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STATEMENT

I certify that the dissertation submitted by me for the degree of DOCTOR of PHILOSOPHY (Leadership in Performance and Change) at the University of Johannesburg is my own independent work and has not been submitted by me for a degree at another faculty/university.

___________________________
L Derman
March 2008
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Lynne Derman

March 2008
ABSTRACT

ORGANIZATIONAL ENERGY AND INDIVIDUAL WELL-BEING

By: Lynne Derman
Promoter: Dr Nicolene Barkhuizen
Co-promoter: Professor Karel Stanz
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Degree: D. Phil.
Date: March 2008

Background

Many organizations, struggling to keep up with the unrelenting pace of change and extreme competitive pressure, seek to adopt the latest technique or tool in order to improve their bottom line. It may be that the way we view the individual and the organization needs to change, and the dynamic, never-ending pattern of interaction recognized. As early as 1968, Schneider and Bartlett mentioned the need to examine the relationship between the individual and the organization. Integration of phenomena at the individual and organizational levels moves the analysis of organizations away from the static, structural qualities towards a more dynamic process (Pettigrew & Fenton, 2000; Moran & Volkwein, 1992). This perspective facilitates the study of energy. Energy runs through everything. Individuals have energy, and that energy is emanated by their very presence, their emotions, thoughts and
actions (Tosey, 1994). Energies ebb and flow in an organization in accordance with the intentions of the employees of that organization (Smith & Tosey, 1999). Research shows that organizational climate has an impact on the individuals’ vigour (well-being) and this in turn impacts on various factors including the individuals’ performance and thereby organizational effectiveness. What has not been subjected to empirical study is the concept of organizational energy. Nor has the relationship between organizational energy and individual well-being been studied. This study will attempt to address this gap in knowledge.

Research objectives

The primary research objective is to apply the EnergyScapes Profile (ESP) and Shirom-Melamed Vigor Measure (SMVM) in a financial institution with the purpose of determining whether a relationship exists between organizational energy and individual well-being in such an environment.

A literature review and an empirical research strategy are employed to aid in the achievement of the objectives. The objectives of the literature review are to describe the concepts of organizational energy and individual well-being, the antecedents of individual well-being, as well as the relationship that exists between them. The objectives of the empirical research are to record observations, to link them to the postulations of the literature review and to open new avenues for discussion.

Literature review

The review of the literature revealed that the concept of organizational energy has been debated in organizational and management literature for some time. This concept was further investigated and a model of organizational energy
put forward, upon which the heuristically developed measuring instrument, the EnergyScapes (ESP) was based. This instrument was used in this study.

The review of the literature on the concept of individual well-being showed that this topic has enjoyed a lot of attention from researchers and academics over a period of time. Topics such as burnout, work engagement and vigour have been researched and debated. Vigour is considered to be a reliable indicator of well-being. A measuring instrument, the Shirom Melamed Vigor Measure (SMVM) was found, which measures individual vigour, and therefore well-being, and is used in this study.

Various literature and research sources indicate that positive emotions produce optimal functioning which in turn promotes psychological and physical health and well-being. At the same time, individuals’ emotional reactions emanate from the way that the individual assesses and interprets a situation to be either positive or negative.

The literature review revealed a number of examples of research that had been conducted on the relationship between the organization and the individual. The literature also showed that the well-being of individual employees has a pronounced positive or negative effect on the organization and its performance.

**Research Design and Methodology**

A quantitative approach was followed in an attempt to understand individual members’ experience of their organizations, as well as the participants own levels of well-being. With the purpose of achieving the research objectives of the study, the research process that was followed consisted of the following steps:
Step 1: A literature review was conducted with the aim of identifying existing literature and previous research that had been conducted on the topics of organizational energy and individual well-being.

Step 2: The items of both questionnaires were examined, discussed with focus groups and the wording changed to ensure validity within the South African context.

Step 3: The amended questionnaires were administered in a pilot study to a convenience population of 350 employees which yielded a voluntary sample of 114 respondents. From the returned questionnaires, a data set was compiled and the reliability of the instruments determined.

Step 4: The questionnaires were administered to the target organization participating in the field survey and a data set was compiled from the returned questionnaires. The organization that participated was a financial institution which made a convenience population of 3850 employees available for this study. A voluntary sample of 520 employees participated.

Step 5: The data was statistically analysed by the University of Johannesburg and aimed at determining the psychometric properties of the ESP and the SMVM and the differences between these and the background variables of the sample.

Step 6: The analyzed information was interpreted and recommendations were made for potential research opportunities.

Statistical Analysis

Steps were taken to ensure that the ESP and SMVM were suitable for use in the South African context, after which they were administered to a financial institution. The results obtained were analyzed.

The statistical analysis procedure proposed by Schepers (1992) was used in this study and consisted of the following:

- The University of Johannesburg undertook the statistical analysis, using the SPSS statistical package.
Factor Analysis was conducted to determine the fundamental factors underlying the questionnaires.

Cronbach’s Alpha Coefficients were calculated to determine the reliability of the questionnaires.

The main research question for this study is: What is the relationship between organizational energy and individual well-being of employees? Nine hypotheses were formulated, and a number of sub-hypotheses postulated were statistically significant results were obtained, in order to enable an in-depth analysis of the data set.

The key findings of the analysis for the ESP indicated the following:

- The measuring instrument has construct, factorial and content validity.
- The reliability analysis indicated a Cronbach Alpha Coefficient of 0.993
- There are statistically significant differences between certain of the background variables and organizational energy.

The key findings of the analysis for the SMVM indicated the following:

- The measuring instrument has construct, factorial and content validity.
- The reliability analysis indicated a Cronbach Alpha Coefficient of 0.948.
- There are statistically significant differences between certain of the background variables and individual well-being.

**Conclusions and Recommendations**

The results of the literature review and statistical analysis indicated that all of the objectives of this study have been satisfied.

- This research has theoretical, practical, and methodological significance as it contributes to the better understanding of organizational energy and individual well-being in theory and in practice when applying the instruments in a financial institution.
The insights gained into the various aspects of organizational energy and individual well-being will contribute to theory building and the more accurate assessment of these factors in organizations. This will assist managers to design and implement effective interventions, which will enhance the well-being of individual employees and thereby increase the productivity of the organization.

This research comprehensively contributes to the body of knowledge on organizational energy and individual well-being, providing a quantitative method for assessing these factors. This is valuable because very little empirical research has been conducted both internationally and in South Africa, especially with regards to organizational energy.

This research provides evidence that a relationship does exist between organizational energy and individual well-being.

A significant limitation of the study is that the results of the study can only be generalized to the population of the target organization and to other similar environments.

In consideration of the scope and complexity of this study area, several recommendations were made from theoretical, methodological and practical perspectives:

- It is evident from the literature review that not much research has been conducted in the area of organizational energy. This area should therefore be researched further.
- The concept of individual well-being, based on Shirom’s definition of vigour has also not been researched in any great depth. Further research is also required in this area.
The seven point Likert type response scales used in this study should be further refined to improve the reliability and validity of responses. It is suggested that the scale be shortened in order to obtain a clearer indication from respondents. As this is an opinion survey, respondents’ answers tended to gravitate to the mean.

The use of only 12 questions to measure well-being on the SMVM seems limited. This scale could be reviewed and further questions developed.

The results of this study should encourage other organizations to question their own organizational energy and the individual well-being of their employees.

To enhance the success of conducting a quantitative survey of this nature in an organization, qualitative methods should also be employed to obtain further information from respondents.

Insight gained from conducting a survey of this nature should lead to the development of interventions and action plans that can be implemented. After a reasonable period of time, the survey can be re-run in order to determine if any change had been achieved.

The findings of this study do not only provide valuable insights into the theory of organizational energy and individual well-being, thereby contributing to the body of knowledge, but has also validated two instruments to measure these within the South African context.
Chapter 1

Introduction to the Research

Everything flows

Heraclites
1. BACKGROUND AND RESEARCH PROBLEM

1.1 INTRODUCTION

This chapter serves as the introduction to this research. It also places the total study in context by providing a framework for the problem under investigation. A brief description of the subject matter and a motivation for undertaking this study is given. The purpose, research question and objectives as well as the hypotheses are stated. An overview of the research methodology (including the design, the sample, procedure followed, measuring instruments and analytical techniques selected) is provided. The value of this research is discussed. Definitions of key concepts central to the study are also included.

1.2 BACKGROUND AND SETTING OF THE PROBLEM

Integration of phenomena at the individual and organisational levels moves the analysis of organisations away from the static, structural qualities towards a more dynamic process (Pettigrew & Fenton, 2000; Moran & Volkwein, 1992). This perspective facilitates the study of energy. Energy runs through everything and as such is a valid concept to study. All things animate and inanimate have energy. Energy at the individual level manifests itself as the degree of well-being experienced by the individual (Shirom, 2005), and at the collective level, energy ebbs and flows in the organisation thus providing that organisation with a unique character by playing a role in the organisation’s ability to be successful (Tosey & Llewellyn, 2002; Tosey & Smith, 1999). Organisational energy may be regarded as the climate of an organisation and may therefore be studied as a valid topic in organisational climate research (Reeder, 2001).

As early as 1968, Schneider and Bartlett mentioned the need to examine the relationship between the individual and the organisation. Schneider (1979) stressed the “importance of the climate concept as an aid to understanding
employee behaviour in work organisations” (Schneider, 1975), and Moran and Volkwein (1992) state that “empirical findings demonstrate that climate exerts a significant influence on organisational performance as well as affecting the motivation and behaviour of individuals” (Moran & Volkwein, 1992, p. 20). There is a growing awareness in the literature of the importance of the personal dimension when studying organisational behaviour (Fornaciari & Dean, 2001).

Research conducted by Dunnette (1977), and by Smith (1977) focussed on behaviour in organisations and the influence of groups on behaviour. The influence of the individual on the organisation as well as the influence of the organisation on the individual was researched by Schein (1977). A preliminary search of the literature seems to support this shift in focus. “Researchers are increasingly convinced of the need to unite these micro [individual] and macro [organisational] levels of analysis in order to improve understanding of organisational phenomena” (Moran & Volkwein, 1992, p. 20).

What has not been subjected to empirical study is the concept of organisational energy. Nor has the relationship between organisational energy and individual well-being been studied. Individuals have energy, and that energy is emanated by their very presence, their emotions, thoughts and actions, which results in organisations developing their own “organisational energy signature” (Smith & Tosey, 1999). Energies ebb and flow in an organisation in accordance with the intentions of the employees of that organisation (Smith & Tosey, 1999). This study will attempt to address this gap in the knowledge.

Definitions of organisational energy and individual well-being are provided in 1.4 below.

1.2.1 Organisational energy and individual well-being

The emphasis placed by Schneider (1975) on the importance of the climate concept to understanding employee behaviour in organisations and more
recently, Moran and Volkwein’s (1992) opinion that empirical findings demonstrate that climate exerts a significant influence on organisational performance as well as affecting the motivation and behaviour of individuals, has not been followed up in research. Very few studies seem to have been conducted to assess the relationship between organisational climate and individual well-being.

In the preliminary literature search, only one study (Brink, 1996) was found that dealt with the interaction between organisational climate and the psychological well-being of the organisations members. This study, using a systems approach, focuses on emotional well-being, which is consistent with the field of psychological climate and positive psychology. Emotional well-being, as defined by the study, can be considered a mood state. Brink’s study does not deal with the construct of vigour as an affect state, consisting of three dimensions, namely; physical strength, emotional energy, and cognitive liveliness.

In the research that Shirom (2005) conducted on vigour in the context of organisations, he portrays a relationship between the organisation and the individual’s vigour. This is depicted in Figure 1.1 below. From this diagram it is clear that Shirom regards the organisational climate as having an impact on the individual’s vigour (well-being) and that this in turn impacts on various factors including the individual’s performance and organisational effectiveness.
The perspective of energy provides a fresh approach to the study of organisations and individuals. Organisations will find Shirom’s study of interest in that it deals with the concept of energy, a concept that has not generally been addressed but is part of our daily experience and language. Other researchers may find the fact that this study focuses on the interaction between the organisation and individual, combines the culture and climate perspective, and provides a global perspective to the study of organisations and their members, of interest. Working individuals may gain insight into their own energy levels and become more aware of how they affect and are affected by their workplace. This study is of interest to policy makers in that it provides a holistic approach to study the phenomenon. In particular, man is viewed holistically, as a physical, mental, and emotional being within a universe of energy, continually trading energy with others in that universe.

Wheatley and Kellner-Rogers (1996) portray the ebb and flow of energy thus: “Each of us embodies the boundless energies of life. We are creating, systems-seeking, self-organizing, meaning-seeking beings. We are identities in motion, searching for the relationships that will evoke more from us. We
bring these desires to our organisations, seeking from them places where we can explore possibilities. Our energy courses through our organisations. This energy is the best hope we have for creating organisations that feel alive,” (Wheatley & Kellner-Rogers, 1996, p. 92). It is within this context that the relationship between organisational energy and individual well-being is conducted.

The interactive relationship between organisational energy and individual well-being is displayed in Figure 1.2 below. The application of the theory of “energies of consciousness” to this study creates the expectation that organisational energy has an influence on individual well-being, and vice versa, because energy is not limited, or bordered by the definition of the organisation.
Figure 1.2 The interactive relationship between Organisational Energy and Individual Well-being

**Organisational Energy**
- Inspiration
- Integration
- Meaning
- Community
- Control
- Activity
- Existence

**Individual Well-being**
- Physical Strength
- Emotional Energy
- Cognitive Liveliness

**Background Variables:**
- **Biographicals**
  - Gender, Marital status, Marital/relationship satisfaction, Language, Race, Age, Division/department, Geographical region, Job level, Tenure, Basis of employment, Hours worked in a week,

- **Life Style and Health Status**
  - Interests or hobbies, Time to relax, Exercise, Cardiovascular Disease, Hypertension or diabetes, Depression or psychosis
1.3 MOTIVATION FOR THE STUDY

Scientists in the field of quantum mechanics regard systems as energy systems that trade energy with one another. Particles are excited by the introduction of energy that causes them to behave differently (Al-Khalili, 2003). Energy, depicted as vibrations, takes centre stage in this new science. Scientists and biologists are noting amazing behaviour at cellular level, where chemical interactions take place by means of vibrations (Pert, 1997). These findings bear witness to the theories of quantum mechanics and support the viewpoint that not only is everything made of energy, but we also continually trade energy and that these transactions have a net energy result. These principles are also true for organisations. Friedlander and Margulies (1969), define organisational climate as a dynamic phenomena (in Dormeyer, 2003). Energy may therefore be a valid topic for research in relation to organisations.

Many organisations that are struggling to keep up with the unrelenting pace of change and extreme competitive pressure, seek to adopt the latest technique or tool to improve their bottom line. It may be that the way we view the individual and the organisation needs to change, and the dynamic, never-ending pattern of interaction recognized. The findings of quantum physics cannot be ignored, and the principles that emerge from this discipline should be considered in the field of organisational climate, just as practitioners, such as Wheatley (1992), have considered them in the field of leadership. The study of energy at the individual and organisational level begins to explore this perspective.

1.4 DEFINITIONS

Definitions of the following are applicable to this study: culture, climate, energy, well-being and vigour.
1.4.1 Culture

Schein (1990) defines culture as “(a) a pattern of shared basic assumptions (b) invented, discovered or developed by a given group (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore, (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems” (in Dormeyer, 2003, p. 111). Culture informs the climate of the organisation, by making it clear to the individual what is important and so indirectly influences that environment. Culture is generally “out-of-awareness” and has to do with the organisation’s coping mechanisms for both internal and external challenges. It can be defined as having unique indicators such as myths, symbols, rites, and stories as well as ideologies, norms, values, and beliefs (Shein, 1985).

1.4.2 Climate

Climate develops from culture, and has an enduring quality. It is an explicit concept, which consists of more empirically measurable elements than culture does, such as individual motivation, behaviour, and attitudes. Moran and Volkwein (1992) offer the following definition which incorporates elements identified by other researchers: “Organisational climate is a relatively enduring characteristic of an organisation which distinguishes it from other organisations: and (a) embodies members collective perceptions about their organisation with respect to such dimensions as autonomy, trust, cohesiveness, support, recognition, innovation, and fairness; (b) is produced by member interaction; (c) serves as a basis for interpreting the situation; (d) reflects the prevalent norms, values and attitudes of the organisation’s culture; and (e) acts as a source of influencing for shaping behaviour” (Moran & Volkwein, 1992, p. 20). This definition makes a clear distinction between climate and culture, and depicts an organisation’s climate as a component of the culture, which is not only larger but also abstract. Culture is the invisible construct, which guides and informs individual behaviour.
1.4.3 Energy

The term energy derives via Latin from the Greek “energeia” which means activity and stems from “energos”, to be active. Energy is today considered to be a fundamental building block of nature, and particles of matter and waves of energy are interchangeable (Reeder, 2001). Human energy is described by Reeder (2001) as personal energy and is believed to be similar to electromagnetic energy, “a soft visible field flowing through and around us that attracts complementary patterns of human interaction” (Reeder, 2001, p. 20). Although energy is a difficult concept to define, for the purposes of this study, the definition put forward by Tosey and Smith (1999), “energy is seen as human consciousness rather than a purely physical phenomenon” is used (Tosey and Smith, 1999, p. 111). The Penguin English Dictionary defines consciousness as “that level of mental response and activity of which one is aware”. The Editorial note reads: “In psychology and neuroscience consciousness means subjective experience. Once excluded from scientific study, consciousness is now considered one of its greatest challenges. We know that physical changes in the brain are related to changes in consciousness, but the ‘hard problem’ of consciousness is to understand how private subjective experiences can arise from objective events such as the firing of brain cells – Dr Susan Blackmore”.

1.4.4 Well-being

In 1947, the World Health Organisation stated that wellness is “a state of overall physical, spiritual, and social wellness and not just the absence of sickness”. Although this definition is still not acceptable to all, more and more researchers, authors, and health practitioners such as Brennan (1993), Gerber (2001), and Husemoen, Hayes, Chu, Zhang (2000) have gravitated in this direction over the years. For the purposes of this study, well-being is measured by the construct, vigour.
1.4.5 Vigour

The Penguin English Dictionary defines vigour as “active, healthy, well balanced growth or the capacity for this”. Shirom (2005) regards vigour as indicative to the individuals’ well-being. Vigour is defined as a construct that captures physical strength, emotional energy, and cognitive liveliness. Vigour is regarded as an affective response in the context of the organisation.

1.5 VALUE OF THE STUDY

This study will contribute towards the body of scientific knowledge in a number of ways, which are discussed below.

1.5.1 Theoretical contribution

On the theoretical side, the study’s value is anticipated to engender scientific knowledge from the results generated by the organisational energy and the well-being scales used in the study. This will be the first study to make use of these scales in South Africa. There has been some criticism that scales developed overseas may not be applicable to the South African environment (Petkoon, 2002) therefore, it is important to validate these scales in the South African context.

Colquitt and Zapata-Phelan (2007) provide a useful taxonomy on which to assess the theoretical contribution of an empirical article. The envisaged theoretical contribution of this study is depicted in terms of this taxonomy as theory building and theory testing. See Figure 1.3 below.
As can be seen from this figure an empirical study can essentially offer a strong theoretical contribution by being strong in theory building, strong in theory testing, or both. Colquitt and Zapata-Phelan (2007) further state that theory building and testing can be used to classify empirical articles into five discrete categories, including reporters, testers, qualifiers, builders and expanders. Reporters refer to empirical articles that are relatively low in both theory building and testing. Testers are empirical articles that possess high levels of theory testing but low levels of theory building. Qualifiers are empirical articles that contain moderate levels of theory testing and theory building. Builders refer to articles that are relatively high in theory building, but relatively low in theory testing. Finally, expanders are articles that are relatively high in theory building and testing.
In terms of theory building, this study examines a previously unexplored relationship, that of organizational energy and individual well-being. As regards the testing of theory, this study grounds predictions with existing, models diagrams and figures, which in essence comes very close to testing the actual theory (Colquitt & Zapata-Phelan, 2007). Combined, this study can therefore be classified as an expander given that it will be relatively high in building and testing a theory for organisational energy and individual well-being.

1.5.2 Practical contribution

The study is also expected to make a practical contribution. The findings from the proposed study will throw light on the dynamics of organisational energy and individual well-being. Although researchers have identified the need to study the interaction between the organisation and the individual, there does not appear to be many studies of this nature. The study of the relationship between organisational energy and individual well-being therefore adds to the body of knowledge in this field and is useful for organisations and practitioners who are interested in climate studies. The study also increases the awareness of energy and well-being as a means to improve quality of life and as such may be of interest to those in the care-giving sectors.

Furthermore, the study is envisaged to serve as a guideline to those wishing to develop interventions in order to address problems of energy and well-being at both the organisational and individual levels. As the approach is based on the human as a holistic being, this study is useful in integrating thinking on the topic. A greater understanding of the topic can contribute to the field of leadership and improve productivity in commerce.

1.5.3 Psychometric contribution

The study is expected to make a psychometric contribution as well. The validity and reliability of the organisational energy questionnaire EnergyScapes Profile (ESP) is determined. This scale has previously only
been used as a heuristic questionnaire on a consultancy basis. The validity of the individual well-being (vigour) scale, Shirom-Melamed Vigor Measure (SMVM) will be determined in the South African context. The results obtained from this study will be shared with the developers of the scales.

1.6 PURPOSE STATEMENT

The purpose of this study is to examine the relationship between organisational energy and individual well-being. Data was collected from employees of a large South African financial institution.

The first part of the study asks respondents how they perceive the energy of the organisation they work for. Organisational energy is defined in terms of seven general factors identified in the ESP. These seven factors are: Inspiration, Integration, Meaning, Community, Control, Activity, and Existence. These concepts will be expanded on in Chapter 2.

The second part of the study will ask respondents to indicate their own level of well-being which is expressed as vigour. Vigour is defined in terms of three general factors identified in the SMVM. These three factors are: Physical Strength, Emotional Energy, and Cognitive Liveliness. These concepts will be expanded on in Chapter 2.

Biographical information about the respondents relating to gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week, was collected, as well as life style information such as interests or hobbies, time to relax, exercise, and health status information such as cardiovascular disease, hypertension or diabetes, and depression or psychosis, in order to statistically control for these variables.
1.7 RESEARCH QUESTION

Based on the above mentioned problem and purpose statement, the main research question arises:

What is the relationship between organisational energy and individual well-being of employees in a financial institution in South Africa?

1.8 RESEARCH OBJECTIVES

The aim of this study can be visualized at two levels: objectives of the literature review and objectives of the empirical study.

1.8.1 The literature review

The objectives of the literature review are to:

- Describe the concept of organisational energy;
- Describe the concept of individual well-being;
- Describe the antecedents of individual well-being;
- Describe the relationship between organisational energy, and individual well-being.

1.8.2 The empirical study

The objectives of the empirical study are to:

- Determine the psychometric properties (i.e. validity and reliability) of the ESP for South African employees;
- Determine the psychometric properties (i.e. validity and reliability) of the SMVM for South African employees;
- Determine the interactive relationship between organisational energy
(dependent variable) and biographical variables (i.e. gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week);

- Determine the interactive relationship between organisational energy (dependent variable) and life style and health status variables (i.e. interests or hobbies, time to relax, exercise, cardiovascular disease, hypertension or diabetes, and depression or psychosis);

- Determine the interactive relationship between individual well-being (dependent variable) and biographical variables (i.e. gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, hours worked in a week);

- Determine the interactive relationship between individual well-being (dependent variable) and life style and health status variables (i.e. interests or hobbies, time to relax, exercise, cardiovascular disease, hypertension or diabetes, and depression or psychosis);

- Determine whether there is a relationship between organisational energy and individual well-being.

1.9 HYPOTHESES

From the above-mentioned objectives, nine hypotheses for the empirical investigation are formulated. Different sub-hypotheses are devised to test specific biographical variables (gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week) and life style and health status variables (interests or hobbies, time to relax, exercise, cardiovascular disease, hypertension or diabetes, and depression or psychosis) in relation to organisational energy and individual well-being.
The integrative hypotheses are formulated as follows:

Hypothesis 1

There is no statistically significant difference between the different biographical variables (gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week) and Organisational Energy (ESP).

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between ESP and different biographical variables the above hypothesis is stated in a non-directional way.

Hypothesis 2

There is no statistically significant difference between the different life style and health status variables (interests or hobbies, time to relax, exercise, cardiovascular disease, hypertension or diabetes, and depression or psychosis) and ESP.

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between ESP and different life style and health status variables the above hypothesis is stated in a non-directional way.

Hypothesis 3

There is no statistically significant difference between the different biographical variables (gender, marital status, marital/relationship satisfaction, language,
race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week) and ESP dimensions.

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between ESP dimensions and different biographical variables the above hypothesis is stated in a non-directional way.

Hypothesis 4

There is no statistically significant difference between the different life style and health status variables (interests or hobbies, time to relax, exercise, cardiovascular disease, hypertension or diabetes, and depression or psychosis) and the ESP dimensions.

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between the ESP dimensions and different life style and health status variables the above hypothesis is stated in a non-directional way.

Hypothesis 5

There is no statistically significant difference between the different biographical variables (gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week) and Individual well-being (SMVM).
Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between SMVM and different biographical variables the above hypothesis is stated in a non-directional way.

Hypothesis 6

There is no statistically significant difference between the different life style and health status variables (interests or hobbies, time to relax, exercise, cardiovascular disease, hypertension or diabetes, and depression or psychosis) and SMVM

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between SMVM and different life style and health status variables the above hypothesis is stated in a non-directional way.

Hypothesis 7

There is no statistically significant difference between the different biographical variables (gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week) and the SMVM dimensions.

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between the SMVM dimensions and different biographical variables the above hypothesis is stated in a non-directional way.
Hypothesis 8

There is no statistically significant difference between the different life style and health status variables (interests or hobbies, time to relax, exercise, cardiovascular disease, hypertension or diabetes, and depression or psychosis) and the SMVM dimensions.

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the relationship between the SMVM dimensions and different life style and health status variables the above hypothesis is stated in a non-directional way.

Hypothesis 9

There is no statistically significant relationship between organisational energy and individual well-being.

Rationale:

Based on the fact that no evidence in the relevant literature could be found to support the existence of a relationship between organisational energy and individual well-being, as defined in this study, the above hypothesis is stated in a non-directional direction.

The research methodology of this study will now be discussed.

1.10 RESEARCH METHODOLOGY

The problem and aim of this study have been provided. It is now necessary to look at how this research will be executed. Collis and Hussey (2003) refer to
research methodology as “the overall approach to the research process, from its theoretical underpinnings to the collection and analysis of the data” (Collis & Hussey, 2003, p. 55). The research method consists of a literature review and empirical study.

1.10.1 Literature review

The literature review focuses on previous research on organisational energy and individual well-being and the measurement of these constructs. An overview is given of the conceptualization of these constructs in literature, and on the findings in terms of measuring organisational energy and individual well-being.

1.10.2 Empirical study

The empirical study, which aims to achieve the specifically stated objectives, was achieved as follows:

1.10.2.1 Focus groups

Focus group discussions or panels are often used for exploring a specific set of issues (Hekkink, Sixma, Wigersma, Yzermans, Van der Meer, Bindels, Brinkman, & Danner, 2003). The group is “focused” around a collective activity, such as ensuring that all “foreign jargon” is removed from the language of the questionnaires. In order to utilize a questionnaire that has been developed outside South Africa, it is important to ensure that the language used in the questionnaire is understandable to the participants. Three phases were carried out to ensure this. Firstly, the questionnaire was examined by a group of subject matter experts who modified the questionnaire. Secondly, a focus group was asked to review the revised questionnaire. In the third phase, the original developers reviewed the final questionnaire. The purpose of this final phase was to ensure that the wording of the questionnaire still captured the intentions of the developers of the scales.
To ensure that the participants in the focus group are representative of the population expected to answer the questionnaires, a convenience sample of South African employees was requested to participate in the discussion.

1.10.2.2 Pilot study

“A pilot study is a small-scale replica of the main study”, (Burton, 2000, p. 344) and is regarded as essential by Rosnow and Rosenthal (1993). Pilot studies are useful in that they provide information relating to the adequacy of the sampling, non-response rates, the suitability and effectiveness of the data collection method, the adequacy of the questions, how long it takes to complete the questionnaire, how interested respondents are in the survey as well as providing data that allows the researcher to estimate how long the data collection phase can be expected to take (Burton, 2000).

It is usually considered sufficient if responses are obtained from 20-50 respondents during the pilot testing phase of questionnaire development, provided problems are not experienced. More responses may be required if there are problems to be addressed (Burton, 2000), for example, when questions need to be re-worded Rosnow and Rosenthal (1993). Neuman (1994) noted that conducting a pilot study improves the reliability of the study. A pilot study was conducted in order to test the instruments to be used in the study.

1.10.2.3 Research design

Survey research is a frequently adopted approach in the social sciences. The purpose of survey research is to “generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behaviour of this population” (Cresswell, 2003, p. 154). The units of analysis in survey research are generally individuals who complete the survey questions. The results are frequently aggregated to provide data on groups or interactions.
Burton (2000) identifies four research designs which a researcher can use: classical, quasi-experimental, cross sectional, and longitudinal. The cross-sectional research design is widely used in social science research (Burton, 2000; Neuman 1994). “Cross-sectional research is usually the simplest and least costly alternative. Its disadvantage is that it cannot capture social processes or change,” (Neuman, 1994, p. 26).

This study is a cross-sectional design in that data from more than one group was collected at a fixed point in time and then compared, in terms of background variables. This design is also ideally suited to the descriptive and predictive functions associated with correlation research.

Burton (2000) depicts the survey research process as given in Figure 1.4 below.

1.10.2.4 Participants

Leedy (2005) cautions that the results of a study are no trust worthier than the quality of the population or the extent to which the sample is representative of that population. Identification of a population and sampling is conducted by making judgements as to suitable participants for the study.

Babbie (2001), states that probability sampling is applied to obtain data that is representative of the population of interest. In this study, the population of interest is organisations. This population is too large to measure therefore, a sample has been selected. The company participating in the study is a large financial institution, and part of an international group. The company agreed to allow their employees to participate in the study. Participation was voluntary, and the anonymity of the respondents was respected. The sample is therefore regarded as a convenience sample. Burton (2000) describes the selection strategy of a convenience sample as “Select cases based on their availability for the study” (Burton, 2000, p. 312).
Figure 1.4 The survey process (Burton, 2000, p. 293)
1.10.2.5 Procedure

The Manager of the Wellness Practitioners was approached in order to obtain permission to conduct the study within the organisation. The questionnaires were pen and paper based. Participants were requested to complete the questionnaires within a time frame agreed with the Wellness Practitioners.

1.10.2.6 Data Collection

The data for this study was collected by means of self-administered questionnaires, which were distributed manually. The organisation has the infrastructure to distribute and collect the questionnaires in a manner that is quick, economical and provides access to geographically dispersed subjects, which is a consideration for this study in that the organisation has branches countrywide. The advantages of self-administered questionnaires, is that they can be completed at a time convenient to the respondent, eliminate the possibility for interviewer bias, and results in fewer incomplete returns.

The method has however been criticized for lacking a personal touch between the researcher and respondent. The researcher has to trust the respondents to give their own opinion. This method of data collection has also been criticized in that probing of responses is not allowed. It is also restricted to literate populations. Babbie (2001) warns that this may limit the ability to generalize the results of the study. However, this method is highly suitable when the sample, as in this case, is company employees who are all literate (Burton, 2000).

Self-administered questionnaires preserve the anonymity of the respondents. A concern is the low response rate of self-administered questionnaires. Low response rates may introduce bias into the study. Babbie (2001) however makes recommendations on how the researcher can monitor the response rates and draw inferences with regard to the significance of non-responses.
1.10.2.7 Measuring instruments

The measuring instruments employed in this study are questionnaires. Questionnaires are carefully constructed and standardized in order to obtain data in the same form from all respondents (Babbie, 2001). The rationale behind the use of questionnaires is to obtain a quantitative measure on how the constructs interact with each other. The questionnaires used in this study will be examined next.

EnergyScapes Profile (ESP).

Organisational Energy is measured by the ESP which was developed by Dr Paul Tosey of the University of Surrey, England, and Peter Smith, managing director of The Leadership Alliance, Toronto, Canada. It is based on their joint and separate work with numerous organisations and consultants in Europe and North America. Permission was obtained from the developers to use this instrument.

Huffington and James (1999) aver that the purpose of research is to contribute to the field of knowledge on the topic. These authors argue for a balance between research that is driven by the academic community and research driven primarily by practitioners, “steering a course between the two is critical for management research…Schein argues that client led process work can and should be considered appropriate management research. The advantage of this approach is that it is relevant to the client and builds in the notion of intervening in a system to understand it and vice versa: to understand a system one studies the impact on one’s interventions,” (Huffington & James, 1999, p. 3).

The ESP has only been used on a consultancy basis. It was developed heuristically, and can be considered as a client led instrument. It has been used successfully within a number of companies in the U.K. This is the first study to determine the validity and reliability of the instrument. The ESP has seven dimensions: Inspiration, Integration, Meaning, Community, Control,
Activity and Existence. The questionnaire comprises of one hundred and five questions, each dimension is measured by means of fifteen questions.

Shirom-Melamed Vigor Measure (SMVM).
The SMVM was used to measure well-being. This questionnaire aims to measure individual vigour at work by assessing the respondents reported levels of physical strength, cognitive liveliness and emotional energy. Validity and descriptive statistics are available for this questionnaire, based on a sample of 2743 apparently healthy employees, in Israel. The questionnaire comprises of twelve questions: five questions relating to physical strength, three questions relating to cognitive liveliness, and four questions relating to emotional energy. Permission has been granted to the researcher to use this questionnaire.

Background questionnaire
A background questionnaire was used to gather data relating to the control variables. Information gathered included the following biographical information: gender, marital status, marital/relationship satisfaction, language, race, age, division/department, geographical region, job level, tenure, basis of employment, and hours worked in a week, lifestyle information: interests or hobbies, time to relax, exercise, and health status information: cardiovascular disease, hypertension or diabetes, and depression or psychosis.

1.10.2.8 Data analysis
The results from individual data collected on the questionnaires was aggregated to a unit level such as region, division, and job level, on the assumption that the individual perceptions in each of these units will combine to give that unit distinct characteristics. Although this method has been questioned in the literature, various researchers have addressed this issue including James and Jones (1974), who found that, subject to certain criteria, this methodology is appropriate. Today, this is a common approach in climate studies, “most research is now focused on aggregate rather than on

The statistical analysis was carried out with the SPSS Program (SPSS, 2003). The reliability and validity of the ESP and SMVM was determined by means of Cronbach alpha coefficients, as well as exploratory factor analysis. Descriptive statistics (i.e., means, standard deviations, skewness and kurtosis) was used to analyse the data.

One-way analysis of variance (ANOVA) was used to determine the significance of differences between organisational energy and the individual well-being of groups based on the background variables. When an effect is significant in ANOVA, multivariate analysis of variance (MANOVA) was used to discover which dependent variables had been affected. In terms of statistical significance, a value at a 95% confidence interval level ($p \leq 0.05$) is set. Effect sizes (Cohen, 1988) are used to decide on the practical significance of the findings. The Pearson product-moment correlation coefficient specifies the relationship between the variables. A cut-off point of 0.30 (medium effect, Cohen, 1988) is set for the practical significance of correlation coefficients.

T-tests are used to determine differences between the groups in the sample. Effect sizes (Cohen, 1988; Steyn, 1999) are used in addition to statistical significance to determine the significance of relationships. Effect sizes indicate whether obtained results are important (while statistical significance may often show results which are of little practical relevance). A cut-off point of 0.50 (medium effect, Cohen, 1988) is set for the practical significance of differences between means.

1.11 VALIDITY

Babbie (2009) provides the following definition of validity: “Validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration” (Babbie, 2001, p. 143). Threats to validity
may result in the researcher being unable to conclude the study. There are three types of validity threats: criterion-related validity, construct validity, and content validity (Babbie, 2001; Rosnow & Rosenthal, 1993). Babbie (2001) also identifies a fourth type of validity, face validity. As part of this study, the validity of the ESP and SMVM questionnaires was determined and the results reported. The four types of validity are discussed below.

1.11.1 Criterion validity

This is also known as empirical validity and relates to the degree to which the questionnaire correlates to other outcome criteria, which one would reasonably expect it to do. Researchers may use meaningful criterion in the present, called concurrent validity, or future, called predictive validity, and then correlate the performance of the questionnaire with that criterion (Rosnow & Rosenthal, 1993). In this study criterion validity for the two questionnaires was determined statistically by means of the SPSS program.

1.11.2 Construct validity

“More sophisticated views of the validation of tests require that researchers be sensitive not only to the correlation between their measures and some appropriate criterion, but also to the correlation between their measure and some 'inappropriate criterion',” (Rosnow & Rosenthal, 1993, p. 126). This validity has to do with the ability to discriminate. This threat arises when the researcher has inadequate definitions and measures of the variables in the study. Construct validity statistics for the SMVM scale, has already been determined by the developers of the scale. “The new SMVM was already tested for construct validity in two studies, with comparable results,” (Shirom, 2005, p. 29). Construct validity for the ESP was determined statistically, as part of this study.
1.11.3 Content validity

Content validity refers to the items on the questionnaire and the kinds of material, content areas, or range of meanings that the items need to cover. This was determined by the statistical analysis.

1.11.4 Face validity

This type of validity refers to whether or not the questionnaire fits our common agreement and our individual mental images concerning a particular concept (Babbie, 2001). This was determined by the focus groups.

1.12 RELIABILITY

“Reliability is a matter of whether a particular technique, applied repeatedly to the same object, yields the same result each time,” (Babbie, 2001, p. 140). Researcher bias is one source of unreliability, which is not a factor in self-administered questionnaires. Another source is the type of questions asked of respondents. Care must be taken to ask respondents questions that are clear and to which they are likely to know the answer.

In order to increase the reliability of this study, subject matter experts and a focus group reviewed the questionnaires. Subsequently, the wording of some of the items was amended to ensure that the questions would be understood within the South African context.

1.13 ETHICAL CONSIDERATIONS

The ethics of science aims to provide guidelines on what constitutes appropriate moral behaviour in the sphere of science (Mouton, 2001). As pointed out by Cresswell (2003), ethics refers to methods of Data Collection, Data Analysis and Interpretation, and to Writing and Disseminating the
Research. In this regard, I identify with the Ethical Code of the Department of Human Resource Management at the University of Johannesburg.

In particular, the following applied to my research:

- The study was subject to approval by the University;
- Permission to gather data was obtained from the company;
- Participants were not put at risk;
- Voluntary participation was respected;
- Participants were informed of:
  - The purpose of the study,
  - The procedures to be followed, and
  - Participants right to privacy, including their right to withdraw at any time during the study;
- The data collected is the property of the University and the researcher;
- The results of the study was made available to the participants and their company;
- Data will be kept for a minimum of 5 years.

Every effort was made to ensure the accuracy of the information. All interpretations of data were discussed with my promoters. In addition, I adhered to the Department of Human Resource Management's code of ethics, guidelines and processes.

1.14 CHAPTER LAYOUT

This thesis consists of five chapters. Figure 1.5 below depicts the relationship between the various chapters. This figure will be used consistently at the beginning of each chapter to indicate the purpose of the specific chapter within the context of this thesis.
Using this model as the point of departure, the reader has been provided with an introduction to the problem, the problem statement, the motivation and value of the study, as well as a short background to the research methodology in this chapter, **Chapter 1**. Chapter 1 sets the scene for **Chapter 2** which is the literature review documenting existing literature on the topics of organisational energy and individual well-being. In **Chapter 3** a detailed discussion is provided on the research design, the research sample, data gathering method and the analysis of the data. The results of the research is presented and discussed in **Chapter 4**, including the processing and analysis of the data in figures and tables. In **Chapter 5** the empirical results are interpreted and discussed. Conclusions are drawn and recommendations and
focuses for future research are presented. A summary of the study is also given.

1.15 CONCLUSION

In the present chapter the motivation for the study is explained, providing the problem statement, the research questions and objectives, the research methodology, chapter outline as well as the value of studying organisational energy and individual well-being.

The following chapter focuses on reviewing the available literature on organisational energy and individual well-being.

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The physical universe is made up of wholes Western man has taken these wholes and broken them up into smaller and smaller parts in order to understand the whole What’s interesting is that we have forgotten the whole and spend most of our time caught up in the parts

- Michael Kaufman