situational sense of coherence and perceived wellbeing increased from the first- to the fourth measurement. After the second measurement only intellectual wellbeing increased significantly, while the other dimensions of learned optimism, situational sense of coherence and perceived wellbeing decreased, albeit not significantly. From the qualitative information recorded at the time of the second measurement, the executives reported that the executive coaching sessions stimulated their approach to problem solving. According to the qualitative information recorded at the second measurement, the executives reported experiencing work overload, lack of resources and autonomy due to the restructuring that took place at that time.

The results of this study seem to be in line with previous findings that the executive coaching programme improved the general wellbeing, work-related wellbeing, situational personality characteristics and performance of executives in the mining industry (Grant, 2003; Grant, 2006; McGovern et al., 2001).

5.2 LIMITATIONS

The sample size was one limitation of this study. According to Kerlinger and Lee (2001), the largest possible sample size should always be used. The small sample size has significant limitations in terms of the generalisation of the findings, as well as the statistical methods available for testing a casual model of work-related wellbeing of executives in the mining industry.

Another limitation of this study was the lack of a control group. This was due to the fact that the total population of executives in one area were selected. Only executives from one area were selected due to significant time and resource constraints on the side of the researcher. This means that the effects could have occurred naturalistically, rather than being caused by the intervention.

Furthermore, the study population consisted only of senior executives. Future research should therefore include the middle managers of the different departments in the Mining Industry. Moreover, the design may have induced a demand effect where the participants may have felt that they had to report making progress and enhanced wellbeing in order to please the researcher (Grant, 2003).

A further limitation was that participants in only one industry were used. Future studies should extend the sample to include other mining organisations, and perhaps other industries in South Africa.

5.3 RECOMMENDATIONS

In this section, recommendations for the organisations and for future research are made.

5.3.1 Recommendations for the organisation

The executive coaching programme, which has been developed for the purposes of this study, could be used as a development intervention for both senior- and middle management of the mining industry. In this study only the executives from the production department were used. However, it is possible to expand this programme to other departments in the mining industry. The findings indicate that this could create a more positive attitude towards executive development. Future studies on the effect of executive coaching on the performance, general wellbeing and work-related wellness of employees in the mining industry should therefore be expanded to include different departments in the mining industry. This will enable the organisation to determine the validity of the programme throughout the organisation. In using the executive coaching programme throughout the organisation, however, there needs to be more than one coach using the same programme and methodology.

The diary method used during this study proved to be an effective tool in determining situational aspects affecting the participants during the coaching process. Consequently, it is recommended that these diaries be used in some form (either electronically or paper-based) during all the coaching interventions in the organisation in order to clearly understand the context in which the particular individual functions. Not only does it offer a clear, continuous description of the experience of the individual, but it also provides the organisation with an in-depth analysis of the variables influencing organisational wellness, e.g. performance, turnover intention, job satisfaction, etc.

Finally, a culture survey should be conducted before the executive coaching programme in order to understand the true impact of the current culture of the industry, as well as the possible effect thereof on the outcomes of the intervention. Research shows that the

culture of the organisation can have a significant impact on development interventions and financial performance of an organisation.

5.3.2 Recommendations for future research

Based on the results obtained in this study, the following recommendations can be made with regards to future research:

- Comparing the effectiveness of various types of coaching, for example, whether a group programme is just as effective as individual programmes, or whether tele-coaching is just as effective as face-to-face coaching;
- Tracking the variations in terms of various personality characteristics (both pervasive and situational) after completion of an executive coaching programme;
- Exploring the relationship between more pervasive and more situational personality indicators of wellbeing, especially in the coaching context;
- Investigating the role of situational variables in the description of wellbeing in future studies in the same, as well as other industries in South Africa;
- Including other aspects of wellbeing in future studies regarding the wellbeing of employees at various levels in the mining industry, e.g. occupational health and wellbeing, psychological risk-analysis, turnover intention, work-related wellness, etc (Hackman & Oldham, 1980);
- The application of a diary study method in the predication of risk behaviour in the mining industry, which includes other indicators of wellbeing such as occupational health and safety (Reis, 1994);
- The sustainability of the gains attained as a result of the executive coaching programme and the extent to which it has been maintained over time, as well as the expression thereof in financial terms;
- Larger, more diverse sample sizes should be included in future studies in order to be able to empirically test a casual model of work-related wellbeing of executives in the mining industry (Stevens, 2000);
- Expanding the executive coaching intervention to other industries in South Africa;

- Conducting qualitative research in terms of the experience and wellbeing of executives by means of the electronic diary method in the mining and other industries in South Africa;
- Conducting coaching intervention studies with the aid of an experimental design in the mining industry, as well as other industries;
- Investigating the relationship between situational wellbeing and job-related wellbeing continuously over a specific time-period.

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