

**RELATIONSHIP BETWEEN WORK AND NON-WORK STRESSORS  
AND WORK-LIFE BALANCE AMONGST GLOBAL MARKET  
TRADING PROFESSIONALS**

By

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## DECLARATION

I declare that **RELATIONSHIP BETWEEN WORK AND NON-WORK STRESSORS AND WORK-LIFE BALANCE AMONGST GLOBAL MARKET TRADING PROFESSIONALS** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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**SIGNATURE**  
(M.F de Sousa)

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**DATE**

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## **SUMMARY**

# **RELATIONSHIP BETWEEN WORK STRESSORS AND NON-WORK STRESSORS AND WORK-LIFE BALANCE AMONGST GLOBAL MARKET TRADING PROFESSIONALS**

by

MICHELLE FONTAINHA DE SOUSA

DEGREE: MCOM

SUBJECT: INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

PROMOTER: PROF S C COETZEE

In the financial industry, there is a high demand for employees to possess all the necessary skills and motivation to perform highly specialized functions, and handle demands that accompany increasing stress levels.

The aim of the research was to determine whether there is a relationship between work and non-work stressors and work-life balance in the Global Market Trading industry.

A cross-sectional survey design was used, with a sample of 72 global market trading professionals drawn from a financial institution in Gauteng. Two questionnaires and a biographical questionnaire were administered. The questionnaires proved to be reliable.

The power of the study was calculated. Descriptive statistics and Spearman correlation was used to organise, summarise and describe the data.

The findings of the study show that as global market trading professional's intrinsic factors at work and stress regarding their personal time increases, their experience of negative WHI increase as well.

**KEY TERMS:** Job stress, family stress, work-life balance, trading professionals, effort recovery model, work-home interface, work stressors, non-work stressors.

## **OPSOMMING**

### **VERBAND TUSSEN WERKSTRESSORS EN NIEWERKSTRESSORS EN DIE WERK- LEWE-BALANS ONDER BEROEPSHANDELAARS IN DIE GLOBALE MARK**

deur

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GRAAD: MCom

ONDERWERP: BEDRYFS- EN ORGANISASIESIELKUNDE

STUDIELEIER: PROF S C COETZEE

In die finansiële bedryfswêreld word werknemers onder sterk druk geplaas om al die nodige vaardighede en motivering te besit om hoogs gespesialiseerde funksies te verrig, asook om bykomende vermoëns te verwerf om die eise wat met stygende stresvlakke gepaard gaan, te kan hanteer.

Die doel van die navorsing was om te bepaal of daar in die globale markhandelaarsbedryf 'n verband bestaan tussen werkstressors en niewerkstressors enersyds en die werk-lewe-balans andersyds.

'n Dwarssnitopname-ontwerp is gebruik met 'n monster van 72 beroepshandelaars in die globale mark uit 'n finansiële instelling in Gauteng. Twee vraelyste en 'n biografiese vraelys is toegepas. Die vraelyste is betroubaar bevind vir die steekproef wat in hierdie studie gebruik is.

Die onderskeidingsvermoë van die studie is bereken. Beskrywende statistiek en Spearmankorrelasie is gebruik om die gegewens te organiseer, saam te vat en te beskryf.

Die studiebevindings toon dat namate die stres van beroepshandelaars in die globale mark met betrekking tot intrinsieke werkfaktore en stres ten opsigte van hulle persoonlike tyd toeneem, hulle ervaring van negatiewe werk-huisinterferensie ook toeneem.

**TREFWOORDE:** Werkstres, gesinstres, werk-lewe-balans, beroepshandelaars, inspanning-herstelmodel, werk-huiskoppelvlak, werkstressors, niewerkstressors.

## **CHAPTER 1**

### **ORIENTATION AND SCIENTIFIC BACKGROUND TO THE RESEARCH**

The aim of this chapter is to introduce the general and specific objectives of this research. The first part of this chapter will provide background to the research problem and motivate why this study is both relevant and important. This will be followed by the formulation of the research questions, literature and empirical objectives of the study. The research method is explained and the divisions of the chapters are given.

#### **1.1 BACKGROUND AND MOTIVATION**

Over the past 14 years, the pace of work within organisations has increased rapidly (Donovan & Kleiner, 1994). This increase can be attributed to many factors which include technological advancements, the need to be globally competitive, continually changing economies as well as changes in organisational structures (Johnson, Cooper, Cartwright, Donald, Taylor & Millet, 2005). Owing to the technical and economic factors impacting on organisations, employees face a number of other challenges, for example greater work load, increased job insecurity, and lack of role clarity, to name a few (Johnson *et al.*, 2005). As a result of this changing nature of work, individual stress increases (Donovan & Kleiner, 1994).

Stress affects the physical and emotional well being of employees as well as organisational effectiveness (Sauter, Murphy & Hurrell, 1992). Research by Menon and Akhilesh (1994) showed that stress reactions have implications for the individual as well as the organisation. Stress can no longer be considered merely as the individual's or manager's problem. Stress affects the individual's adjustment with others and can in turn affect performance and production of the entire organisation. Organisations are realising the potential harmful effects of stress in terms of decreased motivation, lowered performance levels and mental and physical ailments that excess stress cause (Menon & Akhilesh, 1994). It is now accepted that prolonged or intense stress can have a negative impact on an individual's mental and physical health (Johnson *et al.*, 2005).

Stress was defined several decades ago by Selye (1974) as the nonspecific response of the body to any demand. Because these “responses” are endocrinal, psychological and physical reactivity to demands, can, if intense enough or repeated frequently enough, upset the homeostasis of the body (in other words it’s natural state of balance) (Selye, 1974). Traditional definitions have, however, failed to acknowledge that stress does not reside solely in the individual or in the environment but in the transaction between the two (Lazarus & Launier, 1978). An extension of the view that stress results from an imbalance between demand and capacity is proposed by Francis and Barling (2005), which states that stress is a result of a combination of environmental pressures on a person and his or her individual response to these pressures or demands. Once this transactional perspective is operationalised, stress is viewed as relational in nature and arises from a judgment that the demands of a situation are about to tax the physical or psychological resources of the individual, thus threatening wellbeing (Holroyd & Lazarus, 1982; Lazarus, 1991). Individuals respond differently to stress. Some individuals function well under significant stress while others do not. How the individual respond to the stressful situation will depend on their personality, their perceptions, and their past experience (Feldman, 2001).

According to research done by Donovan and Kleiner (1994) stress can be derived from three sources namely: physical, mental and situational status (either in the work or non-work environment). Physical stress can be brought on by such things as overwork, lack of rest and a poor diet. Mental stress can be traced to a person’s mental state of mind. It involves our hopes, fears and regrets from our day-to-day life. According Donovan and Kleiner (1994) situational stress is derived from our interaction with the outside world – our roles as husband, father, wife and mother and also our interaction with the trappings of modern life such as cars, and computers. Le Fevre, Matheny and Kolt (2003) used the term “stressor” to describe the external force or influence acting on the individual, also known as the source of stress. Stressors are divided into work and non-work stressors (Greenhaus & Beutell, 1985). Work stressors may refer to any characteristic of the workplace that poses a threat to the individual. These work stressors can relate to either work demands a person cannot meet or the lack of sufficient resources to meet work needs (Larson, 2004). Past evidence showed that job stressors for example: lack of

control over work, excessive time pressures, excessive or inflexible working hours, too much or too little work or responsibility, confusion about duties and responsibilities, lack of job variety and interest. Inadequate training and possibilities for learning new skills, poor work-life balance, difficult relationships at work, lack of support and lack of contact with colleagues, organisational confusion, restructuring, job change, and uncertainty over job prospects poses a threat to the health of workers and, in turn, to organisations and will increase with time (Jones, Barge, Steffy, Fay, Kuntz & Wuebker, 1988).

A workers' ability to cope with increasing workplace stress is also affected by the amount of stress they are subjected to from stressors outside of the workplace. Stress outside of the workplace (non-work stress) may stem from various stressors namely an unhappy relationship, living in poverty, and traumatic childhood experiences (Jones *et al.*, 1988). Non-work stress can be defined as a real or imagined imbalance between the demands on the home and the family's ability to meet those demands (Jones *et al.*, 1988). It can be seen as pressure or tension within your home that disrupts your normal, day-to-day life (Larson, 2004). Non-work stressors could include: relationship problems, financial problems, and general family problems, illnesses, housing and feeding problems, legal problems, sexual problems, and mental health problems (Jones *et al.*, 1988).

In recent years there has been a worldwide movement of companies toward understanding and supporting the importance of a balance between work and life for all levels of employees (Burke, 2000). Any stressors can affect work relationships or performances and home life. Therefore without work-life balance policies in place within organisations, individuals may start to feel pressured and stressed (Donovan & Kleiner, 1994). Helping employees attain work-life balance in useful ways increases productivity, improves recruitment and retention, reduces absenteeism, and improves customer experiences as a result of a more motivated workforce (Frone, 2003). The evidence by Hyman and Summers (2004) suggests that notwithstanding the introduction of flexible working regimes, hours of work are increasing, unpaid overtime and working at home is common, as is evening and weekend shift-working for many employees. Moreover, work intrusions into time at home can be expressed intangibly, through stress, worry and related conditions. An

international trend reveals that work-life balance is so critical, it is becoming part of government programmes worldwide (Brown, Brown, Miller & Hansen, 2001).

Work-life balance can also be described in terms of the experienced work-home conflict, and is often referred to in terms of an inter-role conflict in which the pressures from the work and home domains are mutually incompatible (Greenhaus & Beutell, 1985). The use of work-life balance is argued to be an acknowledgement that people without families might also have interests that are incompatible with long and inflexible working hours (Perrons, Fagan, McDowell, Ray & Ward, 2005). 'Balance', however, need not imply that time and energy is split equally between paid work and care but is more of recognition that individuals have different expectations and preferences for the ways in which they organise their total workloads. People continue to have different and changing ideas about the desirable mix of work and life and different resources with which to realise their aspirations. The meaning of work-life balance generally relates to issues of care and the division of time between paid work and caring (Perrons *et al.*, 2005). There is, however, still a lack of in-depth knowledge about the processes that may underlie the interaction between work and private life, and its relationships with employee health and well-being (Larson, 2004).

## **1.2 PROBLEM STATEMENT**

In the financial industry, there is an increasing need for employees at different levels and in different subgroups in the organisation to possess the necessary skills and motivation to perform the core tasks associated with their jobs and also acquire additional abilities in handling demands that accompany ever-increasing stress (Fenton-O'Creevy, Nicholson, Soane & Willman, 2005). Global markets is a term given to a front office treasury department which deals with large amounts of money of individuals or organisations who wish to invest locally or internationally (Potgieter, Falkena, Kok & Van Ettinger, 1991). The Global markets trading team trades (buying and selling of bonds, equities, foreign exchange and commodities) actively in the full range of financial instruments, both locally and in international markets - providing clients with a variety of both standard and tailored products and services. The specialist desks focus on all key aspects of financial markets.

Global markets are generally divided into ten business areas namely: bond trading, commodities, credit, equities, foreign exchange, interest rate derivative trading, money markets, primary markets, stock broking, and structured solutions. Global markets provide great career opportunities and therefore aim to attract high caliber employees who are self-motivated and create the dynamic, innovative and professional culture characteristic of the organisation (Potgieter *et al.*, 1991). But Global market trading is also considered a stressful occupation because the job is often characterised by high risks which could potentially result in losses or profits within the market. Also, the trader must ensure good customer service, price accordingly to gain advantage in the market and essentially reach the budget. The pressures experienced by these individuals are part of the job and therefore individuals need to stay motivated and be aware of any changes or developments within the trading market (Potgieter *et al.*, 1991).

Research by McDonald, Guthrie, Bradley and Shakespeare-Finch (2005) explained that the main aim should be to manage stressors by becoming aware of our individual ways of responding to them, and through making effective changes to our working lifestyle.

No previous research has been done within global markets trading professionals regarding their experienced work-life balance. Results of this research can be used by the organisation to identify the key stressors of employees and therefore develop work-life balance policies for employees who are essential to the success of the organisation.

From the problem statement, the following research questions emerge.

- How can work and non-work stressors be conceptualised from the literature?
- How can work-life balance be conceptualised from the literature?
- How can the relationship between work and non-work stressors on the one hand and work-life balance on the other hand be conceptualised from the literature?
- What are the work and non-work stressors amongst global market trading professionals?

- What is the experience of work-life balance amongst global market trading professionals?
- What is the relationship between work and non-work stressors on the one hand and work-life balance on the other hand amongst global market trading professionals?

### **1.3 AIM**

From the above-mentioned problem statement, the following general and specific aims are formulated:

#### **1.3.1 General aim of the study**

The general aim of this research project is to determine the relationship between work and non-work stressors on the one hand and work-life balance on the other hand amongst global market trading professionals.

#### **1.3.2 Specific aims of the study**

The following three aims of the research can be identified in terms of a theoretical viewpoint:

- To conceptualise work and non-work stressors from the literature
- To conceptualise work-life balance from the literature
- To conceptualise the relationship between work and non-work stressors and work-life balance from the literature.

The following three specific aims of the study can be identified in terms of an empirical approach:

- To determine the specific work and non-work stressors amongst global market trading professionals.

- To determine the experience of work-life balance amongst global market trading professionals.
- To determine the relationship between work and non-work stressors on the one hand and work-life balance on the other hand amongst global market trading professionals.

## **1.4 RESEARCH METHOD**

### **1.4.1 Literature Study**

In the literature study the focus will be on conceptualising the concepts of work and non-work stressors, and work-life balance amongst global market trading professionals. The possible relationship between these constructs will be conceptualised from the literature review.

### **1.4.2 Empirical Research**

The empirical research is discussed in terms of the variables to be investigated, research design, unit of analysis, sample, measuring instruments, the research procedure and statistical analyses that will be conducted.

#### *1.4.2.1 Variables*

Variable refers to the characteristics of the object being researched. Independent variables are typically the antecedent phenomenon, under the control of the researcher, while dependent variables are the consequent phenomenon (Mouton & Marais, 1993).

In this particular research the variables being measured are work and non-work stressors (independent variables) and work-life balance (dependent variable) for global market trading professionals.

#### 1.4.2.2 *Research Design*

A descriptive study will be used in this research project as the aim of this study is to describe relationships between two variables, namely: work and non-work stressors and work-life balance amongst global market trading professionals.

*Descriptive studies* aim to describe phenomena accurately either through narrative type descriptions, classification, or measuring relationships. These studies seek accurate observations, and the research design should focus on the validity and reliability of the observations. These studies can be quantitative or qualitative in nature (Terre Blanche & Durrheim, 1999).

The research design used in this research is quantitative in nature. The aim of the research design is to provide a planned and structured way of achieving the research goal and to enhance validity and reliability (Mouton & Marais, 1993). The research design to be used is the cross-sectional survey design. With this design, each individual in the sample is evaluated on several variables at the same time, and the relationships between the variables are determined. It is a study of connections that occur without any planned intervention between the variables. Some practical problems that may occur when using this design are measurement errors (the respondent does not understand the question in the survey), processing errors (errors made during data processing e.g. data entry) and the third-variable problem (where a high correlation between two variables may be explained by a third variable with which both are highly correlated). One of the most profound practical problems of this design is the fact that causation between variables cannot be established (Mouton & Marais, 1993). A biographical questionnaire is included in the study in order to gather information about the sample.

#### 1.4.2.3 *Unit of Analysis*

Unit of analysis refers to the what of the study, what object, phenomenon, entity, process or event will be investigated (Mouton, 2001). The unit of analysis will be individuals, specifically global market trading professionals. These individuals will include male and female managers and non managers of various ages and races.

#### 1.4.2.4 Population

The study population (N=200) consists of members from the global markets trading division in Gauteng from a large financial institution in South Africa. An availability sample will be drawn from this population.

#### 1.4.2.5 Measuring instruments

Three questionnaires will be used in this study. Namely, a biographical questionnaire, a self-developed stressors' questionnaire (which includes work and non-work stressors), and the Survey Work-home Interaction NijmeGen (SWING) questionnaire.

A biographical questionnaire was developed by the researcher which gathers information from participants regarding their gender, age, race, qualifications, number of dependants, marital status, and years' experience in the job.

A self-developed stressors questionnaire was developed specifically for this study. The researcher held five informal discussions with colleagues which assisted in outlining nine categories needed for this questionnaire. Then a minimum of five statements were allocated to each category, which relate to the literature review. The reliability of this questionnaire will be determined.

The Survey Work-home Interaction NijmeGen (SWING) questionnaire (Wagena & Geurts, 2000) is theoretically based on the Effort-Recovery (E-R) Model (Meijman & Mulder, 1998) and was designed to enhance and extend the existing knowledge on work-home interaction. The SWING differentiates between the direction (work → home and home → work) and the quality of influence (negative and positive). The SWING is a 22-item WHI measure developed by researchers in the Netherlands, the items of the SWING are divided into a four-response format which varies from 0 (*never*) to 3 (*always*) (Rost & Mostert, 2007). Research conducted by Pieterse and Mostert (2005) found the SWING to be a reliable instrument, where Cronbach alpha coefficients were acceptable for all four factors (NHWI = 0.87; NWHI = 0.79; PWHI = 0.79; and PHWI = 0.76). Van Tonder (2005) found that all the scales were reliable,

although the Positive WHI scale had a Cronbach alpha coefficient of 0.67. Based on these results, it can be proposed that the SWING has sufficient reliability

#### 1.4.2.5 *Data Analyses*

Descriptive statistics (namely the mean, standard deviation, minimum and maximum values and skewness) are used to organise, summarise and describe the data (McBurney, 2001). Spearman correlations are stated to indicate the strength of the relationship between stressors (work and non-work stressors) and work-life balance (positive and negative work-home interactions and positive and negative home-work interactions) (McBurney, 2001).

### 1.5 RESEARCH PROCEDURE

In an attempt to obtain scientific and objective findings, the research method will assume the following sequence:

#### 1.5.1 Phase 1: Literature Survey

**Step 1:** Literature review of stressors. This involves an analysis and integration of the existing literature on work and non-work stressors, focusing on definitions, symptoms, outcomes, type, theoretical models and measurements.

**Step 2:** Literature review on work-life balance and work-home interaction. Focusing on definitions of the concept, types, theoretical models and measurements of the work-life balance concept.

**Step 3:** Integrated literature review on work and non-work stressors and work-life balance.

**Step 4:** Formulation of hypotheses based on the above literature review.

## 1.5.2 Phase 2: Empirical Study

**Step 1: Selecting the Sample.** The study population (N=200) includes an availability sample of members from global markets trading division in Gauteng from a large financial institution in South Africa.

**Step 2: Compiling the Measuring battery.** Three instruments will be used in this study. Biographical questionnaire, stressors' questionnaire and SWING.

**Step 3: Data Collection.** Data collection will consist of four steps.

1. The research group is introduced to the researcher, informed of the purpose, method, and procedure of the study and their consent for participation is obtained. The biographical information must be completed before they continue with the questionnaire.
2. The measuring battery is distributed electronically to the group.
3. The data is analysed and feedback is given to the directorate heads. The researcher required the details of respondents to track participation and to provide feedback to those that requested such. It was only the researcher and the statistician that saw the names. However, respondents were assured that responses would be treated confidentially and that the analysis was done on an aggregated level. Participation was voluntary and agreement to participate indicated that respondents understood the confidentiality clause. If individuals require feedback on their questionnaires, independent feedback sessions will be organised accordingly.
4. All the data is integrated and conclusions and recommendations with regards to the organisation and future research are made.

**Step 4: Data Analyses.** The statistical analyses will be done by using the SPSS program

**Step 5: Report and interpretation of the results.** The results will be discussed based on the data retrieved. Tables and graphs will be used in this step to describe to quantitative results.

**Step 6: Conclusion.** A number of deductions will be made based upon the findings of the research, relating it back to the initial problem statement and hypotheses.

**Step 7: Limitations** of the research will be discussed based on the problems faced during the study and to better equip future researches.

**Step 8: Recommendations** of the research will be discussed. Recommendations to the organisation as well as for future investigations will be outlined specific to this problem.

## **1.6 CHAPTER DIVISION**

The chapters of the research will be presented as follows:

Chapter 2: Stress and work and non-work stressors

Chapter 3: Work-life balance and work-home interaction

Chapter 4: Research Methodology

Chapter 5: Research results

Chapter 6: Conclusions, recommendations and limitations

## **1.7 CHAPTER SUMMARY**

In the first part of this chapter, a background to the research problem was discussed and a motivation for the importance and relevance of this research was given. This was followed by a discussion of the research questions, literature, and empirical aims of this research as well as the research method. The chapter ended with a brief outline of the chapter flow for this dissertation.

## **CHAPTER 2**

### **WORK AND NON-WORK STRESSORS**

This chapter encompasses a description of the literature which seeks to address the theoretical aim of this research namely to describe work and non-work stressors amongst global market trading professionals. This chapter starts by defining the concepts of stress and stressors. Then, work stressors and non-work stressors are defined and discussed in detail. Next, a discussion regarding stress modifiers and consequences of stress follows. The chapter ends with a description and discussion of the overview of financial institutions.

#### **2.1 INTRODUCTION**

In recent years, the pace of work within organisations has increased rapidly. This increase can be attributed to many factors, which include technological advancement, the need to be globally competitive, continuous change in economies as well as changes in organisational structures. Consequently, the demands placed on individuals employed in the organisation have also increased (Farrell & Geist-Martin, 2005). Employees spend almost 50% of their lives at work, and 78% of people report that work is their biggest source of stress (Farrell, & Geist-Martin, 2005).

Researchers' interest in job-related stress has increased dramatically over the years (Ben-Bakr, Al-Shammari & Jefri, 1995). This is because many researchers believe that stress is becoming a major contributor to absenteeism, low employee morale, high accident and turnover rates, decreased productivity and increased company medical expenses (Ben-Bakr *et al.*, 1995). Research work over the past 20 years or more, has then also shown that the experience of stress in the workplace has undesirable consequences both for the health and safety of individuals and for the wellbeing of their organisations (Rees, 1995). Work stress combined with non-work stress can lead to physical and emotional outcomes due to excess demands placed on the human body and mind (Danna, & Griffin, 1999). Consequently, companies are developing wellness campaigns to address the problems arising from stress.

## 2.2 DEFINITION OF STRESS

Despite a significant increase in research on stress, researchers and people interested in stress are still not in agreement about the meaning and nature of stress (Dua, 1994). The word stress is derived from the Latin word *Strinere*, meaning to draw tight, and was used in the 17<sup>th</sup> century to describe adversity or suffering. During the late 18<sup>th</sup> century, stress denoted *force, pressure, strain and strong effort*, referring primarily to an individual's organs or mental powers (Hinkle, 1973). In the 19<sup>th</sup> century Sauter et al. (1992) defined stress as an interaction between the person and his or her environment. This interaction is perceived as a load that is so strong that it exceeds a person's coping mechanisms or sources of support. After 1992, Dua (1994) defined stress as a response to challenging events, as an event that places demands on the individual, as an environmental characteristic which poses a threat to the individual, and as a realisation by the individual that he or she is unable to deal adequately with the demands placed upon him or her.

Following the work by Sauter et al. (1992), Jex (1998) was of the opinion that stress can be defined as firstly a stimulus, which implies that it refers to the stimuli in the environment that may require some adaptive response on the part of the individual. Secondly, stress can be defined as a response, this refers to the feelings that an individual could experience when the demands of the job or personal life exceed the individual's ability to cope. Lastly, stress can be defined as a stimulus-response, which implies that stress refer to the overall process experienced by the individual.

Cooper, Sloane, and Williams (1988) describe stress as a response to a situation in which individuals are unable to meet the demands placed on them, resulting in a negative outcome. Researchers argue that this definition acknowledges that the sources of stress and its effects are multiple and not limited to a particular situation. Therefore, stress is viewed not just as a function of being under pressure in an occupational sense, but as a function of an individual's whole life situation. This includes aspects intrinsic to the job like relationships at work, organisational structure, or role conflict (Cooper, 1996).

Individuals do not respond to the events with uniform stress responses. The most widely used model of stress was developed by Richard Lazarus (Westen, 1999), as a transaction between the individual and the environment, rather than a property of either the person or the environment. Stress entails an individual perception that demands of the environment exceed available psychosocial resources. Stress depends on the meaning of an event to the individual: An event that fills one individual with excitement can make another feel anxious. The extent to which an event is experienced as stressful therefore depends on the individual's appraisal of both the situation and his or her ability to cope with it (Westen, 1999). This transactional model consists of two stages in the process of stress and coping, namely; primary appraisal of the situation and secondary appraisal of the situation (Feldman, 2001).

Primary appraisal of the situation is an assessment of an event to determine whether its implications are positive, neutral or negative. If the individual determines that the implications are negative, they appraise the event in terms of how harmful it has been in the past, how threatening it appears to the future and how likely it is that the challenge can be addressed successfully. Secondary appraisal of the situation is the assessment of whether one's coping abilities and resources are adequate to overcome the harm, threat, or challenge posed by the potential stressor. During this stage, individuals seek to determine whether their personal resources are sufficient to meet the dangers posed by the situation (Feldman, 2001). The experience of stress is the outcome of both primary and secondary appraisal (Feldman, 2001).

Most researchers agree that when studying stress models it is important to distinguish between two closely related items, namely stressors and stress (Francis & Barling, 2005).

### **2.3 DEFINITION OF STRESSORS**

Stressors are defined as the external events such as difficult relationships in the workplace that contribute to the experience of stress (Sauter, Murphy & Hurrell, 1990), and the physical and psychological stimulus to which an individual responds (Quick, Quick, Nelson, & Hurrell, 1997). Stress is considered to be an individual

internal response to stressors and is characterised by arousal and displeasure (Francis & Barling, 2005). When stress is defined as a stimulus-response, the term stressor is used to indicate the job or organisational condition (Jex, 1998).

Le Fevre et al. (2003) used the term “stressor” to describe the external force or influence acting on the individual and “stress” to denote the resulting reaction, terminology adopted by many others (e.g. Code & Langan-Fox, 2001; Quick, Nelson, Quick & Orman, 2001). Usually a stressor is threatening when it will have a big impact on the individual.

According to Sauter et al. (1992) stressors can be divided into four main areas namely: physical and psychological stressors, past, present and futures stressors, positive and negative stressors, and acute and chronic stressors. Physical stressors include everything from lack of sleep to invasive surgery. Common psychological stressors evoke distressing emotions, such as hate, anger, sadness and fear. Past stressors, such as traumatic childhood experiences, may continue to exert pressure in the present. Present stressors include work deadlines and sales quotas. Future stressors include things that have not yet happened but that we worry about anyway. Stress can be positive (getting a promotion, getting married) or negative (job loss, divorce). Although positive events are usually better, they can be stressful because often something is given up when something is gained. For example, one may trade the ease and comfort of an old job for the excitement of a new job, but the new job includes challenges, too. Acute stress comes on suddenly and lasts for a relatively short time, such as your babysitter calling in sick on the same day you have to give a big presentation at work. Chronic stress is long lasting. It may stem from an unsatisfying job, an unhappy relationship or living in poverty. Chronic stress may also arise from traumatic childhood experiences. Chronic stress is far more damaging than acute stress.

According to Fairbrother and Warn (2003) there are two further divisions of acute and chronic stressors. The first is everyday stressors also known as daily hassles. This is the stress created by the demands of daily life, including our work, our families and our social life, also referred to as work and non-work stressors. The most often cited everyday stressor is work. In today’s world of doing more with less,

employees find themselves with more work, fewer resources, and less time. Individuals have tight deadlines and a competitive work environment in which only the best performers are guaranteed continued employment. All of these factors add up to a very stressful work environment (Fairbrother & Warn, 2003). Other everyday stressors can include home demands: These are taking care of aging parents and trying to raise children and maintain a home. Normal daily hassles such as too many things to do, juggling different responsibilities, time pressures, traffic noises, job dissatisfactions, poor health, negative attitudes, relationship demands, or financial problems can also cause significant stress (Emmons & McCullough, 2003).

For the purpose of this study stressors will be divided into two main categories namely: work and non-work stressors.

## **2.4 WORK STRESSORS**

Globalisation of the economy, ever increasing competition, and the rapid pace of technological change may be seen as responsible for bringing about the ever-increasing pace of change in the working environment on a world wide scale (Schabracq & Cooper, 2002). As a result, more and more employees today are faced with changes they never asked for. These continual unasked for changes often give rise to stress reactions in employees, resulting in a number of negative consequences for both the employee and the organisation (Conner & Douglas, 2005). Modern business is highly competitive, demanding and expensive, and as a result, organisations, management and employees are under constant pressure to achieve higher targets (Rothmann, Steyn, & Mostert, 2005). Organisations everywhere are downsizing, outsourcing and restructuring, leaving workers feeling stressed, insecure, misunderstood, undervalued and alienated (Rothmann *et al.*, 2005).

Work stressors may refer to any characteristic of the workplace that poses a threat to the individual (Donovan & Kleiner, 1994). These work stressors can relate to either work demands a person cannot meet or the lack of sufficient resources to meet work needs (Larson, 2004). For stress to exist, the demand from the environment (the work) versus the capability of the individual (the employee) will typically be

considerably out of balance. Individuals experience work stress when they have little or no control over their work or when work demands exceed their abilities (Donovan & Kleiner, 1994). The level of stress an individual experiences in his or her organisational context, and the extent to which adverse effects such as psychological and other strains occur, depend on how effectively he or she copes with stressful organisational situations (Rothmann & Viljoen, 2009).

Research conducted by Cooper and Marshall (1976), identified six categories of stressors which would impact on occupational stress, namely: intrinsic factors of work, individuals role in the organisation, relationships at work, career development, organisational structure and climate, and work-home interaction. Based on Cooper and Marshall's research stressors may differ within various work environments, depending on the demands and resources that exist in the specific work context (Rothmann, Mostert & Strydom, 2006). More and more research has been conducted to re-evaluate work stressors.

According to Sauter et al. (1992) work stressors could include: lack of control over work, excessive time pressures, excessive or inflexible working hours, too much or too little work or responsibility, confusion about duties and responsibilities, lack of job variety and interest, inadequate training and possibilities for learning new skills, poor work-life balance, difficult relationships at work, lack of support and lack of contact with colleagues, organisational confusion, restructuring, job change, and uncertainty over job prospects. Also, physical conditions such as high noise levels, overcrowding in the workplace or a lack of privacy have been associated with stress (Fairbrother & Warn, 2003).

Rojas and Klein's (2000) research on work stressors related to professional individuals and included the following stressors: setting unrealistic goals for work completion (where an individual sets unrealistic time-tables or take several tasks at the same time), the number of hours an individual works in a day, interruptions (frequent interruptions in the workplace account for a tremendous loss of productivity), the external environment (which includes noise, temperature, and lighting), workplace competition, dealing and working with violent or abusive

colleagues, job insecurity (concern about losing the job), and lastly, financial insecurity.

Several occupational stress models have been proposed within literature that has focused on organisational causes of stress. The focus in this study will be on the six categories as briefly outlined by Cooper and Marshall (1976) and then further explained in the work of Quick et al. (1997). Cooper and Marshall's (1976) model outlines a main framework in order for specific stressors to be defined and understood. The categories are broader and therefore allow for the researcher to develop an independent stressors' model framework specific to, for instance, global market professionals. The model framework assisted the researcher in defining the categories needed to develop the work stressors part of the self developed questionnaire.

These categories will be used to organise the discussion of work stressors.

#### **2.4.1 Factors intrinsic to the job**

There are a variety of intrinsic job factors that are potentially stressful to the individual which include: work overload or underload, deadlines, long hours and time pressures, excessive travel, having to cope with changes at work, the consequences of making mistakes, and working conditions. Working conditions include correct air quality and indoor climate control, and correct and sufficient lighting. According to Mirvis (1980) better working conditions contribute to improved performance. Poor mental health can be linked to unpleasant working conditions, which include having to work very fast and extreme working hours (Pike, 2003).

Work overload results from employees being assigned too many tasks or insufficient time to accomplish the assigned tasks. Research recently conducted by Rothmann et al. (2006) around job stressors of various occupations stated that stressors of production workers included work overload and lack of autonomy. Academics experience high levels of occupation stress related to pay and benefits, overload and work-life balance, yet they are less troubled by work relationships, job security and job characteristics (Barkhuizen & Rothmann, 2008).

### **2.4.2 Role in the organisation**

Stressors that pertain to an employee's role in the organisation include: role ambiguity, role conflict and the degree of responsibility for others. Role ambiguity refers to situations where job responsibilities and accompanying tasks are not clearly defined. Role ambiguity has been reported as being associated with lower job satisfaction and increased job-related tension (Conner & Douglas, 2005). Role conflict may result from employees facing inconsistent expectations of various parties, or from a perceived incongruence between role demands and personal needs and values (Conner & Douglas, 2005). The more responsibility for others that a person has, generally the greater the job stress. This happens because the individual is spending significant amounts of time interacting with others, attending meetings, and trying to work with and motivate others to meet deadlines and schedules (Larson, 2004).

### **2.4.3 Relationships at work**

Interpersonal relationships at work include the following stressors: poor relationships with supervisors, colleagues, and subordinates. Having good relationships with colleagues and supervisors at work is essential when having to spend the entire day surrounded by these people. It is well documented that having poor interpersonal relationships at work contributes greatly to the individual's experience of work-related stress. Research suggests that people who cultivate broad and diverse networks are more successful than those who rely strictly on their inner circles (Sutherland & Cooper, 1990).

### **2.4.4 Career development**

Stressors related to career development include job insecurity and lack of career development. According to research done by Coetzer and Rothmann (2006) job insecurity, pay and benefits were the major stressors in a South African insurance company. Research by Rothmann et al. (2006) showed that job insecurity and low career growth rated highly as stressors for police officers. An obvious result of mergers, acquisitions and downsizing are employees' concerns surrounding job

insecurity and career development, factors that have increasingly become a source of stress in the past two decades (Cooper, Dewe & O'Driscoll, 2001). The threat of job loss not only effects the socio-emotional well being of an organisation's employees, but it is also associated with a number of serious health problems including ulcers, colitis, alopecia, and increased muscular complaints (Cooper *et al.*, 2001).

This "career stress" has been shown to have a number of negative outcomes including job dissatisfaction and poor work performance (Ivancevich & Matteson, 1980). Kinnunen and Mauno (1999) list reduced job satisfaction, decreased work and organisational commitment, and impaired work performance as possible outcomes of job insecurity.

#### **2.4.5 Organisational structure and climate**

Stressors with regard to organisational structure and climate include the lack of participation and effective consultation, poor communication, politics, and the consequences of downsizing. Research by French and Caplan (1973) stated that individuals who had greater opportunity for participation in decision making showed higher job satisfaction levels and had higher self-esteem.

#### **2.4.6 Home-work interaction**

An increasing potential source of stress is managing the link between work and home, which will be discussed in more detail in chapter 3.

### **2.5 NON-WORK STRESSORS**

A worker's ability to cope with increasing workplace stress is also affected by the amount of stress they are subjected to from stressors outside of the workplace. Trouble at home may reduce their ability to cope with pressure at work (Burr & Klein, 1994). Non-work stress can be defined as a real or imagined imbalance between the demands on the home and the family's ability to meet those demands (Jones *et al.*,

1988). More specifically, non-work stress is pressure or tension within your home that disrupts your normal, day-to-day life.

The second major category of acute or chronic stress is significant life events, which are often life changes that are out of our control. Major life events include items we choose, like getting married, having a child, moving and changing jobs, but also include devastating crises such as the death of a loved one or a natural disaster (Emmons & McCullough, 2003).

According to research by Oosthuizen and Koortzen (2007) the causes of stressors arising outside the work situation for firefighters were characterised by marital dysfunction and divorce, limited time with family, problems with children, and lifestyle factors such as the abuse of alcohol, excessive smoking and lack of exercise. Further issues include long shifts, which interfere with sex lives, loss of friends (non firefighters), and suicide of colleagues or family members, lower social status, anger and frustration at home or in the family, emotional, intellectual and physical exhaustion, wives being alone at night and not being available to help the family when needed.

## **2.6 STRESS MODIFIERS**

Individuals see the same demands and stressors differently on the basis of their cognitive appraisal of the situation or event. Some individuals see a specific demand or stressor as a threat, whereas other individuals see the same demand or stressors as a challenge or opportunity (Quick *et al.*, 1997). From this perspective, the focus shifts away from the actual demand or stressor to the individual's perception of that demand or stressor. According to Quick *et al.* (1997) individuals differ due to the modifiers of the individual's response to stress. Individual and interpersonal differences influence an individual's vulnerability and account for significant variance in the manner in which stress is displayed. Modifiers are defined as pre-existing conditions or characteristics that influence the way in which an individual responds in a stressful event. There are two categories of modifiers: internal conditioning and external conditioning factors. Internal conditioning factors include family history and behaviour patterns, past experiences, cognitive functioning, age, sex, type A

behaviours (typically aggressive, ambitious, competitive and struggle with people, things and events) and personality (which consists of aspects like locus of control, self-efficacy and emotional stability). External conditioning factors include diet, climate, drugs, interpersonal relationships and social support (either emotional support or informative support) (Dua, 1994).

Individual qualities affect how a person will respond to stress in three major ways (Schuler, 1980). First, because individual needs and values define the person's desires, the individual qualities determine the relative importance of events or occurrences to the person. Second, individual abilities and past experiences affect the choice of strategies to deal with stressful events. Finally, the individual's choice of strategies to deal with the stress is influenced by the individual's personality characteristics. Consequently, individuals will differ in the ways they respond to an identical event depending on these individual qualities (Schuler, 1980).

By viewing stress as a result of a misfit between an individual and his or her environment, insight can be gained into why one person seems to thrive in a certain setting, whereas others suffer. Stress is a naturally occurring experience that may have either beneficial or destructive consequences (Larson, 2004). Stress is a physical response, but the stressors that trigger the response are typically social, psychological, or symbolic, and consequently require no physical action (Larson, 2004). Stress is so hard on the human body because the body is preparing for a physiological response to a non-physical demand. The cumulative result is a major strain on a person's body that can lead to illness. The more frequently the person is in a stress-response mode, the more susceptible that individual is to fatigue, disease, disability, aging, and death (Matteson & Ivancevich, 1987).

## **2.7 CONSEQUENCES OF STRESS**

Research work over the past 20 years or more has shown that the experience of stress in the workplace has undesirable consequences both for the health and safety of individuals and for the wellbeing of their organisations (Cox, 1993). While assessment of the size of the stress problem for individuals depends on the definition of stress used and the tools employed for measuring it, a common rule of

thumb measure suggests that 40 per cent of workers in any group will be diversely affected by stress (Rees, 1995). Occupational ill-health statistics, collected as part of the 1990 Labour Force Survey, found that 55 per cent of all reported cases of stress/depression and half of all reported cases of exhaustion were perceived as being caused by work (Bradley & Sutherland, 1994).

For organisations the most frequently cited consequences of stress at work include high turnover (Cox, 1993), and poor time keeping, low employee morale, high accident and turnover rates, decreased productivity and increased company medical expenses (Ben-Bakr *et al.*, 1995) all of which, as Cox (1993) points out, are “escape strategies”. However, some people who are experiencing high levels of stress will continue to turn up for work but their performance in terms of productivity and quality of work will be impaired with possible consequences for the recipients of their service. The cost of these stress consequences has become a huge burden on many organisations worldwide. Some researchers in the area of stress report that annual costs attributed to stress-related alcoholism, drug abuse, disease and low productivity are about US\$142 billion (Ben-Bakr *et al.*, 1995).

On an organisational level, Beehr (1995) outlined two major outcomes of occupational stress: employee withdrawal and reduced job performance. Lateness, absenteeism, turnover and psychological withdrawal are listed by Beehr (1995) as types of employee withdrawal. These types of withdrawal occur when the employee perceives the workplace to be unpleasant and as a result attempts to avoid it. This mismanaged workplace stress can cost companies dearly in terms of lost productivity, decreased performance, high medical aid costs, and loss of much needed experience and skill.

Schabracq and Cooper (2002) cite a number of other possible costs of workplace stress to organisations. These include low morale, low quality products and services, poor internal communication, increased levels of conflict, bad publicity, and loss of irate and offended customers, high costs with regard to staff replacements as a result of increased turnover, and vacancies that cannot be filled. In recent years a number of cases have occurred whereby employers have faced legal costs as a consequence of overworking individuals in their employment (Johnson, 1995).

The individual symptoms of stress may be categorised into three types: physiological, psychological, and behavioral (Beehr & Newman, 1978). Physiological stress symptoms may be further divided into short term (such as a headache), long term (such as ulcers, high blood pressure, or heart attack), and non-specific (such as having an acid stomach). Almost every system of the body is involved in the stress response (Beehr & Newman, 1978). However, the responses of the cardiovascular, digestive, and muscular systems are the most pronounced. This response is recognised as the “fight or flight” response. No matter what the type of stressor, the body prepares to react in the same way. It increases the blood supply to the heart and muscles, elevates the blood pressure, and releases adrenaline into the system. The digestive system slows down digestion and dumps sugar into the blood stream to serve as an immediate source of energy. The muscles tense up in order to be ready to spring into action. As stress increases, a person’s “fight or flight” response occurs more frequently and may result in a drain of the person’s energy reserves. Psychological responses include such symptoms as apathy, forgetfulness, dissatisfaction, and irritability. Individual behavioral consequences of stress may include loss of appetite, weight gain or loss, change in smoking habits, change in use of alcohol, and sudden change in appearance.

## **2.8 OVERVIEW OF FINANCIAL INSTITUTIONS**

Hardly a day passes without newspapers and televisions carrying a story about financial markets and their impact on the lives of individuals. Even a casual perusal of these news stories make it apparent that the activities of financial institutions and markets have come to play a central role in our economic well-being and security (Fenton-O’Creevy *et al.*, 2005).

### **2.8.1 Unique work context of global market trading professionals**

A bank is a financial institution whose primary activity is to act as a payment agent for customers, and to borrow, lend, and, in all modern banking systems, create money. Most banks are profit-making, private enterprises (Potgieter *et al.*, 1991). The changing economic environment has a significant impact on banks and thrifts as they struggle to effectively manage their interest rate spread in the face of low rates

on loans, rate competition for deposits and the general market changes, industry trends and economic fluctuations (Davidson, Coetzee & Visser, 2007). It has been a challenge for banks to effectively set their growth strategies with the recent economic market. A rising interest rate environment may seem to help financial institutions, but the effect of the changes on consumers and businesses is not predictable and the challenge remains for banks to grow and effectively manage the spread to generate a return to their shareholders (Fenton-O’Creedy *et al.*, 2005). Banks face ongoing pressure by shareholders, both public and private, to achieve earnings and growth projections.

A trader is defined as a person who buys or sells securities, derivatives, commodities, and foreign exchange with the intention of making a profit. A trader may be employed by a trading firm, like an investment bank (Fenton-O’Creedy *et al.*, 2005). In order to understand traders, researchers have to first understand the markets they inhabit. The core of a trader’s role is making decisions under conditions of uncertainty and risk. It is widely recognised that trading is a difficult job that places enormous pressure on the individual in terms of the complexity and flow of information, the major consequences that can flow from decisions, and the limited time frame and resources they have to make decisions (Fenton-O’Creedy *et al.*, 2005). This is recognised in the extreme value investment banks place upon selecting people with high intellectual capabilities and personal qualities that will enable them to survive and prosper in these circumstances. Any financial institution will only succeed if they are able to attract, retain, develop and deploy people with energy, passion and skills (Potgieter *et al.*, 1991).

Global market's trading is a highly competitive market and is an essential part of Investment banks business budget. The correct type of person needs to be hired for these very specialised jobs in order for the individuals as well as the business to survive. Global markets’ trading is considered by many to be a specialised skill, therefore employing the right type of person for the job is important. The trading environment is a fast moving and high risk arena where traders from all commercial and private banks compete for clients’ business, based on the best price in the market and customer service (Fenton-O’Creedy *et al.*, 2005). The Global Markets team trades actively in the full range of financial instruments, both locally and in

international markets, providing clients with a variety of both standard and tailored products and services. The specialist desks focus on all key aspects of financial markets. With a strong global presence across continents and international time zones. (Potgieter *et al.*, 1991).

The job itself involves a lot of reading into the markets, being aware of changes in the local and international economy (for example 9/11 tragedy or SA interest rate hikes) and influences within the market. The job also includes taking risks and attending to detail and most importantly ensuring minimal mistakes. Any mistake in the markets (for example incorrect pricing to clients or even trading on the wrong side of the market) could have a huge impact on the business as well as the individual. Losses in monetary value that occur are reported by the individual to the directors of the investment bank.

Work stress is inevitable in any working environment, yet the work stress of a trader is more intense based on two specific facts: the job itself is more intense and budget orientated, secondly where mistakes are made company money is lost and there is possibility of warnings or dismial of an individual (Fenton-O'Creevy *et al.*, 2005).

Currently, no reliable and valid measurement of occupational stress exists in South Africa that could be used to diagnose the frequency and intensity of stressors in this specific banking institution. Discovering which stressors are most prominent to global market trading professionals in South Africa could lead to the stressors being addressed during selection, stress management workshops, and organisational development interventions. No prior research has outlined the specific stressors of trading, therefore this study will assist in identifying key stressors of trades both at work and home.

## **2.9 CHAPTER SUMMARY**

While chapter two provided an outline of the different definitions of stress proposed by researchers, it was contended that for the purposes of this study stress would be defined as a response to a situation in which individuals are unable to meet the demands placed on them, resulting in a negative outcome. Therefore, stress is

viewed not just as a function of being under pressure in an occupational sense, but as a function of an individual's whole life situation (Cooper *et al.*, 1988). This definition relates to the purpose of this study in that stress is experienced in the work and non-work environment.

The study then went on to outline a number of stressors and consequences of stress in the workplace and non-work environment. This outline is important in particular to the purpose of this study, since it serves the purpose of identifying which specific stressors of the global markets professional could be related to increased levels of stress, as well as the possible consequences for the individual.

Work life balance will be discussed in Chapter 3.

## **CHAPTER 3**

### **WORK-LIFE BALANCE**

This chapter aims to conceptualise work-life balance from the literature. Specifically, work-life balance will be defined, and the effort-recovery model will be discussed as well as potential consequences of the work-home interaction process. Lastly, work-life balance will be discussed in light of specific work and non-work stressors.

#### **3.1 INTRODUCTION**

Dual-earner families are now a normative part of national and international society. Labor force participation rates among married women almost doubled between the years 1966, when 35% of married women were employed, and 1994, when 61% of married women were in the labor force (Winkler, 1998). By 1997, 71% of women with school-age children were employed (Matjasko, & Feldman, 2006). In comparison, fathers' rates of employment have remained relatively unchanged.

Already in 1980, research by Pleck, Staines and Lang (1980) revealed that a substantial proportion of employed adults report conflict between their work and non-work roles. People typically manage a variety of roles such as marriage, parenthood, paid work, house work and community roles. This complex process may result in stress, conflict or overload that may challenge the individual to find a balance (Marks, Huston, Johnson & MacDermid, 2001), and impact on the physical, behavioural as well as cognitive-affective aspects of their lives (Allen, Herst, Bruck, & Sutton, 2000; Greenhaus, Collins, & Shaw, 2003). Negative outcomes of this experience of work-family conflict include elevated job stress (Frone, Russell, & Cooper, 1992), including the typically associated somatic complaints (Thomas & Ganster, 1995), lower job satisfaction (Bruck, Allen, & Spector, 2002; Burke & Greenglass, 1999), lower levels of organisational commitment (Greenhaus & Beutell, 1985), and less home life satisfaction (Higgins & Duxbury, 1992).

There is an accepted level of evidence indicating that work-family conflict has a major influence on the well-being of workers (Theunissen, Van Vuuren, & Visser,

2003). Modernising trends such as economic development, globalising influences, equal employment opportunities, to mention a few, has led to an increasing concentration on the impact of work life issues on the general life balance experienced by employees (Kirrane & Buckley, 2004). Work life balance is fast becoming one of the defining issues of the current employment scene (Hyman & Summers, 2004).

In the next section work-life balance will be discussed in further detail.

### **3.2 DEFINITION OF WORK-LIFE BALANCE**

Changes in home and family structures, increasing participation by women in the workforce, and technological changes (e.g., mobile phones and portable computers) that enable job tasks to be performed in a variety of locations have blurred the boundaries between job and home life. With the number of dual-career couples rising in the workforce (Zedeck & Mosier, 1990), the demands of both a career and caring for a family are often difficult to meet. For many workers, this has created the potential for interference or conflict to occur between their work and non-work lives (Hill, Miller, Weiner, & Colihan, 1998). From research conducted, it would appear that work has a greater degree of impact on family life than vice versa (Marks *et al.*, 2001). This probably results from the family's financial dependency on work and in some situations, the rigidity of work schedules (Guttek, Searle & Klepa, 1991). The challenge of combining work and non-work is an issue therefore faced by many employees (Mageni & Slabbert, 2005).

The best way to define the concept of "work-life balance" is to break the concept into separate words. According to Guest (2001) paid "work" comprises not simply contractual hours of employment. It is often surrounded by ancillary (unpaid) activity such as extended and unpredictable journey times and in the case of some occupations, such as farming, there is no seamless divide between the domains of work and home. Initially "life" had been rather narrowly construed to imply "family or home life" but recent commentators have suggested a more inclusive perspective, to include free and leisure time, irrespective of non-work commitments (Guest, 2001). In consequence there has been a political and organisational shift from "non-work-

friendly” conceptualisations of working practices toward those of “work-life balance” (Dex & Smith, 2002, p. 3). The concept of “balance” itself can be highly problematic: there is a “need to recognise that balance can have both an objective and subjective meaning and measurement, that it will vary according to circumstances and that it will also vary across individuals” (Guest, 2001, p. 8). ‘Balance’, however, need not imply that time and energy are split equally between paid work and care but is more of a recognition that individuals have different expectations and preferences for the ways in which they organise their total workloads (Perrons *et al.*, 2005).

Although work–life balance is a generally accepted term, there are complications with the concept of balance. Using the term “balance” ignores the possibility that both domains may also influence each other in a constructive way by transferring positive attributes (Donald, & Linington, 2007). Jacobs, Mostert, and Pienaar (2008) state that work–family balance represents a vague concept where work and family life are integrated or harmonious in some way or where work–family balance is seen as a lack of conflict or interference among work and family roles. Achieving balance also implies that one must take away from one area and add to another. Another problem with the term “balance” is that it suggests that work is not part of an individual’s life but something separate.

For the purpose of this research, work-life balance will be defined as having the ‘right’ combination of participation in paid work (defined by hours and working conditions) and other aspects of life (family and financial conditions) as measured by the subjective experience of employees.

When investigating work-life balance, one needs to investigate the process of interaction between work and home life. This work-home interaction process will be described in the next section.

### **3.3 WORK-HOME INTERACTION**

In the past decade organisations have focused with renewed interest on the interaction between work and family. This is mainly because of major changes that took place in the composition of the labour market, not only internationally, but also

in South Africa. The workplace has become progressively diverse due to transformation developments, including Employment Equity and Affirmative Action legislation, impacting on the financial performance of organisations (Rost & Mostert, 2007).

According to Demerouti, Geurts, and Kompier (2004) work-home interaction (WHI) is defined as an interactive process in which a worker's functioning in one domain (e.g., home) is influenced by (negative or positive) load effects that have built up in the other domain (e.g., work). Initially, research on Work-Home Interaction (WHI) done by Geurts, Demerouti and Kompier (2004) has focused almost exclusively on the negative impact of work on the home situation. However, it seems that researchers have realised that the work-home interface is a much broader concept that also encompasses a positive side.

The assumption that work might influence functioning at home (as well as the other way around) in both a positive and a negative way has been empirically tested only recently (e.g., Grzywacz & Marks, 2000; Grzywacz, Almeida & McDonald, 2002; Summer & Knight, 2001). The study of Grzywacz and Marks (2000) provided evidence for the co-existence of four different but inter-related types of spillover between 'work' and 'home', that is, negative and positive spillover from the work to the home situation, as well as negative and positive spillover in the opposite direction. In the study by Geurts et al. (2004) work-home interaction is best characterised as a four-dimensional construct that distinguishes between the quality of influence (negative vs. positive) and the direction of influence (work home vs. home work).

There are four WHI dimensions (Geurts *et al.*, 2004). Firstly, Negative Work-Home Interference (NWHI), referring to a situation in which negative load reactions built up at work hamper functioning at home. Secondly, Negative Home-Work Interference (NHWI), referring to negative load reactions developed at home that impede functioning at work. Thirdly, Positive Work-Home Interference (PWHI), referring to positive load reactions built up at work that facilitates functioning at home. Lastly, Positive Home-Work Interference (PHWI), referring to positive load reactions developed at home which facilitates functioning at work.

For the purpose of this study work-home interaction is described as the interaction of global market trading professionals with their work and family or private life. This interaction that occurs can either be positive or negative depending on the circumstances (positive or negative) at work and home, which in turn influences relationships (positively or negatively) at work or home.

The Effort-Recovery Model provides a theoretical framework to understand the experience of these different forms of interaction between work and home, which will be discussed in the next section.

### **3.4 EFFORT RECOVERY MODEL**

According to Geurts and Demerouti (2003), the effort- recovery (E-R) model is described as the quantity and quality of how recovery plays a crucial role in an individual's life. The effort recovery model sheds light on the underlying mechanisms in the relationship of workload and non-workload with well-being by assuming that recovery from work or non-workload effects during the day plays a crucial role (Geurts, Kompier, Roxburgh, & Houtman, 2003).

The central idea is that work demands that require too much effort are associated with the building up of negative load effects that spillover to the non-work domain (home and family environment). As a consequence, it will be more difficult to recover at home sufficiently from the effort one has put forth into the job. In the end, this will increase the possibility that work demands harm psychological health and furthermore creating negative work-home interaction (NWHI). After a short respite from work and/or non-work demands, the individual's psychobiological system will stabilise again at a baseline level and recovery from the effects of work and/or non-work demands that have built up during the day will be sufficient (Geurts *et al.*, 2003).

In general, negative work-home interaction may have detrimental effects on health and well-being since it increases, psychosomatic symptoms and physical health complaints (Geurts, Rutte & Peeters, 1999; Grandey & Cropanzano, 1999), as well as psychological distress (Kirchmeyer & Cohen, 1999). Following the reasoning of

the E-R model inadequate recovery from demanding aspects of the work and the home situation might lead to feelings of fatigue or psychosomatic health complaints. This is often referred to by Greenhaus and Beutell (1985) as work-home conflict and then by Geurts et al. (1999) as work-home interference.

From the perspective of role stress theory (Peeters, Montgomery, Bakker & Schaufeli, 2005), Greenhaus and Beutell (1985) defined work-home conflict as “a form of inter-role conflict in which the role pressures from the work and non-work domains are mutually incompatible, such that participation in one role makes it difficult to participate in the other” (p. 77). This conflict has been linked to various stress related, work-related and non-work related outcomes (Allen *et al.*, 2000; Frone, 2003, for reviews). According to Jacobs et al. (2008) the type of work–home conflict can be based on role characteristics that affect time, strain or behaviour in one domain, but which are incompatible when trying to fulfill the role in the other domain (work vs. home). These three types of work–home conflicts are further defined as 1) time-based conflict (i.e. when work and home roles compete for time), 2) strain-based conflict (i.e. when strain in the one role affects performance in another role), and 3) behavior-based conflict (i.e. when role behaviour in the one domain may be in conflict with expectations of behaviour in the other domain) (Rost, & Mostert, 2007).

Work–home interference is defined as the extent to which a person experiences pressure within the work domain that is incompatible with the pressure that arise within the family domain (Geurts *et al.*, 1999). WHC or NWHI has been associated with depression (Frone, Russell, & Barnes, 1996), reduced well-being (Grant-Vallone & Donaldson, 2001), and alcohol use or abuse (Frone *et al.*, 1996). There is therefore a great desire on the part of both employees and employers to achieve a balance between workplace obligations and personal responsibilities to reduce work-home conflict through work-life balance (Greenhaus & Beutell, 1985).

On the other hand, the positive prevalence of work life balance is work-life facilitation and this results in some positive consequences for the individual. Work–family facilitation has been defined as a type of compatibility in which resources available in one role enhance or assist participation in the other role (Voyandoff, 2004).

The effort–recovery model has been used to conceptualise the relationship between work–home conflict and facilitation and employee health. There has been an attempt in recent literature to understand how conflict and facilitation may function together (e.g. Grzywacz & Bass, 2003). A useful conceptualisation of this relationship rests on the idea that demands are associated with conflict, whereas resources are associated with facilitation.

As such, work-home conflict (WHC) and facilitation are independent constructs rather than opposite ends of the same continuum (Voyandoff, 2004). The idea was supported in recent research indicating that the best fit of WHC and facilitation was a model in which both were treated as independent constructs (Grzywacz & Bass, 2003). This finding is directly related to the idea of effort and recovery in that the demands or efforts in one domain increase the likelihood of negative spillover into the other domain and increase the need for recovery in that domain. Over time, this can lead to negative health outcomes (Bakker & Geurts, 2004). It has been suggested that work–family facilitation contributes to family functioning by offsetting the negative potential of work–family conflict by allowing families to reframe potential stressors in a way that reduces their threat (Grzywacz & Bass, 2003).

Resources in one domain may be energising, increasing the likelihood of positive spillover to the other domain and decreasing the need for recovery (Bakker, & Geurts, 2004). A recent study found support for this proposition but only negative and positive work-to-non-work spillover (conceptualised as work–home interference) was measured (Bakker & Geurts, 2004). Given the importance of recovery during non-work hours, the effort–recovery model provides a conceptual framework to interpret the findings of the study by Williams, Franche, Ibrahim, Mustard (2006) that suggests that positive non-work-to-work spillover is associated with better sleep quality. Williams et al. (2006) propose that the presence of resources in the non-work domain that spillover into the work domain could facilitate the recovery process.

These reactions are, in theory, reversible, and recovery is possible when effort is no longer required or when the physiological and psychological reactions to effort can be attenuated through other means. Sonnentag (2001) documented that recovery can occur through various leisure activities, such as watching television or reading a

magazine, spending time with friends or talking on the telephone, and physical activities, such as exercise. The temporary respite and the physical and psychological “squeal” created by these leisure activities enable recovery from individuals’ daily demands.

According to Geurts et al. (2003) there are three types of situations in which an employee cannot recover sufficiently from high job demands. Firstly, the job demands (high job demands, little job control, and little job support) unremittingly require effort investment without the possibility to recuperate because new demands are made upon the individual in the private situation. Secondly, the time available for recuperation after work is too short because demands do not cease but continue to exist, resulting from long working hours. Lastly, individuals are slowly unwinding, which can hamper relaxation after work. Recovery from activities in the non-work setting might be at risk in a similar way when, firstly, these activities require high effort investments due to their ‘high duty’ character. Secondly, there is no time available for low-effort activities. Lastly, individuals suffer from slow unwinding. In the three situations in which sufficient recovery is at stake, a downward spiral may be activated. That is the employees who are still not fully recovered must invest additional effort to perform adequately during the next work day, resulting in higher load effects that make an even higher appeal on the recovery process.

There are two types of recovery an individual will experience, according to Poelmans (2005). Internal recovery (during workday) and external recovery (after work). External recovery may be poor due to the spillover of work demands to one’s home life, just as internal recovery may be poor due to the spillover of home demands to one’s work situation. When individuals have not fully recovered from previous effort investments, they must, still in a sub-optimal state, invest additional (compensatory) effort to perform adequately when confronted with new (work or non-work) demands. This results in an increased intensity of negative load reactions that appeal even stronger to the recovery process (Geurts *et al.*, 2003). The continuous presence of high demands (in one or both domains) and insufficient recovery may in the long run lead to an accumulation of negative load reactions that may persist.

The role of recovery may also enhance our understanding of positive WHI. When individuals are able to keep their effort investments within acceptable limits by utilising opportunities for control and support, energy resources may be replenished rather than depleted. Energy consumption is a necessary condition for stabilising the production of energy, and people tend to find energy for things they like doing. Work and non-work settings that enable individuals to self-regulate their effort investment offer the possibility to gain positive experiences, yielding positive load reactions that spillover to the other (non-work or work) domain (Geurts *et al.*, 2003).

The effort-recovery model offers some insight for integrating and understanding the sparse literature examining the effect of workers' non-work lives on their work-related performance. Research conducted by Grzywacz, Rao, Woods, Preisser, Gesler, and Arcury, (2005) and Mastekaasa, (2000) stated that the relatively low prevalence of self-reported non-work conflict with work and the weak association between parental status and absence, suggest that most workers are able to adequately recover from the effort required by their non-work responsibilities, at least in the short term. The results of these studies contributed to the literature by explicitly linking workers' family lives to their performance in the workplace.

Direct examinations of the effect of workers' non-work lives on their work-related performance or individual productivity yield mixed findings. Two studies that used objective indicators of employee performance on the job, such as managers' appraisal of employee performance or the relative size of employees' merit increases, suggest that workers with younger children (i.e., younger than 5 years of age) had better rather than worse work-related performance than those with older children (Campbell, Campbell, & Kennard, 1994; Lobel & St. Clair, 1992). Elevated performance by parents of young children, as was reported by Campbell *et al.* (1994), may reflect lower levels of effort (and less exhaustion) resulting from new skills acquired through parenting that are useful on the job or the positive emotions that result from engaging in generative tasks (Kirchmeyer, 1992a; Rothbard, 2001; Ruderman, Ohlott, Panzer, & King, 2002). High demands in either the work or the non-work setting will not have adverse health consequences as long as sufficient recovery time is warranted with specific load reactions (Meijman & Mulder, 1998).

In contrast to this, studies that were conducted by Hankin, Wright, and Gephart, (2001) focused on specific demands of non-work and yielded some evidence that non-work responsibilities may interfere with workers' performance on the job.

Non-work responsibilities that elevate effort or undermine recovery opportunities would likely contribute to compromised performance in the workplace. Parents of children with disabilities or chronic conditions tend to have poorer self-reported job performance, greater difficulty concentrating at work, and greater absence (Warfield, 2001; Watanabe, Jensen, Rosen, Newby, Richters, & Cortes, 1995). This suggests that the burdens of caring for an ill child can interfere with the employees' ability to function in the workplace. Workers with higher levels of marital distress have more work-loss (i.e., absence) and cutback (i.e., lost productivity while at work) days than workers in better marriages (Forthofer, Markman, Cox, Stanley, & Kessler, 1996). Taken together with the absenteeism studies, the limited evidence suggests that workers' non-work lives have possible beneficial effects on work-related performance; however, when non-work demands are high, as with an ill child or a poor marriage, performance may suffer. In cases such as these, the persistent imbalance between effort and recovery contributes to physiological or psychological exhaustion that undermines individuals' performance at work. It therefore seems imperative that organisations or employers attempt to address the work-life of their employees.

### **3.5 ORGANISATIONAL POLICIES THAT ADDRESS WORK-LIFE BALANCE**

Globalisation of the economy, ever increasing competition, and the rapid pace of technological change may be seen as responsible for bringing about the ever-increasing pace of change in the working environment on a world wide scale (Joiner, 2001). When one investigates the current South Africa, it appears that continual transformation and rapid learning are required to stay ahead of the competition. High performance organisations have raised their expectations regarding time, energy and work commitment from employees (Burke & Greenglass, 1999). Research suggests that the provision of non-work-friendly work practices may also benefit organisations by improving the retention or recruitment of skilled women, reducing absenteeism, increasing productivity, reducing hiring and retraining costs (Labich,

1991) and providing for easier recruitment and higher productivity. The provision of part time and flexible scheduling is also pursued by organisations wanting to reduce their turnover costs.

From the perspective of employee needs, rather than employer provision, again substantial gaps can be readily identified. Recent surveys indicate that whilst demand for better balance by employees had grown, employers have yet to treat work-life balance as a priority (Bargaining Report, 2003). The evidence suggests that notwithstanding the introduction of flexible working regimes, hours of work are increasing, unpaid overtime and working at home is common, as is evening and weekend shift-working for many employees (Hyman & Summers, 2004). Moreover, work intrusions into time at home can be expressed intangibly, through stress, worry and related conditions.

Organisational work-home policies have been developed to moderate the greater care commitments of employees with non-work responsibilities, thereby assisting employees to simultaneously fulfill their responsibilities both at work and at home. However, a growing body of literature questions whether the provision of these policies alone, inevitably facilitates the effective blending of work and non-work (McDonald *et al.*, 2005).

The Effort-Recovery Model provided adequate theoretical frameworks to understand the experience of different forms of interaction between work and home that may be helpful to design healthier work places and non-work supportive programs (Geurts, Demerouti, & Kompier, 2004), because the model suggests the necessity to consider reciprocal relationships between positive and negative aspects of both work and home in order to achieve a better understanding of work-home interaction.

Sacrificing work time or work assignments because of home is an important modern strategy for achieving balance between work and non-work (Keene & Reynolds, 2005). Workers' ability to make scheduling adjustments at work is one of the most useful non-work-friendly benefits to parents (Keene & Reynolds, 2005), and workers who have control over their work schedules report feeling more successful at balancing work and non-work life (Tausig & Fenwick, 2001).

### **3.6 LINKING STRESSORS, WHI AND THE EFFORT RECOVERY MODEL**

In light of a recession, growing demands for productivity, decreased human resources, and technological changes, stress at home and stress caused by work has become a norm for many employees.

When work demands require too much effort and time (e.g. work overload, long working hours and work stressors) and work resources (e.g. social support and career opportunities) are insufficient to fulfill the job requirements, energy and time resources are depleted. As a consequence, negative load affects build up and hampers one's functioning in the non-work domain (work negatively influencing home). On the other hand, when existing job resources are sufficient to deal with high job demands, individuals may be stimulated to learn from and grow in their job and energy will be mobilised rather than depleted. This will facilitate one's functioning in the non-work domain (work positively influencing home).

The basic assumption is that load effects that have built up during working hours, particularly when work demands have been excessive, spillover to the non-work situation and limit opportunity for recovery during non-working hours (Geurts *et al.*, 2003). Thus, it is assumed that home demands (e.g. household and non-work stressors) that require too much effort and time and lack sufficient resources (for example the lack of support from one's spouse) to fulfill the task requirements, will be associated with negative load effects that hamper one's functioning in the work domain (home negatively influencing work). The existence of home resources (for example domestic help, babysitter and spouse's support) that enable individuals to deal with the demanding aspects in their home situation, will be associated with positive load effects that will facilitate one's functioning at work (home positively influencing work).

If opportunity for recovery is however insufficient after being exposed to workload, this might be the case when demands put on the individual do not cease after working time but continue to exist during the non-working period. As a result of such insufficient recovery process, negative work load effects accumulate and result in

longer term negative effects, such as prolonged fatigue, chronic stress and other psychosomatic complaints (Geurts *et al.*, 2003).

The pivotal role of recovery during the non-working period makes the ER model a relevant perspective for studying stressors, WHI and WHC. We define WHC as a process whereby a worker's functioning and recovery in the home domain were hampered by load-effects that have a built up in the work domain. Therefore, WHC may compromise opportunities to recover from work demands which in turn increase the chances that work demands erode affective wellbeing.

To summarise, stressors are inevitable in both the work and home environment, making it impossible for an individual to ignore these various stressors. The way in which stressors are dealt with, will either positively or negatively influence work or home life.

### **3.7 CHAPTER SUMMARY**

The chapter starts with an introduction to work-life balance and then follows into an official definition of work-life balance. Work-home interaction is defined and four dimensions of the interaction are discussed and defined. Next, the Effort Recovery Model is discussed in order to understand positive and negative work-home interactions. The model serves as a framework for the study. Then we discuss possible organisational policies that address Work-life balance. Lastly, we link all the major constructs discussed in this chapter and the previous chapter to gather a full understanding of the aim of the study as set out in Chapter 1.

## **CHAPTER 4**

### **RESEARCH METHODOLOGY**

The research design, study population and measuring instruments used in the study are described in this chapter. The research procedure followed is discussed as well as the statistical analyses that are carried out. Finally the research hypotheses are stated in terms of the present study.

#### **4.1 RESEARCH DESIGN**

According to Bless and Higson-Smith (1995, p. 63), the term research design has two meanings. Firstly, it is a programme used to guide the researcher in collecting, analysing and interpreting observed facts, and secondly it is a specification of the most adequate operations to be performed in order to attain specific hypotheses under given conditions.

The aim of the research design, according to Mouton and Marais (1993, p. 33), is to plan and structure a given research project in such a way that the eventual validity of the research findings is maximised.

Cross-sectional studies form a class of research methods that involve observation of some subset of a population of items all at the same time, in which, groups can be compared at different ages with respect of independent variables (Gregory, 2000). Cross-sectional designs study the relationship between different variables at a point in time. A cross-sectional survey design will therefore be applicable to use in this research.

#### **4.2 STUDY POPULATION AND SAMPLE**

In this section the study population is discussed. Characteristics of the population, the sampling method and characteristics of the sample are described.

### **4.2.1 Biographical characteristics of the population**

The study population that was identified and used for the study consisted of employees from a large financial institution in South Africa. The study population was all members of the global markets division within this financial institution (N=200).

### **4.2.2 Sampling**

In this study an availability sampling strategy was used to compose the sample. It was decided to include all 200 global market trading members in the financial institution, within the Gauteng region. The researcher decided that only the Gauteng area would take part in this study due to constraints surrounding the accessibility to the respondents. The Global markets members have already been trading for at least a year prior to the onset of the research. Initially, when the questionnaire was distributed to the employees the response was slow. In order to gather the maximum amount of respondents an e-mail reminder was sent to employees. A separate e-mail was sent to all the desk heads asking for assistance in encouraging willing employees to complete the questionnaire.

### **4.2.3 Characteristics of the sample**

72 Global markets members responded to the questionnaires. The biographical characteristics of the sample as obtained from the biographical questionnaire are indicated in Table 4.1

Table 4.1

*Frequency distribution of the sample according to some biographical variables*

<b>Biographical characteristics</b>	<b>N</b>	<b>%</b>
<b>Age</b>		
18-25	13	18.10
26-35	37	51.40
36-45	13	18.10
46 and over	9	12.40
<b>Gender</b>		
Male	32	44.40
Female	40	55.60
<b>Number of dependents</b>		
0	24	33.30
1	20	27.80
2	22	30.60
3 or more	6	8.40
<b>Marital status</b>		
Married	39	54.20
Unmarried	27	37.50
Divorced	5	6.90
Widow	1	1.40
<b>Race</b>		
Black	14	19.40
White	27	37.50
Indian	17	23.60
Coloured	14	19.40
<b>Years experience in occupation</b>		
Less than 2 Years	8	11.10
2-5 years	23	31.90
6-10 years	15	20.80
More than 10 years	26	36.10
<b>Qualifications</b>		
Matric	21	29.20
Diploma	12	16.70
Degree	19	26.40
Postgraduate degree	20	27.80
<b>Number of subordinates</b>		
None	26	36.10
1-10	42	58.30
11 – 20	2	2.80
21 or more	2	2.80

The above information indicates that 37 (51.40%) of the traders involved are between the ages of 26 and 35, of which 40 (55.60%) of the traders involved are females, with only 32 (44.40%) males.

For the purpose of this research dependants are classified as the number of children an employee has in their care. From the table above 24 (33.30%) of the traders involved have no dependents and that 6 (8.40%) of the traders have 3 or more dependants. 54 (20%) of the traders involved are married and that a relatively small number 5 (6.90%) are divorced.

The above information indicates that 27 (37.50%) of the traders involved are white. There are 26 (36.10%) traders that had more than 10 years experience in their occupation and only 8 (11.10%) of the traders have less than two years experience in their occupation.

Only 21 (29.20%) of the traders obtained a matric certificate. The information further indicates that 20 (27.80%) of the traders completed a post graduate degree. The above information revealed that 42 (58.30%) of the traders have 1 – 10 subordinates each, while 2 (2.80%) of the traders involved has more than 21 subordinates.

From the tables it can be seen that not all respondents completed the biographical questionnaire. Where the respondents did not complete a certain section of the biographical questionnaire, these missing values are referred to in the table as the number of respondents that did not indicate a specific category for that section.

The selection of the measuring instruments will now be discussed.

### **4.3 SELECTING THE MEASURING INSTRUMENTS**

The development, administration, scoring, reliability and validity of the quantitative measuring instruments will be discussed next.

#### **4.3.1 Biographical questionnaire**

A self-developed biographical questionnaire was used to obtain information for descriptive purposes and to determine the demographic variables of the sample. The biographical questionnaire (attached as APPENDIX A) was compiled to gather the following information: age, gender, number of dependants, marital status, race, number of years in occupation, qualifications, number of subordinates, and business unit. The biographical questionnaire will provide a general profile of the global markets traders in terms of the dimensions and characteristics mentioned above.

#### **4.3.2 The measurement of work-life balance**

The Survey Work-Home Interference Nijmegen questionnaire (SWING) (attached as APPENDIX B) is one of the first instruments that was developed and validated with insights used from work psychology (Wagena & Geurts, 2000). The SWING is one of the few instruments that provide a relatively broad picture of the work-home interface, addressing both its negative and its positive side. The Effort-Recovery theory was utilised to define various components of work-home interaction.

##### **a) Rationale and development**

The SWING is a 22-item measure developed by researchers in the Netherlands (Wagena & Geurts, 2000). The SWING is used to measure work-home interaction (Geurts et al., 2005). The questionnaire was designed to enhance and extend the existing knowledge on work-home interaction. Originally, the SWING consisted of 27 items, and then changed to 22 items. Five problematic items had to be removed. With regard to the construct validity of the SWING in South Africa, two South African studies obtained similar results. Pieterse and Mostert (2005) extracted four factors by means of exploratory factor analysis. Van Tonder (2005) investigated the construct validity of the SWING by using structural equation modelling (SEM). The questionnaire differentiates between the direction of influence (i.e. influence from work on private life, and vice versa) and the quality of influence (i.e. negative versus positive influence). The SWING thus measures four types of work-home interference, namely (1) negative Work-home Interference (NWHI) (eight items); (2)

positive Work-home Interference (PWHI) (five items); (3) negative Home-work Interference (NHWI) (four items); and (4) positive Home-work Interference (PHWI) (five items).

#### **b) Description**

The questionnaire consists of 22 items. The items of the SWING are divided into a four-response format which varies from 0 (*never*) to 3 (*always*).

#### **c) Administration and scoring**

The questionnaire allows the respondents to read the instructions themselves. They then answer the 22 items by indicating the degree to which the statement complies with their work-home interaction (work-life balance).

The questionnaire is scored by adding the items per each subscale separately to arrive at a score for each subscale. The questionnaire is divided into four subscales namely: negative WHI (item 1 to 8), negative HWI (item 9 to 12), positive WHI (item 13 to 17), and positive HWI (item 18 to 22).

#### **d) Interpretation**

The individual rates each statement according to how often it happens that for e.g., “you are irritable at home because your work is demanding?” The SWING is divided into a four response format which varies from 0 (*never*) to 3 (*always*). The total score of the four subscales of the SWING gives an indication of the respondent’s WHI (either negative or positive). The score of the statements will assist the researcher in determining whether the sample of global market trading professionals experience negative WHI, negative HWI, positive WHI, and positive HWI.

If a 0 rating is the minimum and a 3 rating is the maximum then in relation to the SWING questionnaire and the study, the scores will be interpreted as follows: If individuals score low (i.e. 0) on negative WHI and negative HWI statements, it means that individuals do not agree with the statements that are related to negative

WHI and negative HWI, which implies that the individuals do not experience high degrees of negative WHI and negative HWI. If individuals score a high score (i.e. 3) it means that individuals agree with the statements that are related to negative WHI and negative HWI, which implies that individuals experience high levels of negative WHI and negative HWI.

Conversely, If individuals score high (i.e. 3) on positive WHI and positive HWI, this means that individuals agree with the statements given, which implies that the individuals do experience high degrees of positive WHI and positive HWI. On the other hand if individuals score low (i.e. 0) on positive WHI and positive HWI, it means that individuals do not agree with the statements, which implies that individuals experience no positive WHI and positive HWI.

According to the current study, higher scores will be interpreted as high positive WHI and positive HWI, in contrast would mean lower negative WHI and negative HWI. Therefore a mean score of 0 to 1 would be interpreted as low, and seen in the negative WHI and negative HWI subscale. A mean score of 2 and 3 would be interpreted as high and seen in the positive WHI and positive HWI subscale. Any score between 1 and 2 would be an average score.

#### **e) Validity and reliability**

Geurts et al. (2005) examined the construct validity of the SWING by comparing it to competing models for the relationships among the 22 items. Compared to three other competing models, the proposed model fitted the data best. This model identified the four expected dimensions (i.e. negative WHI, positive WHI, negative HWI and positive HWI).

Geurts et al. (2005) found Cronbach alpha coefficients of the SWING to be acceptable (NWHI = 0.84; PWHI = 0.75; NHWI = 0.75; PHWI = 0.81). Pieterse and Mostert (2005) also found the SWING to be a reliable instrument, where Cronbach alpha coefficients were acceptable for all four factors (NHWI = 0.87; NWHI = 0.79; PWHI = 0.79; and PHWI = 0.76). Van Tonder (2005) found that all the scales were reliable, although the PWHI scale had a Cronbach alpha coefficient of 0.67. Based

on these results, it can be proposed that the SWING has sufficient validity and reliability.

**f) Motivation for choice**

Since no South African instrument that measures negative and positive interaction between work and home is available, the SWING seems to be a psychometrically sound instrument to use and to adapt for South African conditions. The four-factor structure of the SWING was found to be an equivalent and unbiased instrument for English and non-English speaking employees (Geurts *et al.*, 2005).

**4.3.3 Measurement of work and non-work stressors**

Due to the specialised field of global markets trading professionals, a specific questionnaire was developed by the researcher to identify work and non-work stressors of these professionals (attached as APPENDIX C).

**a) Rationale and development**

The researcher conducted unstructured interviews with five random people within global markets. The same questions were asked to all 5 individuals. First question was: “what are your work stressors” and the second question was “what are your non-work stressors”. By means of content analysis, the following themes were identified in terms of work stressors: traveling, traffic, money, and management. The following themes were identified in terms of non-work stressors: financial, family safety, health and personal time. From the themes identified from the unstructured interviews and the literature from chapter 2 and 3 the questionnaire was developed to include two broad sections namely: work stressors and non-work stressors. Work stressors were divided into five categories as per Cooper and Marshall (1976): intrinsic factors of work, individual role in organisation, relationships at work, career development, organisational structure and climate. Non-work stressors were divided into four categories: personal time, money, health, family. Each category consists of a minimum of five questions.

## **b) Description**

The questionnaire consists of 55 items. The items are rated from “strongly disagree” (1), to “strongly agree” (5).

## **c) Administration and scoring**

The questionnaire allows the respondents to read the instructions themselves. They then answer the 55 items by indicating the degree to which the statement complies with their work and non-work stressors.

The questionnaire is scored by adding the items per each subscale separately to arrive at a score for each subscale. The questionnaire is divided into nine subscales, of which five are for work stressors and four for non-work stressors. Work stressors subscales included intrinsic factors at work (items 1 to 7), individual role in the organisation (items 8 to 13), relationships at work (items 14 to 18), career development (items 19 to 25), and organisational structure (items 26 to 31). Non-work stressors subscales included personal time (items 32 to 37), money (items 38 to 43), health (items 44 to 48), and family (items 49 to 55).

## **d) Interpretation**

The total score of the nine subscales of the stressors questionnaire gives an indication of the respondent’s stressors in the work and non-work setting. The questionnaire is divided into a five-response format which varies from 1 (strongly disagree) to 5 (strongly agree). The individual scores each statement according to how strongly he or she agrees or disagrees with the statement. The 55 statements represent important factors that are unique to each of subscales. The rating of each statement will help the researcher to determine what subscales and factors could contribute to increased stress. The low scores could be interpreted as a lower degree of stress that is experienced with regard to a specific stressor; whereas higher scores could be interpreted as indicators that contribute to increased levels of stress with regard to that specific stressor.

Since a minimum score is 1 and a maximum score is 5, individuals that score a low score (i.e. 1) on a specific stressor is indicating that they strongly disagree with the statement and therefore do not regard it to be a contributing stressor. If the individual on the other hand scores a high score (i.e. 5), it implies that the individual strongly agrees with the statement and therefore regards this to be a contributing stressor.

#### **e) Reliability**

Cronbach Alpha Coefficient was used to determine the reliability of the questionnaire. The score was calculated for each subscale of the questionnaire. Work stressors subscales: intrinsic factors at work has an alpha coefficient of 0.666, individual role in the organisation has an alpha coefficient of 0.829, relationships at work has an alpha coefficient of 0.836, career development has an alpha coefficient of 0.860, and organisational structure has an alpha coefficient of 0.845. Non-work stressors subscale: personal time has an alpha coefficient of 0.726, money has an alpha coefficient of 0.772, health has an alpha coefficient of 0.808, and family has an alpha coefficient of 0.860. The questionnaire is therefore a reliable instrument for measuring work and non-work stressors of global markets trading professionals.

#### **f) Motivation for choice**

As discussed earlier, the questionnaire was developed specifically for global markets trading professionals due to the specific job roles and responsibilities they perform. There was no one questionnaire that measured both work and non-work stressors, therefore influencing the development of a questionnaire based on the literature review as well as the one on one interviews conducted.

### **4.4 PROCEDURE**

An in depth literature study was conducted where work stressors, non-work stressors and work life balance of global market trading professionals were conceptualised. A measuring battery was compiled, based on the literature study, and a sample was identified. Approval for the research was obtained from management. The biographical questionnaire, SWING and stressors questionnaire was combined to

form one questionnaire and then converted into web format. The sample was informed about the purpose of the study, the method and the procedure that would be followed and they were asked for their consent for participation. The measuring battery was administered by means of a mass e-mail sent out to the sample by management with the web link attached and a request to complete the questionnaire. The data was electronically captured. The sample was given feedback on their results and the data was integrated.

Ethical considerations were addressed in a cover letter of the questionnaire. Respondents were requested to indicate that they had been informed of the purpose of the study and consented to participate. The aim of the research project was explained to the participants and they were informed of the confidential nature of the data and provided written consent. The test user has a responsibility to ensure that the instrument is valid for the purposes for which they use the tests. Ensuring the ethical use of instruments is therefore a shared responsibility between the test developer and user. Anonymity was guaranteed and participants were free to ask questions.

#### **4.5 STATISTICAL ANALYSES**

Statistical analysis has been carried out with the help of SPSS version 13.0 for Windows (Norusis, 1994).

The quantitative procedures involved the following steps:

Step 1: The two questionnaires were marked separately and the scores obtained by the respondents were calculated.

Step 2: The SPSS system was used. The reliability of the questionnaires is determined respectively by the computation of the Cronbach Alpha Coefficients.

The means, standard deviation, skewness, and correlation were calculated. The means were used to describe the dataset. The mean is the sum of all the scores in the distribution divided by the number of scores in the distribution, this mean will be used to compute the average scores that are obtained for the different components

of the questionnaire (McBurney, 2001). The standard deviation and the minimum and maximum values were used to further describe the dataset. The standard deviation is the (positive) squared root of the variance. The value of the standard deviation indicated how much the scores vary from the mean value. The more the scores vary, the more heterogeneous the sample of the traders will be in terms of their stressors and work-life balance experienced. If the value of standard deviation is small, the sample of the traders is more homogeneous in terms of their experience (Terre Blanche, & Durrheim, 1999).

The skewness for a normal distribution is zero, and any symmetric data should have a skewness near zero (McBurney, 2001). The value reported for skewness equals zero if the distribution is normal. To determine whether or not the value of skewness for a variable differs significantly from zero, you compare it against the standard error for skewness. The standard error for skewness is calculated by taking the square root for 6 divided by your sample size (Tabachnick & Fidell, 2001).

$$Ss = \sqrt{6/N}$$

As a rough guide, a skewness value more than twice its standard error is taken to indicate a departure from symmetry. In this research, the standard error for skewness is determined as 0.28. Therefore, a variable with a skewness value larger than 0.56 (twice the size of the standard error of skewness) would be regarded as skewed.

The Spearman's product-moment correlation indicated the linear correlation between two variables. It is a value between -1 and +1. A calculated  $r$  of 0.86 for instance indicates a strong positive relationship, whereas a calculated  $r$  of -0.12 for instance indicates a weak negative relationship (Terre Blanche, & Durrheim, 1999).

Effect sizes (Cohen, 1988; Steyn, 1999) were used in addition to statistical significance to determine the practical significance of relationships. A cut-off point of  $p = 0.05$  (95% confidence interval level) was set for the statistical significance of the

results. Effect sizes indicate whether obtained results are important, while statistical significance may often show results which are of little practical relevance (Steyn, 1999). A cut-off point of 0.30 (medium effect) (Cohen, 1988) was set for the practical significance of correlation coefficients.

## **4.6 HYPOTHESES**

The hypotheses will now be discussed in terms of the Biographical questionnaire, SWING and Stressors questionnaire

### **4.6.1 Hypothesis 1**

Global market trading professionals who experience more work stressors will experience more negative Work-home Interference.

### **4.6.2 Hypothesis 2**

Global market trading professionals who experience more non-work stressors will experience more negative Home-work Interference.

## **4.7 CHAPTER SUMMARY**

This chapter described the empirical study, commencing with the determination of the design and population. The description of the sample focused on age, gender, number of dependents, marital status, language context, years of experience in occupation, qualifications, and number of subordinates.

The selection of the measuring instruments was discussed and the qualitative data collection was also explained. The statistical processing of the data was outlined. In Chapter 5 the results of the data analyses will be reported.

## **CHAPTER 5**

### **RESULTS**

#### **5.1 INTRODUCTION**

This chapter encompasses the empirical study undertaken to address three specific aims of the research: (1) to determine the work and non-work stressors of global market trading professionals (2) to determine the experience of work-life balance of global market trading professionals (3) to determine the relationship between work and non-work stressors and work-life balance amongst global market professionals in the South African context.

The presentation of the quantitative results commences with a discussion of the power of the study and the reliability of the measuring instruments. The descriptive statistics are discussed by looking at the mean score, standard deviation and skewness of the questionnaires. The relationship between the constructs is investigated by means of the Spearman correlation and the chapter is concluded with a discussion of the results.

#### **5.2 POWER OF THE STUDY**

The power of a study is a very important aspect of any study. By definition, the power of a statistical test is the probability that its null hypothesis ( $H_0$ ) will be rejected given that it is in fact false. Furthermore, it is the number or percentage that indicates the probability that a study will obtain a statistically significant effect (Faul, Erdfelder, Lang & Buchner, 2007). For example, a power of 80 percent (or 0.8) means that a survey or study (when conducted repeatedly over time) is likely to produce a statistically significant result 8 times out of 10. GPower 3.0.10 was used to calculate the power of this study. In order to obtain a power of 0.8 to identify a correlation with an effect size of 0.35 ( $r$ ), the study required 59 respondents. In the end there were 72 respondents.

### 5.3 RELIABILITY OF THE QUESTIONNAIRES

The Cronbach alpha coefficients for the measuring instruments are reported in Table 5.1 - Table 5.3

Table 5.1

*Cronbach alpha coefficients of SWING questionnaire*

<b>Factor</b>	<b><i>Cronbach-alpha coefficient</i></b>	<b><i>Cronbach-alpha before any items were removed</i></b>	<b><i>Item(s) removed</i></b>
Negative WHI	0.910		
Negative HWI	0.688	0.66	19
Positive WHI	0.847	0.78	23
Positive HWI	0.874		

According to Nunnally and Bernstein (1994) a minimum reliability level of 0.7 is required. It can be seen from Table 5.1 that all of the sub-factors of the SWING have acceptable Cronbach alpha coefficients, except for negative HWI. However, even though the Cronbach alpha reported for negative HWI is somewhat less than 0.7 (at 0.688); it is in line with a study done by Van Tonder (2005).

From the table above it is seen that the cronbach-alpha coefficients of two factors increased when items were removed. Positive WHI increased by 0.067 when item 23 was removed and Negative HWI increased by 0.028 when item 19 was removed.

Next we will discuss the cronbach-alph coefficient of work stressors

Table 5.2

*Cronbach-alpha coefficients of Work stressors*

<b>Factor</b>	<b>Cronbach-alpha coefficient</b>	<b>Cronbach-alpha before any items were removed</b>	<b>Item(s) removed</b>
Intrinsic factors at work	0.666		
Individual role in the organisation	0.829	0.819	41 42
Relationships at work	0.836	0.809	50
Career development	0.860	0.819	54 52
Organisational Structure	0.845		

It can be seen from Table 5.2 that all of the sub-factors of the work stressors have acceptable Cronbach alpha coefficients, except for Intrinsic factors at work. However, even though the Cronbach alpha reported for intrinsic factors at work is less than 0.7 (at 0.666), it is still regarded as acceptable in the behavioural sciences according to Hair, Anderson, Tatham, and Black (1998).

According to the table above it is seen that when two items were removed from the individual role in the organisation and career development factors the cronbach-alpha coefficient increased. Relationships at work also revealed a higher cronbach-alpha coefficient when an item was removed.

Therefore, five items were removed from work stressors questionnaire in order to ensure highest cronbach-alpha scores.

Next, the cronbach-alpha coefficient for non-work stressors will be discussed.

Table 5.3

*Cronbach-alpha coefficients of Non-Work stressors*

<b>Factor</b>	<b>Cronbach-alpha coefficient</b>	<b>Cronbach-alpha before any items were removed</b>	<b>Item(s) removed</b>
Personal Time	0.726	0.722	66
Money	0.772		
Health	0.808		
Family	0.860		

The results for the internal consistency of the non-work stressors are in line with the alpha coefficient cut off point of 0.70 as suggested by Nunnally and Bernstein (1994) which is an indication of acceptable levels of reliability.

One item was removed from the personal time factor in order to increase the factor's cronbach-alpha coefficient.

Descriptive statistics will be discussed next.

## **5.4 DESCRIPTIVE STATISTICS**

The mean, standard deviation and skewness were determined for the different questionnaires and their sub-scales. The descriptive statistics of the constructs are shown in Table 5.4 – Table 5.6

### **5.4.1 Work-home Interaction (WHI)**

The descriptive statistics for work life balance is presented in Table 5.4.

Table 5.4

*Descriptive statistics in terms of the sub-scales of Work-home Interaction (SWING questionnaire) for the sample of global market trading professionals*

<b>Factor</b>	<b>N</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Skewness</b>
Negative WHI	72	0.80	0.59	0.81
Negative HWI	72	0.39	0.41	0.79
Positive WHI	72	1.43	0.85	-0.09
Positive HWI	72	1.71	0.90	-0.017

The scores of the global market trading professionals on positive WHI and positive HWI indicate that they experience some degree of positive spillover from their home to their work, and vice versa. They did however score lower on negative WHI and on negative HWI which is indicative of lower degrees of negative spillover from their home to their work environment, and vice versa.

The standard deviation scores represent the average dispersion away from the mean. The standard deviations for these sub-factors indicate that variability was not large in the group of global market trading professionals regarding their work-home interaction scores (McBurney, 2001).

From the table above negative WHI is positively skewed with a score of 0.81, and negative HWI is positively skewed with a score of 0.79, indicating that most of the participants scored lower on these subscales. Positive WHI and positive HWI seems to be normally distributed.

#### **5.4.2 Work stressors**

The descriptive statistics for the work stressors are presented in Table 5.5.

Table 5.5

*Descriptive statistics for the sub-scales of work stressors for the sample of global market trading professionals*

<b>Item</b>	<b>N</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Skewness</b>
Intrinsic factors at work	72	2.66	0.61	0.23
Individual role in the organisation	72	2.52	0.88	0.15
Relationships at work	72	2.47	0.91	0.38
Career development	72	2.35	0.88	0.35
Organisational Structure	72	3.11	0.89	0.04

With regard to the mean scores, the following was found:

The global market trading professionals scored between 2.35 and 3.11 on the various work stressors which they were asked to rate. Higher mean scores reflect higher degrees of stress experienced regarding a specific stressor. The global market trading professionals reported the most stress experienced regarding the organisational structure that they are operating in. Organisational structure relates to the concerns that global market trading professionals may have with regards to their pension, salary increases or bonuses, with regard to their performance or position in the organisation, as well as office politics.

In comparison, the global market trading professionals reported lower levels of stress experienced regarding their career development. Career development relates to their possible feelings of concern regarding opportunities for growth and development, having the desired competencies or related skills to perform their work or being concerned about performing boring or repetitive work. Stress with regard to their career development also involves their need for recognition, their fear of competition within the working environment and a basic feeling of job dissatisfaction that they may experience.

The standard deviation for work stressors ranged between 0.5 to 0.95. The standard deviation scores represent the average dispersion away from the mean, which is indicative that variability in this particular sample was not large.

The data seems to be relatively normally distributed regarding the work stressors of the global market trading professionals.

### 5.4.3 Non-work stressors

The descriptive statistics for the non-work stressors are presented in Table 5.6.

Table 5.6

*Descriptive statistics for the sub-scales of non-work stressors for the global market trading professionals*

<b>Item</b>	<b><i>n</i></b>	<b><i>Mean</i></b>	<b><i>Standard deviation</i></b>	<b><i>Skewness</i></b>
Personal Time	72	2.71	0.73	0.08
Money	72	3.25	0.74	-0.33
Health	72	2.83	0.83	-0.018
Family	72	2.73	0.84	-0.55

In general, the global market trading professionals rated non-work stressors higher in comparison to work stressors. This is indicating that they experience higher degrees of stress regarding aspects in the non-work environment. With regard to the specific non-work stressors, it seems that global market trading professionals experienced the highest degree of stress regarding money. Money as a stressor entails the pressure for individuals to make more money. This can be as a result of more demands within their home environment, their desire to maintain a certain lifestyle or to provide for the basic needs of their family. Global market trading professionals may also experience money as a stressor because it is for them a sign of success and growth within the organisation or allows them to feel like they have more power. Finally, money may display a sense of security for them and their family.

The standard deviation for non-work stressors ranged between 0.6 to 0.85. The standard deviation scores represent the average dispersion away from the mean, which is indicative that variability was not large in this particular sample (McBurney, 2001).

The sample also seems to be normally distributed in terms of non-work stressors.

## **5.5 THE RELATIONSHIP BETWEEN WORK-HOME INTERACTION AND STRESSORS**

As a result of the fact that scores on the SWING was not normally distributed, Spearman's coefficient was used in this study to give an indication of the extent of the relationship between Work and Non-work Stressors Work-life balance. The correlations between these constructs are given in Table 5.7.

Table 5.7

*The Relationship between stressors and Work-life balance (WHI)*

		Negative WHI (NWHI)	Negative HWI (NHWI)	Positive WHI (PWHI)	Positive HWI (PHWI)
Intrinsic factors at work (IFAW)	<i>r</i>	0.46**	0.20	-0.10	-0.09
	<i>p</i>	0.00	0.099	0.423	0.473
Individual role in the organisation (IRIO)	<i>r</i>	0.25*	0.15	-0.14	0.13
	<i>p</i>	0.037	0.220	0.240	0.292
Relationships at work (RAW)	<i>r</i>	0.08	0.12	0.00	0.24*
	<i>p</i>	0.504	0.303	0.976	0.044
Career development (CD)	<i>r</i>	0.12	0.04	-0.13	0.11
	<i>p</i>	0.324	0.728	0.260	0.350
Organisational Structure (OS)	<i>r</i>	0.16	0.20	-0.13	0.10
	<i>p</i>	0.170	0.096	0.291	0.418
Personal Time	<i>r</i>	0.49**	0.19	-0.15	0.00
	<i>p</i>	0.00	0.102	0.223	0.977
Money	<i>r</i>	0.05	0.19	-0.03	0.23*
	<i>p</i>	0.65	0.110	0.784	0.049
Health	<i>r</i>	0.38**	0.28*	-0.10	0.03
	<i>p</i>	0.001	0.019	0.406	0.783
Family	<i>r</i>	0.18	0.44**	-0.07	0.11
	<i>p</i>	0.133	0.000	0.566	0.350

**p ≤ 0.05****\* Practically significant: r = 0.10 (small effect)****\*\* Practically significant: r = 0.30 (medium effect)****\*\*\*Practically significant: r= 0.50 (large effect)**

From the above table it is clear that there are statistically ( $p$ ) significant positive correlations between work-home interaction and some of the work or non-work stressors. The effect sizes range from small ( $>0.10$ ) to medium ( $> 0.30$ ) which is the practical significance. For the purposes of the present study,  $r$ -values that are larger than 0.30 (medium effect) are considered practically significant.

From Table 5.7 it is evident that there is a practically significant positive correlation (medium effect) between negative WHI and intrinsic factors at work, personal time and health as stressors.

The results of the study will be discussed in more detail in the next section.

## **5.6 DISCUSSION**

Previous studies showed that the SWING seems to be a psychometrically sound instrument to use and to adapt for South African conditions (Rost & Mostert, 2007). One study that investigated the psychometric properties of the SWING in the earthmoving equipment industry in South Africa (Pieterse & Mostert, 2005) confirmed the four-factor structure of the SWING and found it to be an equivalent and unbiased instrument for English and non-English speaking employees. The SWING was also found to be a reliable measuring instrument of work-home interaction in the sample of global market trading professionals in this study.

In line with the recommendation of Nunnally and Bernstein (1994) that a minimum reliability level of 0.7 is required for measuring instruments in the behavioural sciences, the stressors questionnaire that was developed particularly for the purposes of this study, was in general found to be reliable for the sample used in this study.

In investigating the relationship between the global markets trading professional's experience of stressors and work-home interaction, it appeared that intrinsic factors at work (as a possible work stressor) are positively correlated to negative work-home interaction. This indicates that as the degree of stress experienced regarding intrinsic factors at work increases, so does the negative work-home interaction of the global

market trading professionals. Intrinsic factors include the pressures to reach the budget of the department as set out by management. There is a possible feeling that age discrimination may exist on the job (either too young or too old). Individuals may feel that their daily starting and ending times are rigid therefore not allowing for flexible working times. The work pace may be perceived as fast pace therefore threatening the individual's overall well-being. Based on the nature of the organisation and the job, the individual may feel pressure to take part in social work gatherings, which then may make the individual feel obligated to attend in order to show commitment to the organisation. Intrinsic factors also include the individual's concern around excessive travel either abroad, or to and from work. Lastly, this may also include the need for the individual to take work home to complete owing to excessive workloads or too many interruptions during the work day. Stress experienced as a result of these intrinsic factors at work is associated with negative consequences for the way in which an individual's work influences his or her time at home. Negative WHI entails work demands that require too much effort and are associated with the building up of negative load effects that may spillover to the non-work domain. Individuals therefore may experience high levels of stress in the working environment which may influence interactions at home (positively or negatively).

How an individual recovers from a negative working experience will determine how home interactions will be approached. Recovery is needed in order to overcome the negative work demands in order for the individual to have normal interaction in the non-work domain. If individuals do not have enough time to recover from their negative influences at work, it may spillover into the non-work domain, therefore creating negative interactions in the home environment. Negative work-home interaction may also have further detrimental effects on health and well-being since it increases, psychosomatic symptoms and physical health complaints (Grandey & Cropanzano, 1999). The current findings are similar to findings of another study by Broadbridge (1999) where retail managers' pressures resulting from factors intrinsic to the job, affected the quality of time they had in their home/social lives. This equally affected those with or without family commitments.

Personal time (as an experienced non-work stressor) has a positive correlation with negative work-home interaction. Personal time as a non-work stressor includes stress related to travel time to and from work, having too few holidays or holidays interrupted by work, long working hours, and the feeling that there is too little time available to spend with family and friends owing to work commitments. As global market trading professionals' personal time decreases owing to work commitments, the individual is likely to be spending less time with family and friends and this will negatively affect home interactions. A lack of personal time does not only influence less time for family but also, influences the available time available for the individual to recover from the negative interaction. Research by Geurts et al. (2003) revealed that a shorter recovery time after a long day at work may result in continued negative WHI and will continue to occur until recovery has been reached. Therefore, it is essential that the individual make the time to recover from negative interactions at work before normal interactions at home can be reached.

Health (as a potential non-work stressor) has a positive correlation to negative WHI. The individual can experience non-work stress regarding health issues which include worrying about personal and future health, not living healthy lifestyle, and living with or understanding a diagnosis of illness, all of which could lead to a negative spillover in the working environment. Health stress (whether personal or family) contributes to the negative interactions at home which overflow into the work environment and vice versa. The essence to ensure that negative spill over from one domain does not affect another domain is to ensure that recovery is reached in each domain where the stress has occurred. The individual needs to ensure sufficient recovery time in the home domain to ensure that the work environment is not affected. The negative interaction from home to work could lead to poor performance. This is in line with research done by Warfield (2001) where non-work responsibilities that elevate effort or undermine recovery opportunities would likely contribute to compromised performance in the workplace. Furthermore, stress experienced regarding one's health may be a secondary consequence of stress related to other factors at work or at home. This is in line with research done by Dua (1994) that shows that general stress and work related stress lead to cardiovascular disease, infections, cancer, headaches, and gastrointestinal diseases.

Family (as a potential non-work stressor) has a positive correlation (practical significance of medium effect) to negative home-work interaction, this means that as family stressors increase so does negative home-work interaction. Family stressors include anxiety about health conditions of family members, anxiety about health and safety of one's spouse, anxiety about one's children's performance at school, arguments with one's spouse or children, worry about one's spouse's fidelity, and finally a concern about care for their children while at work. Global market trading professional's experience of these family stressors can be associated with a negative effect on their working environment and/or performance. This is owing to the spillover that stress experienced at home can have to the work environment. This is in line with research done with Mostert (2009) that stated that high psychological home demands endanger the balance that employed should have between work and home. When individuals are experiencing high work demands, they need recovery time at home to reduce fatigue and other stressful effects of high work demands. However, if they also have high overload and pressure at home, they will possibly experience fewer opportunities to manage home responsibilities and/or have insufficient leisure time to recover from demands faced at work. Therefore, the time at home is used to deal with additional overload and pressure (instead of using the time to recover from negative load reactions that spilled over to the home domain).

From this study, it was found that intrinsic factors at work are associated with negative spillover to the home environment. Personal time and health factors at home are associated with negative spillover to the work environment. Global market trading professionals therefore identified intrinsic factors at work and personal time and health as influencing factors in their experience of work-life balance.

The following research hypothesis formulated in Chapter 4 can be partially accepted based on the results reported in this chapter:

H 1: Global market trading professionals who experience more work stressors will experience more negative Work-home Interference.

H 2: Global market trading professionals who experience more non-work stressors will experience more negative Home-work Interference.

## **5.7 CHAPTER SUMMARY**

In this chapter the results of the empirical study were reported and discussed. The reliability of the SWING and stressors questionnaire was discussed. Thereafter the descriptive statistics were reported. The relationship between stressors (work and non-work stressors) and work-life balance (work-home interaction) was also reported.

In the next chapter conclusions will be made with regards to the literature findings and the empirical investigation. Recommendations for the organisation, as well as for future research will also be discussed.

## **CHAPTER 6**

### **CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS**

#### **6.1 INTRODUCTION**

This chapter focuses on the conclusions, recommendations and limitations of the research. The conclusions are structured in terms of the specific theoretical aims of the research, which are to describe and analyse work-life balance and stressors among global markets trading professionals in the South African context. Furthermore, conclusive comments are made with regards to the relationship between work life balance and stressors amongst global market trading professionals. Conclusions are formulated in terms of the specific empirical aims of the research, which are to evaluate work life balance and stressors, and to evaluate the relationship between stressors and work life balance.

#### **6.2 CONCLUSIONS**

Conclusions will be made with regard to the specific literature objectives and the empirical findings obtained in the present study. Concluding comments regarding stressors, work-life balance and results of the research follows.

##### **6.2.1 Stressors**

According to Sauter et al. (1990), stressors are defined as external events such as a difficult relationship in the workplace that contributes to the experience of stress. It is the physical and psychological stimulus to which an individual responds (Quick, Quick, Nelson, & Hurrell, 1997). For the purpose of this research, stressors were divided into two major categories namely: work and non-work stressors.

Work stressors are defined as the characteristics of the workplace that pose a threat to the individual. The threat could be either positive or negative. Each organisation and occupation is unique in the stress individual's experience. Therefore stressors may vary in various working environments. Cooper and Marshall's (1978) research

was used to identify six categories of possible work stressors namely: intrinsic factors of work, the individual's role in the organisation, relationships at work, career development, organisational structure and climate, and work-home interaction.

Non-work stressors are defined as pressures that an individual experiences within the home environment that disturbs the individual's daily functioning (Jones *et al.*, 1988). Each and every individual may experience stress at home which may be caused by various stressors. Non-work stressors could include financial problems, family illnesses, child care, or a cheating spouse. These stressors will be perceived differently by each individual (Emmons & McCullough, 2003).

The consequences of work and non-work stressors can have a negative impact on the individual and the organisation. For the individual it could mean health problems and for the organisation it could mean loss of financial turnover (Ben-Bakr, Al-Shammari, & Jefri, 1995; Beehr & Newman, 1978). Any consequence of stress is dependent on how the individual copes with the stressful situation (Beehr & Newman, 1978).

### **6.2.2 Work-life balance**

The concept of work-life balance is best defined as the balance an individual places between work life and family life (Jacobs, Mostert, & Pienaar, 2008). Work-home interaction forms the basis for understanding work-life balance because individuals need to understand the interactions between work and home in order to gain a balanced life. For each individual the interactions between work and home will differ depending on the situations and stressors they are exposed to. A positive work experience could have a positive spillover effect into the home environment (positive WHI) or a negative work experience could have a negative spillover effect to the home environment (negative WHI). Reversely, a positive home experience could have a positive spillover effect to the work environment (positive HWI) or a negative home experience could have a negative spillover effect to the work environment (negative HWI) (Grzywacz & Marks, 2000). The interactions between work and home and their effect on the individual can best be discussed in terms of the Effort Recovery Model.

The effort recovery model explains how negative situations or experiences at work can negatively affect the individual's home environment (Geurts *et al.*, 2003). This is due to the lack of recovery time available for the individual to recover from the negative work load. The lack of recovery time for individuals could have other negative consequences such as health problems and increased negative work-home interactions (Geurts, Rutte & Peeters, 1999; Grandey & Cropanzano, 1999). The individual needs to identify the most suitable means of recovery in a non-work environment, as recovery in a working environment is difficult. This could be due to high job demands and time availability. The role of recovery plays a crucial role in enhancing positive WHI. This means the individual is able to manage and support their energy resources rather than deplete them (Sonnentag, 2001).

It is best said the employees need to take control of their life in the work and non-work environment, in order for balance to be achieved. This could be assisted by understanding the stressors faced at work and the stressors faced at home, and then making decisions on how one can better manage these stressors through balance and support.

### **6.2.3 Linking stressors and work-life balance**

Research by Geurts *et al.* (2003) describes the relationship between work and home demands (work and non-work stressors) and work-life balance as follows: when work demands require too much effort and time (e.g. work overload, long working hours and work stressors) and work resources (e.g. social support and career opportunities) are insufficient to fulfill the job requirements, energy and time resources are depleted. As a consequence, work stressors affects build up and hampers one's functioning in the non-work domain. Conversely, home demands (non-work stressors) that require too much effort and time and lack of sufficient resources (such as support from one's spouse) to fulfill the task requirements, will be associated with negative load effects that hamper one's functioning in the work domain. It therefore seems imperative to understand the specific work and non-work stressors of global market trading professionals and how this might impact on work life balance.

#### **6.2.4 Results of the research**

The following conclusions can be drawn from the empirical results of this research:

The aim of the research was to identify and evaluate the possible relationship between stressors (work and non-work stressors) and work-life balance (WHI). The results of the present study revealed practically significant (small to medium effect) positive correlations between some stressors and work-home interactions. It was found that intrinsic factors at work are associated with negative spillover to the home environment. Global market trading professionals who experience stress relating to pressures to reach a budget are likely to experience a negative spillover to the home environment. The pressures to take part in social gatherings at work, age discrimination in the organisation, rigid or excessive working and travelling hours, as well as working in a fast-paced environment are also likely result in a negative spillover to the home environment. These individuals who experience stress relating to these intrinsic factors at work are therefore at risk of their work negatively affecting their interactions with their family, spouses and children at home.

On the other hand, personal time and health factors at home were associated with negative spillover to the home environment. If the demands at work begin to grow owing to stressors regarding personal time and possible health issues, this may result in negative interactions in the home environment. The individual may have no time to recover from demands at home, and therefore the work environment may be negatively affected, or vice versa.

Health as a stressor is based on how the individual interprets and accepts health problems and diagnosis of family, friends and him or herself. It is to be expected that bad news regarding health issues will cause stress. Global market trading professionals' health stress appears to be affecting their family interactions negatively, as well as negatively affecting their work.

Global market trading professionals therefore identified intrinsic factors at work, personal time and health as influencing factors in their experience of work-life balance. Possible consequences of this for the individual include health problems

and unnecessary internal conflicts. For the organisation the individual could start to perform poorly, resulting in increased costs owing to errors, and possible absenteeism.

To conclude, it seems that the global market trading professionals do in fact experience stress in the work place as well as in the home environment. The sample assisted the researcher in identifying the major stressors in a trading professional's environment. The stressors identified are indicators that the individuals experiences more stress in the workplace, than in the home environment but the stressors from one domain has the potential to cause stress in the other domain, if not managed. It seems that in order to achieve work-life balance, global market trading professionals should address the demands associated with the intrinsic factors at work, their personal time and health.

### **6.3 LIMITATIONS**

The following are limitations to this research:

The sample size was limited. Furthermore, availability sampling was used in this study rather than random sampling. The sample consisted of employees from only one organisation, and therefore the findings from this study may not be representative of stressors and work-life balance of employees in other organisations.

Another limitation of this study can be the use of a self developed stressors questionnaire. Even though the questionnaire was reliable, no other reported data was available to compare the results of this sample with.

### **6.4 RECOMMENDATIONS**

Recommendations will be discussed in two sections. Recommendations for the organisation and recommendations for future research.

#### **6.4.1 Recommendations for the organisation**

It is important for the organisation to recognise that both individual and organisational level interventions are required to ensure effective stress management. The following specific recommendations are made:

Global market trading professionals identified intrinsic factors at work as the highest contributing stressor to negative WHI. Management needs to create awareness around the stress management courses available to all staff members to help cope with these stressors of the job. The researcher recommends that the course should include extra modules in order to assist the employee deal with the identified stressors. This may include strategies on how to manage individual's pressures surrounding reaching budgets (based on our current economic situation). Help the employee manage the expectations surrounding attending social gatherings in the working environment. Coaching individuals on time management in order for the individual to complete tasks in working hours. Furthermore, ensure that employees have a clear understanding around the responsibilities and expectations involved in a specific role (which could include excessive traveling). Lastly, the course needs to include strategies on how employees manage stress in a fast paced environment. Flexible working schedules may be introduced to certain areas within the global markets trading department in order to enhance these employees use of personal time.

When it comes to dealing with personal issues relating to health problems or concerns, staff needs to be re-assured of the facilities available in the organisation, e.g. the employee assistance programme.

#### **6.4.2 Recommendations for future research**

The following recommendations are made on the basis of the findings:

Further research on stressors, both work and non-work stressors specifically in the global markets trading environment within South Africa should be encouraged in

order to identify the unique stressors of global markets trading professionals in other financial institutions as well. But also, due to the unique nature of business, organisations, human resources and the economy in this country, benchmarking across South African organisations would also provide useful information to industrial psychologists and managers.

Further research is necessary regarding the relationships between stressors and work-life balance. This could be accomplished with conducting interviews rather than questionnaires, in order to gather in depth information regarding the specific experiences of these stressors and how it may be affecting each of the different environments that they operate and live in.

## **6.5 FINAL SUMMARY AND CONCLUSION**

On the basis of the problem statement, the hypothesis outlined for this study intended to indicate the relationship between stress and work-life balance.

In this chapter, the conclusions and the limitations of the research were presented in relation to the literature review and empirical objectives. Finally, the chapter concluded with recommendations with regard to the empirical study and the work-life balance of global market trading professionals.

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## **APPENDIX A**

### **GENERAL INFORMATION AND BIOGRAPHICAL QUESTIONNAIRE**

## GENERAL INFORMATION

This questionnaire uses ActiveX controls and scripts to send the answers to a secure server. No other information is collected from your computer. Depending on the settings of your internet browser a yellow information bar may appear. Please allow the use of mentioned controls and scripts for this session.

Welcome to the stressors and work life balance questionnaire.

Michelle de Sousa is a student at the University of South Africa. She is currently conducting a questionnaire based survey as part of the fulfillment of the requirements for her Masters degree in Industrial and Organisational Psychology.

The purpose of the questionnaire is to determine the relationship between work and non-work stressors and work-life balance amongst global market trading professionals within XY Bank.

All information gathered will be confidential and participation is entirely voluntary. NO reporting or feedback provided in respect of this research study will refer to any specific individual.

The questionnaire consists of three sections: namely biographical information, stressors questionnaire and the work life balance questionnaire.

In order to complete the questionnaires entirely and correctly please choose only one answer per question.

If you have any questions about the survey, please contact Michelle de Sousa.

If you would like to participate in this research please tick in the appropriate block.

I accept the conditions of this research and consent to the voluntarily participation thereof.

YES	<input type="radio"/>
NO	<input type="radio"/>

## BIOGRAPHICAL INFORMATION

Please write your particulars in the appropriate space and tick on those particulars that are applicable to you.

1. Date (yyyy/mm/dd)

2. Surname and Initials

2b. E-mail address

3. Gender

Male	<input type="radio"/>
Female	<input type="radio"/>

4. Age

18 - 25 years	<input type="radio"/>
26 - 35 years	<input type="radio"/>
36 - 45 years	<input type="radio"/>
46 - 55 years	<input type="radio"/>
56 - 65 years	<input type="radio"/>

### 5. Race

White	<input type="radio"/>
Black	<input type="radio"/>
Indian	<input type="radio"/>
Coloured	<input type="radio"/>
Other	<input type="radio"/>

### 6. Dependents

1	<input type="radio"/>
2	<input type="radio"/>
3	<input type="radio"/>
4	<input type="radio"/>
5	<input type="radio"/>
More than 5	<input type="radio"/>

### 7. Marital status

Married	<input type="radio"/>
Unmarried	<input type="radio"/>
Divorced	<input type="radio"/>
Widower	<input type="radio"/>
Widow	<input type="radio"/>

### 8. Qualifications

Matric	<input type="radio"/>
Diploma	<input type="radio"/>
Degree	<input type="radio"/>
Postgraduate degree	<input type="radio"/>

### 9. Years experience in job

Less than 2	<input type="radio"/>
2 - 5 years	<input type="radio"/>
6 -10 years	<input type="radio"/>
More than 10 years	<input type="radio"/>

9b.Number of subordinates

1 - 10	<input type="radio"/>
11 - 20	<input type="radio"/>
21 - 30	<input type="radio"/>
31 - 40	<input type="radio"/>
More than 40	<input type="radio"/>

10. Please select your business unit

Bond Trading	<input type="radio"/>
Commodities Trading	<input type="radio"/>
Credit	<input type="radio"/>
Equities	<input type="radio"/>
Foreign Exchange	<input type="radio"/>
Interest Rate Derivatives	<input type="radio"/>
Money Markets	<input type="radio"/>
Primary Markets	<input type="radio"/>
Share Trading	<input type="radio"/>
Structured Solutions	<input type="radio"/>

## **APPENDIX B**

### **WORK-HOME INTERACTION (SWING) QUESTIONNAIRE**

Please read the following statements and choose the response that is most appropriate to you.

How often does it happen that...

	<b>Never</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
11. You are irritable at home because your work is demanding?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. You find it difficult to fulfill your domestic obligations because you are constantly thinking about work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. You have to cancel appointments with your spouse/family/friends due to work-related commitments?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Your work schedule makes it difficult for you to fulfill your domestic obligations?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. You do not have the energy to engage in leisure activities with your spouse/family/friends because of your job?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. You have to work so hard that you do not have time for any of your hobbies?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Your work obligations make it difficult for you to feel relaxed at home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Your work takes up time that you would have liked to spend with your spouse/family/friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. The situation at home makes you so irritable that you take your frustration out on your colleagues?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. You have difficulty concentrating on	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

your work because you are preoccupied with domestic matters?				
21. Problems with your spouse/family/friends affect your job performance?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. You do not feel like working because of problems with your spouse/family/friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. After a pleasant working day/week, you feel more in the mood to engage in activities with your spouse/family/friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. You fulfill your domestic obligations better because of the things you have learned on your job?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. You are better to keep appointments at home because your job requires this as well?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. You manage your time at home more efficiently as a result of the way you do your job?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. You are better able to interact with your spouse/family/friends as a result of the things you have learned at work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. After spending a pleasant weekend with your spouse/family/friends, you have more fun in your job?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. You take your responsibilities at work more seriously because you are required to do the same at home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. You are better able to keep appointments at work because you are required to do the same at home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. You manage your time at work more efficiently because at home you have to do that as well?	○	○	○	○
32. You have greater self-confidence at work because you have your home life well organized?	○	○	○	○

## **APPENDIX C**

### **STRESSORS (WORK AND NON-WORK) QUESTIONNAIRE**

Please read the following statements and choose the response that is most appropriate to you.

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither agree nor disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
33. I feel pressured to reach budget	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. I feel that age discrimination exists in my organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. I feel that my starting and ending times are rigid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. I feel that my work pace is too fast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I feel there is pressure to take part in social work gatherings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. I feel that my job involves excessive travel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. I feel that I often take work home to complete	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. I feel that I perform roles that I shouldn't	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. I feel that I do not know my job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. I feel that I am not suited to my job role	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

43. I feel that I do not get to participate in decision-making	<input type="radio"/>				
44. I feel that I do not have adequate staff and other resources	<input type="radio"/>				
45. I feel responsible for too many people	<input type="radio"/>				
46. I feel uncomfortable talking to line managers	<input type="radio"/>				
47. I feel that my boss gives little feedback about my work	<input type="radio"/>				
48. I feel that I do not trust co-workers	<input type="radio"/>				
49. I feel that communications at work is poor	<input type="radio"/>				
50. I feel that I have a great relationship with my line manager	<input type="radio"/>				
51. I feel that there is little chance for growth	<input type="radio"/>				
52. I feel that there is too much competition at work	<input type="radio"/>				
53. I feel that work is boring or repetitive	<input type="radio"/>				
54. I feel that I do not have the competencies or skills to perform the work	<input type="radio"/>				
55. I feel that I don't like	<input type="radio"/>				

the work that I do					
56. I feel that I am in a dead-end job	<input type="radio"/>				
57. I feel my work goes unrecognized	<input type="radio"/>				
58. I feel worried about my pension	<input type="radio"/>				
59. I feel concerned about low salary increases	<input type="radio"/>				
60. I feel concerned about not receiving bonuses	<input type="radio"/>				
61. I feel concerned about being pushed out of my job	<input type="radio"/>				
62. I feel concerned about how errors could impact on my future in the organisation	<input type="radio"/>				
63. I feel that there is too many politics in my organisation	<input type="radio"/>				
64. I feel that I work too many hours	<input type="radio"/>				
65. I feel that my work commute is too long	<input type="radio"/>				
66. I feel that I work too many weekends	<input type="radio"/>				
67. I feel that I take too few vacations	<input type="radio"/>				
68. I feel that my time is not my own on vacation	<input type="radio"/>				

69. I feel that there is too little time for me, family and friends	<input type="radio"/>				
70. I feel pressure to make more money	<input type="radio"/>				
71. I feel that I need more money to provide for basic needs of my family	<input type="radio"/>				
72. I feel that I want money to reach/maintain a certain lifestyle	<input type="radio"/>				
73. I feel that I have to make more money as a sign of success	<input type="radio"/>				
74. I feel I have to make more money to provide me with more power	<input type="radio"/>				
75. I feel that I need more money so I can feel that I am secure	<input type="radio"/>				
76. I feel concerned and worried about my personal health	<input type="radio"/>				
77. I feel that I have not been living a healthy lifestyle	<input type="radio"/>				
78. I feel that I often worry about my future health	<input type="radio"/>				
79. I feel that I am worried about a health	<input type="radio"/>				

condition for which there has been no diagnosis					
80. I feel that I am worried about a health condition for which there has been a diagnosis	<input type="radio"/>				
81. I feel that I am worried about health conditions of family members	<input type="radio"/>				
82. I feel that I worry or am worried about my children's school performance	<input type="radio"/>				
83. I feel that I worry or am worried about my spouse's fidelity	<input type="radio"/>				
84. I feel that I struggle and worry about childcare for my children	<input type="radio"/>				
85. I feel that I often fight with my spouse	<input type="radio"/>				
86. I feel that I often fight with my children	<input type="radio"/>				
87. I feel that I worry about the health and security of my/spouse parents	<input type="radio"/>				