

# CHAPTER ONE: OVERVIEW, RATIONALE AND RESEARCH OBJECTIVES

## 1.1 INTRODUCTION

In November 2002, Cabinet approved proposals for the restructuring of higher education institutions, through mergers and incorporations. This reduced the number of higher education institutions from 36 to 21. Any major change process has an impact on employee well-being, since it is associated with increased uncertainty. It therefore produces increased perceptions of occupational stress, lower job satisfaction, high levels of absenteeism, a lack of trust and high mental and physical ill-health symptoms (Chunda & Cooper, 2002: 21-22; Gibson, Ivancevich & Donnelly, 2000).

The survival and longevity of the new higher education institutions will largely depend on the well-being of individual employees. To deal with the underlying stressors caused by the mergers and incorporations, higher education institutions should develop and implement wellness programmes as part of their strategic human resource plans. Since managers, as change agents, have to provide strategic direction and leadership to the new institutions, their wellness is of crucial importance for the continued survival of higher education institutions. When managers, as leaders, are not healthy, there may be the perception that the organisation they serve may not be healthy either (Grant & Mack, 2004).

This research study follows an explorative approach in developing a holistic wellness model for managers in higher education institutions. Two Gauteng based universities were selected to measure the perceived wellness behaviour levels and health risk factors of managers. The reason for selecting these two institutions was that one university, referred to as an academic university, is an example of an existing institution that only had to incorporate one small campus from another university, which would have little impact on the status quo. The other university selected, referred to as a technology university, was a new institution which came into being on 1 January 2004 following the merger of three former technikons. This research study thus focused on health risk behaviour variables, as predictors of unhealthy lifestyles and vulnerability to diseases, amongst managers at the

academic university and the technology university. In addition, the wellness levels of managers of these two institutions were compared. A holistic wellness behaviour assessment questionnaire was used to determine whether there is a need for wellness interventions by way of a comprehensive wellness programme. A wellness programme should be based on a thorough needs analysis. Baseline data should be gathered on demographics, health claim costs, disability claims, health risk and fitness levels, absenteeism reports, productivity and organisational culture. To obtain baseline data a variety of questionnaires may be used, such as employee interest surveys that solicit the employees' input to determine the kind of programmes in which employees would be likely to participate, while a behavioural health risk assessment survey may gather data on the current level of employee health risk factors.

No previous study, regarding the development of a wellness model for managers at higher education institutions, has been undertaken. A search via the *Nexus database system* for current and completed research revealed no records of any South African research directly related to the focus of this study (Nexus database, 2005).

## **1.2 BACKGROUND, MOTIVATION AND AIM**

In the twenty-first century, leading causes of illness and death were not ascribed to infectious diseases, but to lifestyle diseases. According to Thomas (1978), modern lifestyles are killing people: *[The new theory is that most of today's human illnesses, the infectious ones aside, are multifactoral in nature, caused by two great arrays of causative mechanisms: the influence of things in the environment and one's personal lifestyle. For medicine to become effective in dealing with such diseases, it has become common belief that the environment will have to be changed and personal ways of living also have to be transformed, and radically.]*

Houlton (2003) and Murray and Lopez (1997) mention that the top ten global risks identified by the World Health Organisation are low birth and childhood weight; unsafe sex; high blood pressure; tobacco smoke; alcohol; unsafe water; sanitation and hygiene; high cholesterol; indoor smoke from solid fuels; iron deficiency and obesity. According to Serfontein (2003), research done by the American government on the impact of various factors of current living conditions on mortality rates,

indicates the following: lifestyle (51%), environment (20%), genetic factors (9%) and medical intervention (10%).

Lifestyle and environment factors are the most important causes of death. However, man is able to control these factors. Genetic factors play a less important role than expected, while medical intervention plays a relatively insignificant role in life expectancy. These and other scientific studies should convince human beings that a significant improvement in health is possible if behaviours were changed to avoid sickness and promote wellness. People cannot control the heredity and age factors in their lives, but lifestyle choices are controllable and by reducing risk factors through changing behaviours, people will improve their state of wellness. Pelletier (1979), in *Holistic Medicine*, suggests that there are four factors that impede health, namely stress caused by environmental demands, personality factors (psychological conflicts, mental attitudes and dispositions), diet and self-destructive behaviour (such as cigarette smoking, excessive alcohol and drug consumption and reckless driving).

The reasons for conducting this study were:

- ❑ Poor health leads to increased health care costs. Most of these costs are linked to health risk factors such as smoking, poor eating habits and sedentary lifestyle (Ozminkowski, Goetzel, Santoro, Saenz, Eley & Gorsky, 2004). The reduction of these risk factors, through wellness interventions, will make it possible for higher education institutions to take aggressive action toward reducing health care utilisation and thereby containing costs and reducing absenteeism as a result of illness.
- ❑ The leading causes of most illnesses are largely preventable and behind these illnesses are a host of preventable factors including the use of tobacco, high-risk alcohol consumption, sedentary lifestyles and poor nutritional habits (Orange County Business Journal, 2003). Besides identifying lifestyle risk factors, a holistic wellness behaviour assessment will also indicate which treatment should be provided to help managers avoid disabilities and premature deaths. In addition, managers will be made aware of and educated in the benefits of leading a healthy lifestyle.
- ❑ An ever-increasing work week poses a number of threats. Long working hours increase incidents of depression and other health problems such as stress, burnout, suicide, sleep disorders and anxiety (Bolan, 2000). A wellness

programme, based on a holistic wellness behaviour assessment, can alleviate some of these concerns.

- ❑ The increased reliance on technology has caused a host of new health concerns including repetitive stress injuries, lower back problems and compromised vision (Orange County Business Journal, 2003). In addition, a large percentage of the workforce spends the majority of their day seated at desks plugged into workstations. Sedentary lifestyles have become a major concern.
- ❑ This study will identify possible work stressors and interventions to deal with it effectively. Stress on the job can be a contributing factor to work place accidents and injuries, reduced productivity, unnecessary absenteeism, and increased medical care costs (Orange County Business Journal, 2003). Stress contributes to illnesses such as heart diseases and diabetes, high blood pressure, ulcers, irritability, difficulty in making routine decisions, loss of appetite, accident proneness and nervous disorders such as anxiety and depression (Robin, 2003; van Daalen & Odendaal, 2001). By implementing a stress management intervention as part of a wellness programme, stress can be reduced or eliminated.

This study will help higher education institutions to develop their own holistic wellness models, develop and implement wellness programmes for managers as part of the strategic human resource plans, create an awareness amongst employees that most illnesses can be avoided through preventive measures, alleviate the threats posed by expanding work weeks, help to reduce stress levels, reduce health care costs, increase employee satisfaction, enhance job performance, reduce employee turnover, reduce absenteeism, improve morale, increase employee productivity, attract and retain knowledgeable employees, improve the image of the organisation, increase employee loyalty, keep workers healthy and enhance the quality of life of employees both on and off the job (Sherman, 1990; DeFalco, 2001; Wellness Councils of America, 2001; Ho, 1997; Weston, 2003; Violette, 1990).

These are only some of the benefits of this research study for higher education institutions, but the question may be asked whether managers will benefit from it as well? According to Blassingame (2003) and Sherman (1990), the individual manager will benefit by being healthier, enjoying life more, communicating better, having more stamina, having better coping skills, having a greater commitment to his or her work, being more enthusiastic and productive, having a more positive outlook

on life, having a longer life and paying less for health care insurance. Both the organisation and individual, therefore, will benefit from being health conscious and changing their lifestyle behaviours.

The overall contribution of this study would be to develop a holistic wellness model that will serve as the foundation for a comprehensive wellness programme for managers in higher education institutions. It is proposed that an in-depth study will be done on the wellness and health risk behaviours of managers at the academic university and technology university by way of a comprehensive holistic wellness behaviour assessment. The research project thus aimed at empirically investigating the six dimensions influencing wellness amongst managers, and to examine the relationship between wellness behaviour levels and the scales of the probable risk involved in terms of current and future wellness problems of managers. This study will add value as the findings will be used to identify specific wellness interventions to solve wellness behaviour problems. Therefore, the aims of the study were to:

- Develop a holistic wellness model for managers in higher education institutions.
- Measure the wellness behaviour levels of managers by focusing on physical, emotional, intellectual, social, occupational and spiritual wellness dimensions.
- Identify the wellness behaviour and health risk factors of managers as related to the measured wellness behaviour.
- Propose wellness interventions as part of a holistic wellness programme.

### **1.3 PRELIMINARY LITERATURE REVIEW**

An investigation into health, wellness and health risk behaviours provided the theoretical framework guiding the research process.

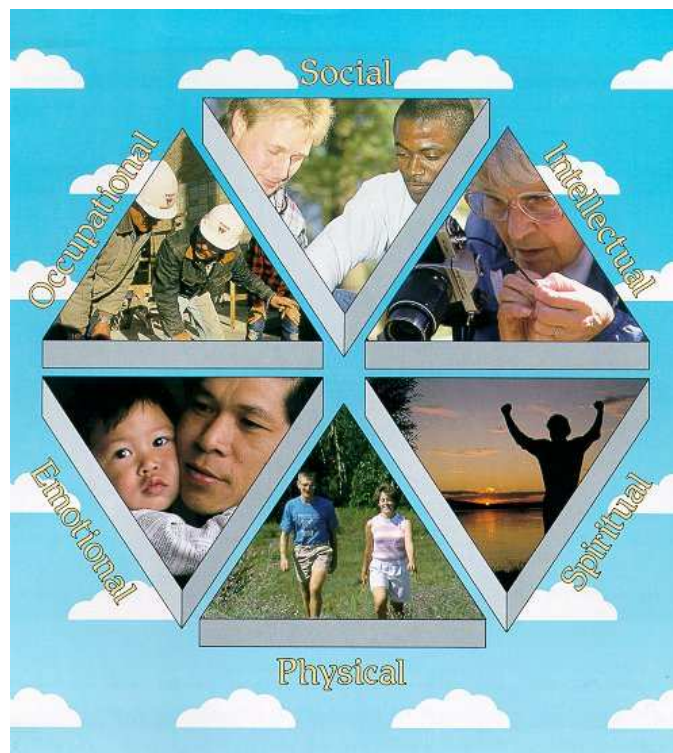
#### **1.3.1 Health and wellness**

To be responsible for one's own well-being, one must understand the meaning of the concepts health and wellness. Health is a state of complete physical and mental well-being and not merely the absence of disease or infirmity (World Health Organisation, 1947). Health is an integrated method of functioning which is oriented toward maximizing the potential of the individual. It requires that the

individual should maintain a continuum of balance and purposeful direction with the environment in which he or she is functioning. Wellness has been defined as an approach to personal health that emphasises individual responsibility for well-being through the practice of health-promoting lifestyle behaviours (Hurley & Schlaadt, 1992). Wellness refers to a holistic approach in which mind, body and spirit are integrated. It is a way of life oriented toward optimal health and well-being in which body, mind and spirit are integrated in a purposeful manner with the goal of living more fully within the human and natural community (Myers, Sweeney & Witmer, 2000:252). Wellness is a process that involves the striving for balance and integration in one's life, adding and refining skills and rethinking the appropriateness of previous beliefs and stances towards issues (Hatfield & Hatfield, 1992).

There are a number of theoretical wellness models that can serve as a foundation for wellness interventions. Hettler (1980) has developed a hexagon wellness model consisting of six dimensions (see figure 1.1).

**Figure 1.1: Hettler's Wellness Model**



(Hettler, 2005)

Leafgren and Elsenrath (1986) explain these six components as follows: Emotional wellness emphasizes an awareness and acceptance of one's feelings.



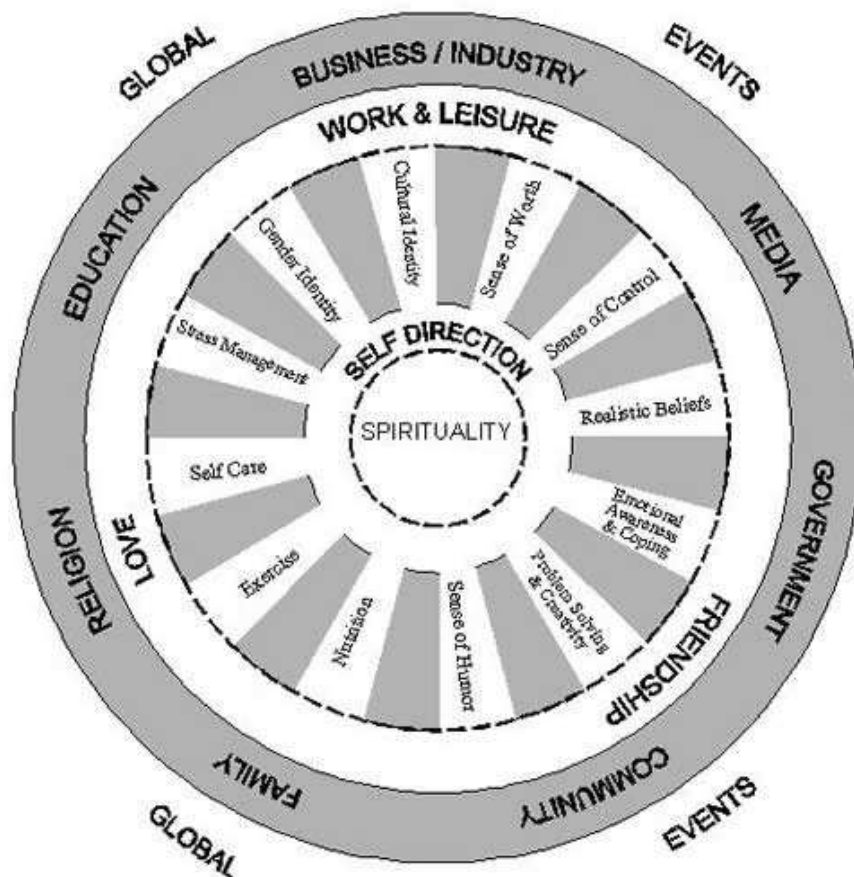
Emotional wellness includes the degree to which one feels positive about oneself and life. It includes the capacity to manage one's feelings and related behaviours, including the ability realistically to assess one's limitations and the ability to cope effectively with stress. The emotionally well person maintains satisfying relationships with others. Intellectual wellness encourages creative and stimulating mental activities. An intellectually well person uses the resources available to expand his or her knowledge in improved skills along with expanding his or her potential for sharing with others. An intellectually well person uses the intellectual and cultural activities in and beyond the classroom, as well as the human and learning resources available within the university community and the larger community. Physical wellness encourages regular physical activity to achieve cardiovascular fitness. It also emphasises the importance of balanced nutrition and discourages the use of tobacco and drugs and excessive alcohol consumption. It encourages healthy nutritional consumption and physical activities that contribute to overall wellness. Social wellness results in contributions to one's human and physical environment for the common welfare of one's community. It emphasizes the interdependence between people and with nature. It includes the pursuit of harmony in one's family life. Occupational wellness is the preparation for work in which one will gain personal satisfaction and find enrichment in one's life through work. It also relates to one's attitude to work. Spiritual wellness involves seeking meaning and purpose in human existence. It includes the development of a deep appreciation for the depth and expanse of life. According to Hattie, Myers and Sweeney (2004:354), two paper-and-pencil assessment instruments, the Lifestyle Assessment Questionnaire and the TestWell Wellness Inventory, designed by the National Wellness Institute, are based on the wellness model of Hettler.

Adams, Bezner, Drabbs, Zambarano and Steinhardt (2000:165-166) have presented a wellness model to conceptualise and measure the spiritual and psychological dimensions in a college population. Their model is founded on three principles common to all conceptualisation of wellness, namely multi-dimensionality, balance among dimensions and salutogenesis (defined as promoting health rather than illness). The model and measure include the physical, social, emotional, intellectual, spiritual and psychological dimensions of health and is dynamically bi-directional. It serves as the theoretical basis for the Perceived Wellness Survey,

which was conducted in a college population and was salutogenically rather than pathogenically focused (Adams *et al.*, 2000: 166).

Witmer and Sweeney (1992:140) incorporated the wellness theory and research concepts from psychology, anthropology, sociology, religion and education into a holistic model of wellness and illness prevention over the life span of an individual as a basis for counselling interventions. The results of research and theoretical perspectives from personality, social and clinical health, stress management, behavioural medicine, psychoneuroimmunology, ecology, contextualism and development psychology were foundations for the revised model (Hattie *et al.*, 2004: 355). The revised model proposes five life tasks, depicted in a wheel, which are interrelated and interconnected (see figure 1.2).

Figure 1.2: Wheel of Wellness Model



(Myers *et al.*, 2000:253)

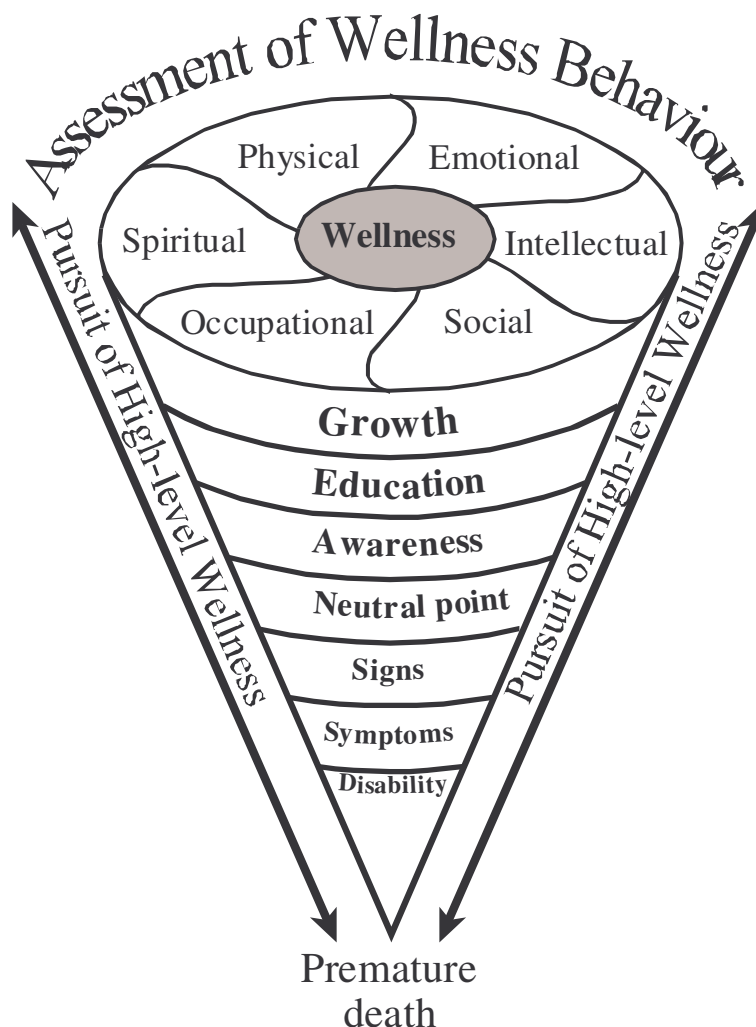
These five tasks are spirituality, work and leisure, friendship, love and self-direction (Meyers *et al.*, 2000:252). According to Hattie *et al.* (2004:355), the life task of self-direction is further subdivided into the 12 tasks of (a) sense of worth, (b)



sense of control, (c) realistic beliefs, (d) emotional awareness and coping, (e) problem-solving and creativity, (f) sense of humour, (g) nutrition, (h) exercise, (i) self-care, (j) stress management, (k) gender identity and (l) cultural identity. These life tasks interact dynamically with a variety of life forces, including, but not limited to, one's family, community, religion, education, government, the media and business/industry. The Wellness Evaluation of Lifestyle (WEL) was developed to assess each of the individual characteristics in the Wheel of Wellness Model.

To conceptualise, explain and understand the complexity of wellness, a preliminary wellness model for managers, adapted from the models developed by Hettler (1980); Adams *et al.*, (2000); Edlin, Golanty and McCormack-Brown (1998:8); Witmer and Sweeney (1992:142) and Myers *et al.* (2000:252) was developed (see figure 1.3).

**Figure 1.3: A Preliminary Wellness Model for Managers**



This model forms the theoretical foundation for this research study. The preliminary wellness model for managers defines health in terms of the whole person and encompasses the emotional, intellectual, spiritual, occupational, social and physical dimensions of individuals (Hettler, 1980; Sapp, 2004; Edlin *et al.*, 1998; Herholdt, 2004; Davies, Davies & Heacock, 2003). The wellness model places great emphasis on the use of health promotion and environmental protection to maintain healthy communities and also stresses the importance of health education and disease prevention for individuals (Dobson & Lepnurm, 2000). The model focuses on optimal health, the prevention of disease, positive mental and emotional states, and proposes that health is a state of optimum wellness (Edlin *et al.*, 1998:8).

The wellness continuum allows one to visualise the difference between wellness and the medical approaches to health. Individuals move on this continuum toward disability and optimal wellness. The top of the model represents wellness while the bottom represents disability. Disability, in this model, may be a state of poor physical health, poor self-esteem, pessimism, existential frustration, a lack of intellectual stimulation, a negative sense of meaning and purpose in life, unhappy work life, unhealthy and conflicting relationships, an unsafe and unhealthy work environment, or any combination of these factors (Adams *et al.*, 2000). Any of these conditions could lead to physical illness or disease. There is also a relationship between the various dimensions of wellness. Ideally, they should be in a state of equilibrium. Wellness is a dynamic process that takes into account the decisions taken on a daily basis regarding a person's lifestyle and risk behaviour. These include the food one chooses to eat, the amount of exercise one gets and whether one wears a safety belt, smokes cigarettes, drinks alcohol, abuses drugs or resides in a polluted environment. To move towards a state of optimal wellness, individuals should make radical changes in their lifestyle choices and risk behaviour. These changes will empower individuals to live full, responsible, rewarding lives in an extremely complex world. A lifestyle behaviour change should be based on a psychological construct such as the Cognitive Learning Theory or Transtheoretical Model. According to Boyd and Goss (2003) and Proper, Hildebrandt, Van der Beek, Twisk and Van Mechelen (2003:219), the Transtheoretical Model (TTM) is an example of a behaviour theory. It has been broadly described as a behaviour change model consisting of a number of dimensions, one of which is temporal, indicating a continuum of five stages of change beginning with pre-contemplation where no

intention to change behaviour exists (for instance surface approach to learning) in the foreseeable future (Boyd & Goss, 2003). Contemplation is the next stage, in which the awareness of a need to change a behaviour exists in the near future (next 6 months), but not in the immediate future. Following this stage is preparation in which individuals plan to change behaviour in the near future (next 30 days) and have taken some steps towards change. The next stage is action during which major behavioural changes are made. If the changed behaviour continues (for instance for more than 6 months) the individual may be described as being in the maintenance stage. The relapse is described as regression to a previous stage. Significant empirical research in health-related domains has shown the TTM's applicability to health behaviour modification (Boyd & Goss, 2003). Goldstein, Whitlock and DePue (2004:74) state that any behavioural risk factor intervention should follow the 5A's approach that includes the following steps: (1) Assess refers to the assessment of the individual's knowledge, beliefs, attitudes and preferences by way of a health risk appraisal instrument such as questionnaires or interactive computer-based systems; (2) advice by a health expert related to an individual's symptoms, values and concerns; (3) agree is the important step of collaboratively identifying behavioural and self-management goals; (4) assist in providing behavioural counselling to help the individual concerned to develop an action plan to develop behavioural skills to change and maintain healthy behaviour and (5) arrange includes making arrangements for contacts with the health expert by way of face-to-face, telephone or internet contact.

The following assumptions may thus be derived from the discussed wellness model and wellness literature:

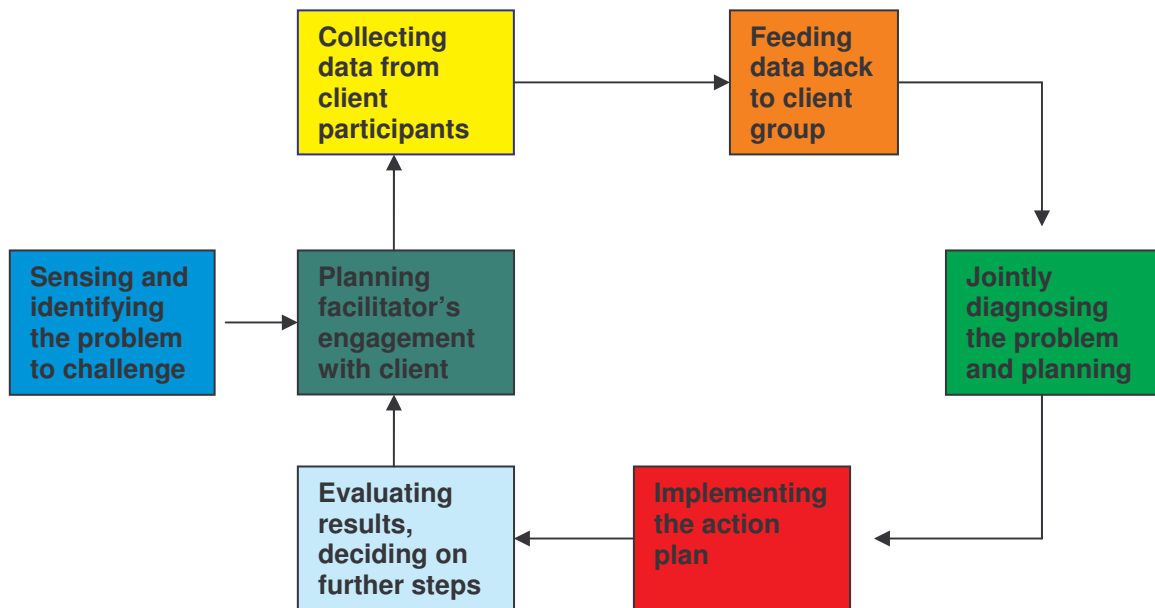
- The well-being of every individual within the organisation influences the well-being of the organisation and vice versa.
- The organisation should provide treatment programmes, for example wellness programmes, to help employees avoid disability or premature death.
- Treatment programmes provided by the organisation may, at best, only help employees to experience the absence of illness symptoms (a neutral point in the model).
- Employees should take responsibility for their own health by leading a healthy lifestyle and reducing their health risks.

- ❑ Through an organisational wellness programme intervention, individuals should be made aware of and educated in, the benefits of leading a healthy lifestyle.
- ❑ Creating awareness and providing education in wellness, as well as providing opportunities for personal growth and the development of employees.
- ❑ Ultimately the goal for an employee is to move to a high level of wellness where the various dimensions of wellness are in equilibrium.

As indicated, the preliminary wellness model for managers served as the theoretical foundation for this research study. The level of wellness dimensions was measured by a holistic wellness behaviour assessment questionnaire. Low-level scores measured on the various wellness dimensions indicated the need for specific wellness interventions in the form of a holistic wellness programme.

To promote wellness in the workplace, organisations should pro-actively promote health and wellness. Organisational health promotion is defined as a strategic effort to reduce the health risks of employees through planned changes in individual risk related behaviours and other organisationally related predisposing conditions (Gutknecht & Gutknecht, 1990). To attain organisational health, a healthy organisational climate must exist. The organisation's climate is defined as the general internal organisational environment that is determined by the organisation's structure, leadership, philosophy, technology, people, and culture (Bennet, 1995:198). Since the climate is determined in part by the culture, the organisational culture should be the target of change. According to Sherman and Bohlander (1992), the organisational climate has the following elements: physical, technological, social, political and economic. Each of them can have an effect on employee health. The organisational climate can only be changed if the culture is influenced by health promotion professionals or wellness consultants. An organisational development approach (OD) should be used to manage the change in culture. According to Cummings and Worley (2001:1), organisation development is a systemwide application of behavioural science knowledge to the planned development, improvement and a reinforcement of the strategies, structures and processes that lead to organisational effectiveness. Harvey and Brown (2001:4) state that OD is long-range efforts and programmes aimed at improving an organisation's ability to survive by changing its problem-solving and renewal processes. These steps are also illustrated by figure 1.4.

**Figure 1.4: Organisation Development Process**



(Cook & Hunsaker, 2001:547)

According to Wilson and Wagner (1997), the OD process can be used to make the organisation healthier and an internal or an external consultant may implement the health change process. In brief, the process should follow the following steps:

- ❑ The consultant must gather information concerning the organisation's culture.
- ❑ The accumulated data must be evaluated to diagnose the conditions in the organisation and to determine the changes needed to meet the organisation's health objectives.
- ❑ The data is collected and organised according to the health objectives of the organisation.
- ❑ The fourth step includes the planning and implementation of specific interventions to change the culture.
- ❑ The fifth step evaluates the interventions used to change the culture.
- ❑ Lastly, a periodic follow-up evaluation is employed to track progress and to develop possible suggestions for future interventions.

According to Nadler and Tushman (1990), Tribus (1989) and Jerome-Forget (1992), the major factors for successful organisational development are support by top management, additional leadership support and the fact that all managers should act as change agents. The best time to initiate organisational change is during

structural re-organisation. One of the strategies for health promotion in organisations is to develop and implement comprehensive wellness programmes.

Wellness programmes should be a part of the strategic human resource plan of an organisation (Ginn & Henry, 2003). Changes, emanating from the environment requiring organisations to adapt, present a major source of stress to employees who are forced to adapt repeatedly to new relationships, both inside and outside the organisation (Shortell & Kaluzny, 2000). Enabling employees to weather these changes, poses a challenge to its human resource management. Instituting wellness programmes can help employees to accept these changes. Such programmes cover a variety of activities that can be classified into risk assessment, fitness, health education and demand management (Conrad, 1988). Humanistic oriented organisations should consider health and wellness programmes as a means to retain scarce workers, keep them productive and save on health costs over a long term.

From an organisational behaviour perspective, a wellness programme intervention is a proactive human resource strategy to address signs and symptoms of diseases and to prevent disability. Furthermore, it should create an awareness of and education about leading healthy lifestyles and thus reduce health risks of individuals. According to van der Watt (2004), the core aspects of wellness are:

- ❑ Self-responsibility: Wellness is about making conscious choices towards the development of a proactive lifestyle.
- ❑ Continuous process: Wellness is a continuous process, regardless of age and lifestyle and not an end-state.
- ❑ Non-prescriptive: The criteria and goals for personal wellness need to be defined by the individual. It is a relative concept that varies from one person and context to the next.
- ❑ All spheres of life: Besides addressing all spheres of life (emotional, physical, intellectual, social, environmental, occupational and spiritual), it also implies these aspects.
- ❑ Maximization of potential: Wellness is not concerned with what is normal or adequate, or the absence of symptoms or disease, but about aiming for optimum health and well-being.

Davies *et al.* (2003:68-70), DeFalco (2001:79-81), Nonprofit Business Advisor (2003:6-8), Buffett (2002), and Jenkins (2001) recommend that, in order to be successful, a wellness programme needs the following building blocks:



#### ❑ **An inside advocate to act as coordinator**

A person should be committed to the value of good nutrition and physical activity as a lifestyle. That does not mean aiming at living perfectly, but rather at setting a goal to work towards and being interested in talking to others about wellness in an effort to stimulate interest and participation (Worksite Wellness for Tompkins County, 2004). The wellness director should have a degree in wellness or a related field of discipline and needs a strong background in business management, human behaviour, physical sciences and counselling (Grant & Brisbin, 1992). Such a background may be acquired through experience, formal education, or a combination of both.

#### ❑ **The support of top management**

Top management must support and participate actively in a wellness programme, especially in the early testing and assessment, as well as attending appropriate seminars on wellness (Violette, 1990). Senior level executives control the budgets, the organisational agenda and all the communication channels and as a result of these realities it is virtually impossible to succeed without the support of top management.

#### ❑ **Steering committee or wellness teams**

In organisational settings, most decisions are currently made by teams. To ensure that the health promotion initiative is supported by all, it is imperative that all key role players should be involved. According to Hunnicutt (2001), one needs to include operations, senior level executives, finance, blue-collar workers, administration and clerical employees, other employees, sceptics and management of information systems (MIS).

#### ❑ **Data to drive health efforts**

Collecting data is important, because these have proved to be major problem areas in employee wellness programmes. There are various sources of data including current lifestyle habits of employees, employees' interest in wellness, the level of productivity demographics, healthcare insurance costs and claims, absenteeism reports, disability/workers' compensation, health screenings, health risk appraisals, fitness levels of employees, facility assessment and culture audits (DeFalco, 2001;

Jenkins, 2001; Grant & Brisbin, 1992). According to Hunnicutt (2001), organisations need this data to see the whole picture. A person should not jump in simply because he or she has support, but should use a team to gather health data. Those who believe that they know what the facts are, should ensure that they verify the objectivity of their sources.

#### ❑ **An operating plan**

An annual plan is a vehicle that articulates the strategic direction of the organisation and serves as a document against which all progress is ultimately measured (Wellness Councils of America, 2001). A business plan should be developed in order to stay on the right course and only to engage in activities that are supporting the organisational wellness objectives. Addressing the costs of absence, health problems, disability and workers' compensation is often one of the most pressing issues for organisations. These areas are business challenges with substantial financial considerations and, for many organisations, the combined annual cost/expense of absence, health problems (medical/Rx/dental), disability and workers' compensation is exceeded only by employee compensation (Johnson & Johnson, 2003).

#### ❑ **Appropriate interventions**

When developing an organisational wellness programme the organisation should decide on the right intervention for identified problems. According to Jenkins (2001) and DeFalco (2001), there are various approaches to wellness interventions. These include self-study or home based study, peer support, group education as well as pharmaceutical and personal counselling. Group education seems to work best, while face-to-face intervention is very expensive.

#### ❑ **A constant evaluation of outcomes**

Programme evaluation is the systematic assessment of the value or performance of a series of activities organised around a set of objectives and purposes. Different types of evaluation include process, impact and outcome. The evaluation may cover items such as cost benefits accruing to health care insurance, workers' compensation insurance, absenteeism, productivity, employee morale, increased levels of health and fitness and modified health risk factors (Grant & Brisbin, 1992).

The results of the evaluation may then be used to modify the programme to ensure the sustainable realisation of predetermined wellness goals by employees.

A survey conducted by the Wellness Junction indicates that health screening is the pre-eminent wellness intervention in the USA (Nonprofit Business Advisor, 2003). Health screening focuses on aspects such as breast cancer detection mammograms, cholesterol testing, blood pressure screenings, bone density and osteoporosis, diabetics testing, cardiac health screenings, body fat analyses, health risk analyses, peak flow, oxygen saturation, pulmonary function testing, hearing tests, vision testing, ECGs and glucose screenings (Nonprofit Business Advisor, 2003; Indiana Business Magazine, 2003). Other popular programmes include stress management, nutrition and exercise programmes, weight loss and weight management, smoking cessation, workstation assessment and ergonomic design, coronary health, individual counselling, parenting classes, health risk assessment, programmes on alternative medicine and holistic approaches, eye surgery options and immunisation clinics. A wellness programme should at least consist of physical fitness, stress management, psychological and mental health, nutrition and dietary related issues, as well as alcohol and chemical dependence education/treatment (Church & Robertson, 1999; Shephard, 2000; Grant & Brisbin, 1992). Weston (2003) recommends the following guidelines for developing a wellness programme: regard health as a strategic issue, ensure that your health programme manager targets the organisation's specific needs, ensure involvement from 'top to bottom' in the organisation, with management leadership for the programme, recognise the need for baseline data and assessments, reassure employees of the privacy of their detailed assessment information, set objectives for improvement across the organisation, define measures for success (such as attendance at workshops), productivity increases, positive employee feedback and fewer sick days or stress leave, tailor programmes and activities to desired outcomes, emphasise employees' personal responsibility for their health and run further assessments at regular intervals and report back on accumulated results.

To be successful, a wellness programme should strive for a participation rate of 75% or higher, give employees what they want, utilise a credible source to deliver content and have an enthusiastic coordinator (Ioma's Safety Director's Report, 2003; Violette, 1990). In addition, such a programme needs a sound business plan, horizontal integration, clarity on the purpose, focus on technology development and

a realisation of the importance of data and information management (Johnson & Johnson, 2003). Wellness programmes should focus on people who are already at high risk, for example, people who smoke or who are obese, thereby trying to reduce their risk profiles (Goetzal, 2002). A health risk appraisal helps organisations to assess their employee population as a whole and identify the kinds of education and intervention the employees need. Individuals should also take responsibility for their own wellness by practising quality in doing their jobs, setting priorities, establishing support groups, participating in community activities, maintaining a healthy lifestyle, fostering a healthy work environment, taking sufficient time off, dealing with anger, taking up a hobby, being honest and happy, stop worrying and practising self-compassion (Bintliff, 1997).

### **1.3.2 Health risk assessment**

The concept of health risk is generally credited to Robbins, whose work on cervical cancer and heart disease prevention during the late 1940s led him to the idea that a medical doctor might record a patient's health hazards as a guide to preventative efforts. This in turn led to the creation of a simple health hazard chart that could give the medical examination a more prospective orientation (Beery, Schoenbach & Wagner, 1986). A Health Risk Appraisal (HRA) is a systematic approach to collecting information on individuals that identifies risk factors, provides individualised feedback and links the person with at least one intervention to promote health, sustain functions and/or prevent diseases.

Virtually all organisations will have to begin implementing an employee wellness programme by conducting a health risk appraisal or assessment using a questionnaire that asks employees about their habits, risk factors, current health issues and family history. The appraisal helps organisations to assess their employee population as a whole and identifies the kind of education and intervention the employees need (Kapp & Sharp, 2003). Through the early identification of behavioural risk factors and then changing the behaviour of people, it is possible to achieve substantial improvements in health.

One of the most obvious approaches is the implementation of a wellness programme based on a comprehensive health risk appraisal. An example is the Healthy People 2000 (HP2000) which is the American national agenda of health

promotion and disease prevention that provides objectives for improving the health of all Americans (National Centre for Health Statistics, 2000). The agenda delineates specific and measurable health behaviour goals within 22 priority areas, focusing on lifestyle or behavioural changes that reduce the risk of disabilities, improve the health status of vulnerable populations and reduce the incidents of disease (National Centre for Health Statistics, 2000). A typical Health Risk Assessment (HRA) instrument obtains information on demographic characteristics (sex, age and job), lifestyle (for example smoking, exercise, alcohol consumption and diet), personal medical history and a family medical history (Shekelle, Tucker, Maglione, Morton, Roth, Chao, Rhodes, Wu, Newberry, Gruman & Rubenstein, 2004).

Assessment instruments consist of between 40 and 80 questions designed to address multiple risk factors. The type of lifestyle or behavioural areas addressed include tobacco and alcohol use, nutrition or diet, physical activity or exercise, height and weight (Body Mass Index - BMI), self-care, motor vehicle use, safety, back care, preventive self-examinations and readiness to change (Babor, Sciamanna & Pronk, 2004). The logic behind HRA is that if employees understood the morbidity and mortality risks of unhealthy behaviour, a significant number would change to more healthy habits. It is also anticipated that HRA data would give the information needed to design intervention techniques and change high-risk behaviours amongst organisational employees. According to Scott (1999), these assumptions are flawed if based on evidence that shows that simply knowing about risk implications is not sufficient to change behaviour. For example, is there a single adult smoker who does not know the health risks of tobacco use or do the majority of the population who are inactive and eating high-fat diets not understand the risk of obesity? High risk individuals are often reluctant to change their drinking, sex, seat-belt and other poor lifestyle habits for fear of repercussion (Scott, 1999). According to Scott (1999), HRA should be replaced by a new approach called IRA (Interest/ Readiness Assessment) that asks individuals about their health interests and what behaviours they are ready to begin changing. The IRA should include, apart from demographic data, the following:

- ❑ Health and lifestyle interests, such as topics on men's and women's health issues, healthcare/self-care, workplace health, physical activity and life skills.
- ❑ Readiness assessment which is based on health practice questions, such as nutrition, body weight, physical activity, stress management and tobacco. It

should determine an individual's stage of readiness (pre-contemplation, contemplation, preparation, action, or maintenance).

- ❑ Chronic health condition interests which may include everything from allergies to osteoporosis as important areas.
- ❑ Perceived health. An individual's health perception correlates highly with his or her actual health, allowing time-over-time evaluation.
- ❑ Learning style preferences. Knowing these encourage investment in the appropriate resources.

The question is how reliable and valid are health risk appraisals? Reliability refers to the degree to which measurements are affected by random error, which may be assessed by the stability of the measures or scores produced by an instrument from one time period to another (Smith, Sonja, McKinley & McKinley, 1989). Validity, on the other hand, refers to the accuracy of a response in relation to some objective standard (Babor *et al.*, 2004).

Several studies have raised doubts about the reliability of HRA data. Research done by Best and Milsum (1978) found that participants in a smoking cessation programme reported numerous improbable changes in the body frame size, medical history and family history after six months. Another study done by Sacks, Krushat and Newman (1980) established that only 15 percent of the subjects in a clinical trial gave constant responses to HRA items at both baseline and follow-up interviews. Studies done by Elias and Dunton (1981), Lauzon (1978), Cioffi (1979) and Alexy (1985) reported test and re-test reliability coefficients exceeding 0.7 for selected risk factors and overall risk estimates, especially for follow-up periods of short duration (three days to one month). Smith *et al.* (1989) did a field trial to assess the reliability and validity of four HRA instruments, namely, Health Risk Appraisal (Centers for Disease Control), The Heart Test (Arizona Heart Association), RISK0 (American Heart Association) and Determine your Medical Age (Blue Cross/Blue Shield, New York). According to Smit *et al.* (1989), the results from the field trial indicate that reliability of HRA risk scores can vary greatly from one instrument to another and these findings have the following implications for organisations using HRAs:

- ❑ Computation errors may severely reduce the reliability of self-scored instruments. Smit *et al.* (1989) recommend that computerised HRAs may be the most desirable type unless manual calculations can be routinely checked for errors.



- ❑ More work needs to be done to improve the measurement of specific risk factors such as physical activity levels, dietary practices and physiologic status. The reliability of blood pressure and cholesterol levels can be increased by measuring these values during physical examinations rather than relying on self-reports.
- ❑ As the reliability of a HRA declines, it becomes increasingly difficult to distinguish changes in risk status from random reporting areas. Unreliability makes health promotion intervention efforts more difficult to detect and only HRAs for which reliability can be demonstrated should be considered for evaluation of the effectiveness of these interventions.

Wiley (1981) retrospectively computed HRA risk estimates using 13 characteristics that had been measured on the Alameda County Cohort. HRAs differentiated high-, middle- and low-risk subjects, although they overestimated by 26 deaths per 1000 the actual mortality experience. A study conducted by Chaves, Jennings, McKinlay & McKinlay (1985) at the American Institute for Research found that heart disease mortality risk estimates from seven basically similar HRAs instruments to correlate closely (above 0.87) with one another.

HRAs potentially have the following positive qualities for clinicians and health educators: preventive orientation, systematic approach, ability to emphasise modifiable factors and grounding in current scientific knowledge (Schoenbach, 1987). Anderson and Stauffer (1996) mention that HRAs are recommended in the context of education programmes and services that improve general awareness of health issues, provide practical knowledge and support individual efforts to change behaviour. In this context HRAs have a high degree of face validity. Although HRA instruments tend to provide an accurate determination of high and low-risk status, accuracy can be reduced under certain circumstances (Eddington, Yen & Braunstein, 1999). Reliability studies for HRA instruments indicate that for the vast majority of questions asked, the results appear to be relatively stable (Babor *et al.*, 2004). Research done by Sacks *et al.* (1980) found that self-reports tend to be unstable over a 6-month period. However, according to Elias and Dunton (1980), the instability of self-reports does not substantially affect risk calculations. Babor *et al.* (2004) are of the opinion that in the context of post-HRA, follow-up programmes may increase awareness and change behaviour, which, reported at a 6-month follow-up, would result in changes in HRA responses. According to Gazmararian, Foxman and

Yen (1991), HRAs accurately predict group-level mortality data, but perform poorly at predicting individual risk of dying. Szymanski, Pate and Dowda (1991) recommend that performance in predicting physiologic risk factors may be optimised if the HRA is combined with physiologic or biometric screening measures. Although the relationship between HRAs and medical costs has often been quantified, further research is necessary to explain the role of HRA-derived data in predicting future health care utilisation, medical care expenses and morbidity (Yen, Eddington & Witting, 1991; Pronk, Tan & O'Connor, 1999).

#### **1.4 PROBLEM STATEMENT AND HYPOTHESES**

As a background to the problem statement, a synopsis of the literature regarding wellness problems is given. A sedentary lifestyle, tobacco smoking, alcohol and drug abuse, unsafe sex, reckless driving and speeding, irresponsible use of firearms and obesity contribute to poor physical health and increase the mortality rate amongst employees. Environmental demands cause emotional disturbances such as stress, burnout, depression, anxiety and sleeping disorders. Limited opportunities for life-long learning hamper the need for self-actualisation and intellectual development. In today's fast changing and turbulent environment, employees become alienated and find it increasingly difficult to establish and sustain healthy relationships with others. In addition, employees find it difficult to incorporate their skills, interests and values to obtain high job satisfaction. Employees frequently lack a sense of purpose and struggle to balance their inner needs with the demands of the rest of the world. From an organisational behaviour perspective, the abovementioned problems may lead to high personnel turnover, low job satisfaction, absenteeism, low morale, increase in health care costs, lower productivity, inefficiency and ineffectiveness. However, individuals can control their lifestyle choices and reduce their health risk factors through changing their behaviours.

The research problem serves as the basis of a hypothesis. For the purpose of this study the problem statement is as follows: *The wellness behaviour of managers at two higher education institutions increases their health risks and necessitates wellness interventions.*

When an explanation for a phenomenon is sought, a tentative proposition is suggested to serve as a point of departure for the specific research study. Such a

tentative statement is called a hypothesis (Ruttkamp & Ally, 2000:41). A hypothesis that uniquely specifies the population parameter concerned is called a null hypothesis and is indicated by the symbol  $H_0$ , while the alternative hypothesis, indicated by  $H_1$ , specifies for the population parameter a set of values that is not specified by the null hypothesis and that is important to the specific problem (Steyn, Smit, Du Toit & Strasheim, 1994:406). For the purpose of the study, the following null and alternative hypotheses were postulated:

**$H_0$ :** There is no correlation between the health risk scores and the wellness behaviour levels of managers.

**$H_1$ :** There is a negative relationship between the wellness behaviour levels and the health risk scores of managers.

**$H_0$ :** There is no significant difference between the mean wellness behaviour levels and mean health risk scores of managers at the academic university and technology university.

**$H_1$ :** There is a difference between the mean wellness behaviour levels and mean health risk scores of managers at the academic university and technology university.

**$H_0$ :** There is no significant difference between the mean wellness behaviour levels and mean health risk scores of heads of academic departments and directors of support services.

**$H_1$ :** There is a difference between the mean wellness behaviour levels and mean health risk scores of heads of academic departments and directors of support services.

**$H_0$ :** There is no significant difference between the mean wellness behaviour levels and mean health risk scores of male and female managers.

**$H_1$ :** There is a difference between the mean wellness behaviour levels and mean health risk scores of male and female managers.

**$H_0$ :** There is no significant difference between the mean wellness behaviour levels and mean health risk scores of post-graduate and PhD graduate managers.

**$H_1$ :** There is a difference between the mean wellness behaviour levels and mean health risk scores of post-graduate and PhD graduate managers.

**$H_0$ :** There is no significant difference between the mean wellness behaviour levels and mean health risk scores of the three age groups used in this study.

**$H_1$ :** There is a difference between the mean wellness behaviour levels and mean health risk scores of the three age groups used in this study.

***H<sub>0</sub>***: It is not possible to use a wellness prediction model, as a holistic dependent variable, to measure wellness against all possible independent variables.

***H<sub>1</sub>***: A wellness prediction model can be used, as a holistic dependent variable, to measure wellness against all possible independent variables.

## **1.5 RESEARCH METHODOLOGY**

### **1.5.1 Research approach**

According to Leedy (1993:8-9), the term methodology merely means the way in which to proceed to solve problems, that is the research process. In the human sciences two basic methodological paradigms can be distinguished, namely, the quantitative and qualitative methodologies. Quantitative research is associated with analytical research and its purpose is to arrive at a universal statement (Brynard & Hanekom, 1997). Mouton and Marais (1988) describe the quantitative approach as that approach to research in the social sciences that is more highly formalised as well as more explicitly controlled, with a range that is more exactly defined than the qualitative approach and which, in terms of the methods used, is relatively close to the physical sciences. Quantitative research is designed to give numerical results, which can be reported in tables, graphs and charts indicating the number of something, the proportion of something or what certain trends are (Bouma, 1997). It requires methods such as experiments and surveys to describe and explain phenomena. These methods include techniques such as observation, pilot studies, quantitative analyses and questionnaires.

Against this background, the present study was conducted within the quantitative paradigm. By utilising a survey research approach, an attempt was made to understand and test the various hypotheses. Survey research involves acquiring information about one or more groups by asking them questions and tabulating their answers (Leedy & Ormrod, 2005:193).

### **1.5.2 Research design**

A research design is a plan or blueprint of how the researcher intends to conduct the research (Mouton, 2001:55; Thyer, 1993:94). The purpose of this design

is to find an answer to the problem statement or hypothesis. This study used a single-stage sample survey of wellness behaviour levels of managers from heads of academic departments to top management at two leading tertiary education institutions in Gauteng. A holistic wellness behaviour assessment questionnaire consisting of close-ended questions was e-mailed to the total target population as the measuring instrument.

### **1.5.3 Sampling**

The population was all managers (heads of academic departments, directors of support services and members of the rectorate) at two tertiary education institutions based in Gauteng. According to Seaberg (1988:240), a population can be defined as the total set from which the individuals of the study are chosen. The entire population was included in this study.

### **1.5.4 Data analysis**

As a result of the quantitative approach followed, the analysis and interpretation of data were done by way of a deductive mode of reasoning, beginning with the hypothesis and moving towards proving it. Data analysis entails that the analyst breaks down data into consistent parts to obtain answers to the research questions and to test the research hypotheses (De Vos & Fouche, 2001:203). The data obtained from the holistic wellness behaviour assessment was used to determine specific wellness interventions for managers at higher education institutions.

As indicated, the pre-structured holistic wellness behaviour assessment questionnaire consisted of close-ended questions (numeric data) while the Statistical Products and Service Solutions (SPSS) was used for the analysis of the quantitative data in this study. The following methods of data analysis were used:

- Descriptive statistics (means, standard deviations, percentage and frequency tables and graphs) to describe the quantitative data.
- Pearson product moment correlation coefficients to measure the strength and the direction of the relationship between various variables and subscales in the hypotheses.

- T*-tests to compare the mean wellness behaviour levels and mean health risk scores, for example between male and female managers.
- One-way analysis of variance (ANOVA) to compare the mean scores between more than two groups.
- Reliability (Cronbach's alpha coefficient) to measure the internal consistency of the questionnaire.
- Other relevant statistical techniques.

## **1.6 FINDINGS AND RECOMMENDATIONS**

The envisaged findings of the research were:

- There would be a negative correlation between the wellness behaviour levels and the health risk scores of managers. It was anticipated that managers that had high scores on their wellness behaviour levels, would have low health risk scores.
- That there would be a difference between the mean wellness behaviour levels and mean health risk scores of managers at the academic university and technology university, heads of academic departments and directors of support services, male and female managers, post-graduate and PhD graduate managers and the three age groups.
- That a wellness prediction model could be developed as a holistic dependent variable that would measure wellness against all possible independent variables or factors.
- To diagnose specific wellness behaviour weaknesses and health risks and to propose specific interventions, based on the measured wellness behaviour levels and health risk scores of managers.

## **1.7 CHAPTER OUTLINE**

- Chapter 1: Overview, Rationale and Research Objectives
- Chapter 2: Literature Review
- Chapter 3: Research Methodology
- Chapter 4: Research Findings
- Chapter 5: Summary and Recommendations



## **1.8 CLARIFICATION OF CONCEPTS**

### **1.8.1 Health**

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organisation, 1947). The development of holistic thinking has led to the broadening of definitions of health to include social, environmental and economic influences. Health includes individuals' social and psychological resources as well as their physical capacities (Brooker, 2003:137). Health is a positive concept of well-being, a subjective feeling, physical fitness, normal functional capacity, resistance, as well as resilience or hardiness (Brooker, 2003:137).

### **1.8.2 Wellness**

Wellness is a process of developing an awareness that there is no end-point but that health and happiness are possible every moment, here and now (Travis & Ryan, 1988). Myers *et al.* (2000) define wellness as a way of life oriented towards optimal health and well-being in which body, mind and spirit are integrated by the individual to live more fully within the human and natural community. According to van der Watt (2004), wellness can be described as a conscious and continuous process of holistic self-development based on personally determined goals for well-being, leading towards the enhancement of individual, organisational and community health and well-being. In addition, wellness has been defined as an approach to personal health that emphasizes individual responsibility for well-being through practising health-promoting lifestyle behaviours (Hurley & Schlaadt, 1992). According to Edlin *et al.* (1998), Herholdt (2004) and Davies *et al.* (2003), wellness and health generally consist of six dimensions that are integrated and function in a synergy to produce harmony. The six dimensions of wellness are the emotional, intellectual, spiritual, occupational, social and physical dimensions.

### **1.8.2.1 Emotional wellness**

Emotional wellness concerns understanding and accepting one's own emotions and feelings and the emotions and feelings of others. Emotional wellness requires understanding and coping with problems that arise in everyday life.

### **1.8.2.2 Intellectual wellness**

Intellectual wellness is continuing to learn new things throughout one's life. This also involves having a mind open to new ideas and concepts. If a person is intellectually healthy, he or she constantly seeks new experiences and challenges.

### **1.8.2.3 Spiritual wellness**

There appears to be agreement on the central importance of meaning and purpose in life as a cornerstone of spiritual wellness (Frankl, 1984). Spirituality can be defined as the desire to find an ultimate purpose in life and to live accordingly, to experience a deep sense of wholeness or connectedness to the universe (Frankl, 1984; Myers *et al.*, 2000). Spiritual wellness is thus a state of harmony with oneself and others. It is the ability to balance one's inner needs with the demands of the rest of the world.

### **1.8.2.4 Occupational wellness**

Occupational wellness is being able to enjoy what one is doing to earn a living and/or contribute to society, whether it is going to university, working as a secretary, doctor, construction manager, or accountant. In a job, it means having skills such as critical thinking, problem-solving and communicating well. It is also finding a way to incorporate one's skills, interests and values to obtain high job satisfaction. Employers should promote this as one of their main goals, since high job satisfaction leads to lower turnover rates. High turnover rates can be costly for employers (O'Donnell, 2002).

### **1.8.2.5 Social wellness**

Social wellness refers to the ability to perform social roles effectively, comfortably and without harming others. Social wellness is being comfortable, accepting others and sustaining healthy relationships.

### **1.8.2.6 Physical wellness**

Physical wellness is a healthy body maintained by eating right, exercising regularly, avoiding harmful habits, making informed and responsible decisions about health, seeking medical care when needed and participating in activities that help prevent illness.

### **1.8.3 Organisational health promotion**

Organisational health promotion is defined as a strategic effort to reduce the health risks of employees through planned changes in individual risk related behaviours and other organisationally related predisposing conditions (Gutknecht & Gutknecht, 1990).

### **1.8.4 Wellness programme**

Corporate wellness programmes are long-term organisational activities designed to promote the adoption of organisational practices and personal behaviour conducive to maintaining or improving employees' physiological, mental and social well-being (Wolfe & Parker, 1994). A wellness programme is preventive in nature and encourages self-directed lifestyle changes.

### **1.8.5 Health risk appraisal**

A health risk appraisal is a process of gathering, analysing and comparing an individual's characteristic prognostics of health with those of a standard age group, thereby predicting the likelihood that a person may prematurely experience a health

problem associated with higher than average morbidity and mortality rates (Mosby's Medical, Nursing and Allied Health Dictionary, 1998).

## **1.9 SUMMARY**

In this chapter, the researcher presented background information on the dependent variable, namely wellness and on the independent variables that are assumed to have an influence on the scale of wellness behaviour problems and health risks. The wellness independent variables are emotional, intellectual, spiritual, occupational, social and physical sub-dimensions. The literature has shown that wellness behaviour problems and health risks are multidimensional constructs with each of the constructs having multiple factors contributing to its development. The rest of the study will determine how the different dimensions of wellness relate to the different aspects of current and future wellness behaviour problems of managers.

In Chapter Two, the theoretical foundation of the six selected independent variables, the wellness behaviour risks associated with each, and risk reduction interventions will be discussed.