Job insecurity, resilience and general health of motor-trade employees.

Rosalie Judy Leach
REMARKS

The reader is reminded of the following:

The references, as well as the editorial style as prescribed by the publication Manual (4th edition) of the American Psychological Association (APA) were followed in this mini-dissertation. This practice is in line with the policy of the Industrial Psychology Programme at the North-West University.

This mini-dissertation is submitted in the form of a research article.
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SUMMARY

Title: Job insecurity, resilience and general health of motor-trade employees

Keywords: Job insecurity, resilience, general health, motor-trade

Individuals employed within the South African workforce are finding themselves operating in an increasingly uneven playing field. The global marketplace is continually amplifying the already stiff competition, forcing employers to reduce the security they are able to offer their workers, in an effort to offset their profit margins. Examining and consequently addressing these private sector employees’ functioning in those spheres that may influence their health and consequent work performance, which in turn affects the performance of the industry - and therefore the economy - is thus essential.

The objective of this study was to investigate the relationship between job insecurity, resilience and general health of personnel \(N = 207\) employed within the motor-trade industry and to examine differences among the job insecurity, resilience and general health levels of different demographic groups. A cross-sectional survey design was implemented. The constructs were measured by means of the Job Insecurity Scale (JIS), the Resilience Scale (RS) and the General Health Questionnaire (GHQ). The research method for the article consists of a concise literature review, followed by an empirical study. Cronbach alpha coefficients, inter-item correlation coefficients and confirmatory factor analysis were used to determine the validity and reliability of the measuring instruments. Descriptive statistics were used to analyse the data and Pearson product moment correlation coefficients, as well as regression analyses were used to examine the relationships between the constructs employed in this research.

No significant differences were found to exist based on biographical characteristics regarding job insecurity, resilience and general health. Job insecurity and the somatic symptoms, social dysfunction and severe depression subscales of the general health measure were found to be statistically significantly negatively correlated. Statistically significant correlations were displayed between resilience and general health, as well as all of its subscales. Resilience was shown to play a moderating role in the
relationship between job insecurity and social dysfunction (and not in any of the other
general health dimensions), as results indicated that the social functioning of
individuals measuring high on resilience was less affected by job insecurity than those
individuals measuring low on resilience.

Conclusions are made, limitations of the current research are discussed and
recommendations for future research are put forward.
**OPSOMMING**

**Titel:** Werksonsekerheid, veerkragtigheid en algemene gesondheid van werknemers in die motorhandelindustrie

**Sleutelwoorde:** Werksonsekerheid, veerkragtigheid, algemene gesondheid, motorhandelindustrie

Suid-Afrikaanse werksnemers bevind hulself in 'n toenemend ongelyke speelveld. Aangesien die globale mark konstant besig is om die reeds hewige kompetisie te versterk en markte poog om hul winsmarges te verhoog, lei dit noodgedwonge tot 'n afname in die sekuriteit wat werkgewers aan hul werknemers kan bied. 'n Onderzoek na die funksionering van werknemers in die private sektor sou dus daartoe kon lei dat die situasie aangespreek word, veral in daardie areas wat werknemers se gesondheid en gevolglik ook hulle werkprestasie beïnvloed. 'n Studie van hierdie aard sou dus as noodsaaklik geag kon word, aangesien sodanige areas noodwendig 'n invloed op die industrie en gevolglik ook op die ekonomie het.

Die doelstelling van hierdie studie was om die verhouding tussen werksonsekerheid, veerkragtigheid en algemene gesondheid van personeel ($N = 207$) in diens van die motorhandelindustrie te ondersoek, asook om die verskille ten opsigte van werksonsekerheid, veerkragtigheid en algemene vlakke van gesondheid binne verskillende demografiese groepe te ondersoek. 'n Deursnee-opnameontwerp is gebruik. Die konstrukte is gemeet deur middel van die Werksonserheidskaal, die Veerkragtigheidskaal en die Algemene Gesondheidsvraelys. Die navorsingsmetode wat in die artikel gevolg is bestaan uit 'n bondige literatuuroorsig, gevolg deur 'n empiriese studie. Cronbach alfa-koeffisiente, inter-itemkorrelasiekoeffisiente en bevestigende faktoranalise is gebruik om die geldigheid en betroubaarheid van die meetinstrumente te bepaal. Beskrywende statistieke is gebruik om die data te analiseer en Pearson-produkmomentkorrelasiekoeffisiente, sowel as regressie-analise is gebruik om die verhoudings tussen die konstrukte in die studie te ondersoek.

Geen beduidende verskille is gevind ten opsigte van biografiese eienskappe met betrekking tot werksonsekerheid, veerkragtigheid en algemene gesondheid nie. Daar is
gevind dat werksonsekerheid en die subskale van somatiese simptome, sosiale disfunksie en erge depressie in die algemene gesondheidsmeting statisties-beduidend negatief gekorreleer het. Statisties-beduidende korrelasies is gevind tussen veerkragtigheid en algemene gesondheid, sowel as al die subskale daarvan. Veerkragtigheid het 'n modererende rol gespeel in die verhouding tussen werksonsekerheid en sosiale disfunksie (en nie in enige van die ander dimensies van algemene gesondheid nie), aangesien die resultate daarop gedui het dat die sosiale funksionering van individue met hoë veerkragtigheidsvlakke minder beïnvloed is deur werksonsekerheid as in die geval van individue met lae vlakke van veerkragtigheid.

Gevolgtrekkings is gemaak, beperkinge van die navorsing is uitgewys en aanbevelings vir toekomstige navorsing word aan die hand gedoen.
CHAPTER 1

INTRODUCTION

This mini-dissertation is concerned with job insecurity, resilience and general health of motor-trade employees.

In this chapter, the problem statement is discussed, and an outline is provided of the research objectives, research method and chapter division.

1.1. PROBLEM STATEMENT

South African companies are confronted by the full effects, today more than ever, of changes in the world economy, technological development, and intense international competition. In order to survive in these tough consumer markets, organisations are required to be inventive in retaining customers whilst determining sources of cost saving. Corporate restructuring, mergers, the altering of the traditional employment contract, downsizing or even plant closures and mass redundancies are a means to this end (De Witte, 1999). Such sources of cost savings include economies of scale, technology, access to raw materials, and salaries and wages; the latter usually being the largest source of immediate cost-saving abilities (Marais & Scheepers, 1996). It is no wonder that workers in advanced industrial economies now find themselves thrust into an unprecedentedly competitive, unprotected and unpredictable labour market (Mughan, Bean & McAllister, 2002).

Job insecurity may be defined in different ways, and consensus on a definition has not as yet been reached (De Witte, 1997; 1999; Kinnunen & Mauno, 2000). According to De Witte (1997, 1999) job insecurity relates to people in their work context who fear that they may lose their jobs and become unemployed, with such feelings being intensified by the growing emphasis on more flexible employment contracts. Job insecurity is demonstrated in labour markets where organisations are downsizing or where there is an oversupply of jobs in a particular area (Feather & Rauter, 2004). Nickell, Jones, and Quintini (2002) argue that insecurity can rise in a world
where jobs remain secure precisely because wages have become more ‘flexible’. Because of the increase in job insecurity in organisations, as well as its association with decreased job satisfaction, organisational commitment and performance, job insecurity as an individual stressor requires attention (Kreitner & Kinicki, 2004). Employees have good reason to feel insecure (Ashford, Lee, & Bobko, 1989).

Van Vuuren (1990) propounds that job insecurity consists of the following three components: firstly, job insecurity is a subjective experience or perception, as different employees may perceive the same situation in a different manner. Secondly, it refers to uncertainty about the future; and lastly, doubts concerning the continuation of the job as such are central to the concept. With reference to the global viewpoint, job insecurity may be defined as signifying the threat of job loss or discontinuity (Caplan, Cobb, French, Van Harrison & Pinneau, 1980).

For the purposes of this study, job insecurity will be viewed according to the definition of Greenhalgh and Rosenblatt (1984), who view job insecurity as being multi-dimensional, consisting of five components. The first four components represent the “severity of the threat”, which may relate to various features of a job or to the entire job. The first component of the job insecurity construct is a perceived threat to various job features such as opportunities for promotion and freedom in terms of work schedule. The second component relates to the perceived importance of each feature to the individual. Researchers would multiply the perceived threat to each feature by its importance and then sum the scores for each feature to obtain an overall severity rating. According to Greenhalgh and Rosenblatt (1984), this formula is based on the assumption that a threat to an important job feature will contribute more to job insecurity than a minor feature. The third component is the perceived threat of the occurrence of various events that would negatively affect an individual’s total job, with the fourth component relating to the importance attached to each of these potentialities. Once again, components three and four would be combined by multiplication, with the sum providing a weighted rating of the severity of the threat of a total job. The fifth and final component of the job insecurity construct is powerlessness, which relates to an individual’s ability to counteract threats to the job or job features. An individual low on powerlessness should not experience job insecurity to be as
severe as a person measuring high on powerlessness. Powerlessness is multiplied by the perceived severity of the threat to generate a measure of overall perceptions of job insecurity.

Job insecurity is significant due to the fact that it is critical in influencing not only individual employees, but also work-related outcomes; including employee health, physical and psychological well-being, employee turnover, job satisfaction and organisational commitment (Yousef, 1998). Greenhalgh and Rosenblatt (1984) support this notion by stating that the impact of job insecurity on individual employees might erode the effectiveness of the organisation as a whole when productivity decreases, to the extent of diminishing the company’s competitive strength. The risk of further redundancies is increased, in turn amplifying feelings of job insecurity.

Yousef (1998) found that employees’ age, marital status, job level, monthly income, tenure in the present job, tenure in the company, and an organisation’s activity, contribute significantly to variations in job satisfaction and security among employees. Wissing and Van Eeden (2002) support the above by stating that variables such as age, gender and ethnic/cultural context influence the manifestation of psychological well-being. It is thus expected that different levels of job insecurity, resilience and health will manifest differently among different demographic groups.

Mallak (1998) defines resilience as the ability of an individual or organisation to expeditiously design and implement positive adaptive behaviours matched to the immediate situation, while enduring minimal stress. Strümpfer (2001) agrees with this by defining resilience as a pattern of psychological activity which consists of a motive to be strong in the face of inordinate demands, which energises goal-directed behaviour to cope and rebound, as well as accompanying emotions and cognitions.

Resilience remains latent until activated, and is therefore situationally contextualised by becoming temporarily activated by passing situational influences (Fleming, 1982; McClelland, 1985; Mischel & Shoda, 1995; 1998). According to Kim-Cohen, Moffitt, Caspi, and Taylor (2004), resilience is partly heritable, and protective processes operate through both genetic and
environmental effects. From the literature it is evident that resilience is both state-like and trait-like; and therefore although resilience is heritable, it is also affected by the external constituencies. The context demanding resilience from a particular individual is co-produced by issues such as gender, age, genetic constitution, present and past levels of physical and psychological health, personality variables, physical strength and fitness, bodily intactness, family situation and role, socio-economic and educational status, past history of trauma and adversity, economic, political/legal systems and conditions, and global variables (Strümpfer, 2001). It is likely, as depicted by the above, that job insecurity may well be an issue causing poorer general health to manifest itself in individuals and that a person’s level of resilience may have an impact on the severity of the health outcomes of job insecurity.

In this research, general health is conceptualised by the theory of Goldberg and Hillier (1979) who identify four concepts, namely, (1) somatic symptoms, (2) anxiety and insomnia, (3) social dysfunction, and (4) severe depression. Research has consistently found job insecurity to be linked to impaired employee well-being, and it has been indicated that physical health problems and mental distress increase proportionately with the level of job insecurity experienced (Ashford et al., 1989; Lim, 1996; Hartley, Jacobson, Klandermans & Van Vuuren, 1991). An analysis of data retrieved from a Canadian National probability sample conducted in 1994 shows that high levels of job insecurity are linked to lower self-rated health and increased distress (McDonough, 2000). In a South African study in a government organisation, Viljoen (2004) found that job insecurity is associated with increased somatic symptoms, social dysfunction, anxiety/insomnia and severe depression.

According to the affective events theory perspective, work environment features and events are subject to cognitive appraisal of whether, and to what extent, such work events and features will aid or obstruct the attainment of goals (Probst, 2002). If such goal obstruction is identified and there is a perceived imbalance between the environmental demands and the employee’s ability to cope with those demands - based on aspects such as dispositions and available resources - stress results. Resultant strain may become evident at a physiological, behavioural or psychological level, or any combination of these. For this reason, when stress exists, work attitudes and affective reactions are expected to be negative (Probst, 2002). Two additional strains that can
result from stress are physical and mental health outcomes, which are expected to be mediated by work attitudes and affective reactions, but may also occur directly. From this perspective, it can be expected that job insecurity will be associated with decreased general health, and that an individual's level of resilience will affect the stressor-strain outcome relationship.

The theoretical framework of this research is based on the model of effort-reward imbalance (ERI) at work. In this model, chronic work-related stress is identified as non-reciprocity or an imbalance between high efforts spent and low gain levels received (Siegrist et al., 2004). The experience of a lack of reciprocity in terms of high 'costs' and low 'gains' elicits negative emotions in exposed people that are paralleled by sustained strain reactions in the autonomic nervous system, due to the fact that the recurrent experience of reward deficiency in a core social role impairs successful self-regulation (Siegrist, 2000; Siegrist et al., 2004). Siegrist et al. (2004) state that thus, in the long run, the imbalance between high effort and low reward at work increases illness susceptibility as a result of continued strain reactions.

This research is valuable as limited research has been conducted regarding job insecurity and its consequences in the motor trade, as well as the role of resilience in the stressor-strain relationship. Furthermore, results obtained can be used in future training and development programmes. Limited job insecurity research in South African has made use of a multidimensional measure of job insecurity, as research tends to rather use a global job insecurity measure, which only focuses on the prospect of job loss and does not include aspects such as loss of promotional prospects. The present research will be undertaken in motor-trade dealerships within Gauteng, and the respondents will include the entire population of motor and parts salespersons, mechanics, administrative staff and management. Job insecurity plays a prevalent part in the life of the motor industry, where stiff competition forces down profit margins and job availability. The aim of the research is to examine the relationship between job insecurity, resilience and general health; and to determine whether differences exist with regard to the job insecurity, resilience and general health levels of different demographic groups.

The following research questions arise on the basis of the description of the research problem:
• How are job insecurity, resilience, general health and the relationship between these constructs conceptualised in the literature?
• What are the relationships between job insecurity, resilience and general health of motor-trade employees?
• Do demographic groups differ regarding their levels of job insecurity, resilience and general health?
• Can job insecurity predict general health of motor-trade employees?
• Does resilience play a role in the relationship between job insecurity and general health?

1.2.  RESEARCH OBJECTIVES

The research objectives consist of general and specific objectives.

1.2.1  General objective

Based upon the above formulation of the problem, the general objective of this research is to establish the nature of the relationship between job insecurity, resilience and general health of motor-trade employees and to determine whether demographic groups differ in terms of their levels of job insecurity, resilience and general health.

1.2.2.  Specific objectives

The specific research objectives are:

• To conceptualise job insecurity, resilience, general health and the relationship between these constructs from literature;
• to determine the relationships between job insecurity, resilience and general health of motor-trade employees;
• to determine how job insecurity, resilience and general health differ with regard to gender, culture, age, qualifications and tenure categories in the motor-trade;
• to determine whether job insecurity can be used to predict general health of motor-trade employees; and
• to determine whether resilience plays a role in the relationship between job insecurity and general health.

1.3. RESEARCH METHOD

The research method consists of two parts, namely a literature review and an empirical study.

1.3.1. Literature review

The literature review will focus on previous research that has been conducted with regard to job insecurity, resilience and general health.

The following databases will be used as primary sources:
• Library catalogues
• Emerald
• Internet: various search engines
• Psychlit
• International journals.

1.3.2. Empirical study

1.3.2.1. Research design

A survey design will be used to reach the research objectives. The specific design is the cross-sectional design, whereby a sample is drawn from a population at one time (Shaughnessy & Zechmeister, 1997). Information collected is used to describe the population at that time. This design can also be used to assess the interrelationships among variables within a population. According to Shaughnessy and Zechmeister (1997), this design is ideally suited to the descriptive and predictive functions associated with correlational research.
1.3.2.2. Study population

The study population \( N = +/- 600 \) that will be targeted consists of motor-trade employees of sixteen motor dealership branches in the Gauteng area, including the entire population of motor and parts salespersons, mechanics, administrative staff and management.

1.3.2.3. Measuring battery

The following three questionnaires will be used in the empirical study:

- The Job Insecurity Scale (Ashford, Lee, & Bobko, 1989)
- The Resilience Scale (Mallak, 1998)
- The General Health Questionnaire (Goldberg & Hillier, 1979)

*The Job Insecurity Scale (JIS) (Ashford et al., 1989)* will be used as the measure of job insecurity. The 57 items are divided into three subscales, namely Job Features (importance of job features × perceived threat to job features), Total Job (importance of possible changes to job × perceived threat to total job), and Powerlessness. The 34 items of the Job Features subscale are divided into two parts. The first part captures the importance of job features along a five-point scale, varying from 1 (very unimportant) to 5 (very important). An example of a question to be rated relating to the importance of job features is: ‘In your work life, how important is having promotion opportunities to you personally?’ The second part captures the perceived threat to job features according to a five point scale from 1 (negative change very unlikely) to 5 (negative change very likely). An example of a question to be rated according to perceived job feature is: ‘Looking to the future, what is the probability that changes could occur – changes you don’t want or might disagree with – that would negatively affect your potential to get ahead in the organisation?’ The 20 items of the subscale Total Job are also divided into two parts. The first part relates to capturing the importance of possible changes to a total job along a five point scale, varying from 1 (very unimportant) to 5 (very important). An example of a question to be rated regarding the importance of possible changes to a total job is: ‘Assume for a moment that the following event could happen to you; how important is it to you personally that you may lose your job and be moved to a lower level within the organisation?’ The second part captures the
perceived threat to total job along a five-point scale from 1 (very unlikely) to 5 (very likely). An example of a question to be asked in accordance with the perceived threat to a total job is: ‘Thinking about your future, how likely is it that this event might actually occur to you in your current job – be moved to a higher position within your current location?’ The three items of the Powerlessness subscale are arranged along a five-point scale, varying from 1 (strongly disagree) to 5 (strongly agree). An example of a question to be asked relating to powerlessness is: ‘I have enough power in this organisation to control events that might affect my job’. The JIS is shown to be reliable, with the three subscales attaining alpha coefficients of the Job Features subscale (0.85), the Total Job subscale (0.75), and the Powerlessness subscale (0.83) (Ashford et al., 1989).

The Resilience Scale (RS) (Mallak, 1998) will be utilised to determine the amount of resilience experienced. The six subscales used to measure resilience include Goal-directed solution-seeking (e.g. enjoy improvising solutions to problems); Avoidance (e.g. feel overwhelmed when situation becomes chaotic); Critical understanding (e.g. know what resources to access); Role dependence (e.g. team members can act in the place of another); Source reliance (e.g. rely on multiple source of information); and Resource access (have access to resources). Each subscale was found to be reliable, demonstrating the following alpha coefficients: Goal-directed solution-seeking subscale (0.85), Avoidance subscale (0.78), Critical understanding subscale (0.70), Role dependence subscale (0.79), Source reliance subscale (0.89) and Resource access subscale 6 (0.70) (Mallak, 1998).

The General Health Questionnaire (GHQ) (28-item version) of Goldberg and Hillier (1979) will be used to measure well-being. Responses are given on a 4-point Likert-type scale, with the total score ranging from 28 to 112. Four subscales measure the degree of somatic symptoms; anxiety and insomnia; social dysfunction and severe depression. An example of a question relating to the somatic symptoms is: ‘Have you recently been feeling run down and out of sorts?’ An example of a question to be rated in accordance with anxiety and insomnia is: ‘Have you recently been getting edgy and bad-tempered?’ An example of a question dealing with social dysfunction is: ‘Have you recently been managing to keep yourself busy and occupied?’ Lastly, an example of a question relating to severe depression is: ‘Have you recently felt that life is empty and hopeless?’
A high score on the GHQ is indicative of a high level of psychological distress, whereas a low score is indicative of a low level of psychological distress. Cronbach alpha coefficients of 0,86 (Isaksson & Johansson, 2000) and 0,89 (Oosthuizen, 2001) were obtained for the total GHQ. Viljoen (2004) obtained the following Cronbach alphas: 0,71 for the Somatic Symptoms subscale, 0,79 for the Anxiety and Insomnia subscale, 0,74 for the Social Dysfunction subscale and 0,80 for the Severe Depression subscale, thus making the use of this instrument applicable in a South African context.

1.3.2.4. Statistical analysis

The statistical analysis is carried out with the SPSS programme (SPSS Inc, 2003). The alpha coefficient, confirmatory factor analyses and inter-item correlations coefficients will be used to determine the validity and reliability of the measuring instruments.

Means, standard deviations, skewness and kurtosis will be used to analyse the data. The mean indicates the average score obtained by the research group on each measuring instrument and the standard deviation indicates the extent to which the individual scores differ from the mean obtained. MANOVA, ANOVA and Tukey HSD tests will be conducted in order to determine the differences in job insecurity, resilience and general health scores of difference demographic groups.

The Pearson product-moment correlation coefficient will be determined to indicate the extent to which one variable is related to another. A multi-regression analysis will be done to determine whether job insecurity holds predictive value with regard to general health. Regression analyses will also be used in order to determine whether resilience plays a moderating role in the relationship between job insecurity and general health. A correlation can be better understood by determining $r$ squared (Cohen, 1988). The square of the correlation coefficient indicates the proportion of variance in any two variables, which is predicted by the variance in the other.
1.4. RESEARCH PROCEDURE

The measuring battery will be compiled, and a letter requesting participation and motivating the research will be included. Ethical aspects regarding the research will be discussed with the participants. Questionnaires will be delivered, completed and collected individually. The results will be analysed and feedback will be given to those who requested it.

1.5. CHAPTER DIVISION

The chapters are presented as follows in this mini-dissertation:

Chapter 1: Introduction, problem statement and research objectives
Chapter 2: Research article: *Job insecurity, resilience and general health of motor-trade employees*
Chapter 3: Conclusions, limitations and recommendations

1.6. CHAPTER SUMMARY

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

Chapter 2 which follows, focuses on the research article.
REFERENCES


The objectives of this study were to investigate the relationship between job insecurity, resilience and general health of motor-trade employees \((N = 207)\), as well as to determine whether differences exist regarding the levels of job insecurity, resilience and general health (as constituted by somatic symptoms, anxiety and insomnia, social dysfunction and severe depression) among different demographic groups. The Job Insecurity Survey, Resilience Scale and General Health Questionnaire were used as measuring instruments. The results showed that job insecurity and somatic symptoms, as well as social dysfunction and severe depression, were statistically significantly related. Contrary to expectation, no significant relationship was found between job insecurity and resilience. A statistically significant relationship was found between resilience and somatic symptoms, anxiety and insomnia, social dysfunction and severe depression. Lastly, it was found that resilience moderates the relationship between job insecurity and social dysfunction.

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The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the National Research Foundation.
Fierce competition and resultant processes of substantial downsizing (dismissals, layoffs, and redundancies) have, in recent years, emerged as extremely pertinent issues (Pelfrene et al., 2003). Flexibility in the job market has been proposed as a prerequisite for economic efficiency and also as a solution for rising unemployment. Consequently, the division between unemployment and various forms of marginal employment is becoming blurred (Cheng, Chen, Chen & Chiang, 2005). Increasingly, workers perceive the global economic dynamics as a threat to their personal working situation (Pelfrene et al., 2003). Furthermore, workers finding themselves thrust in the midst of an economic lull are focused on keeping their current jobs, while employee retention is low on the list of concerns for most companies (Beck, 2002).

Job insecurity may be defined in different ways, and consensus on a definition has not as yet been reached (De Witte, 1997; 1999; Kinnunen & Mauno, 2000). According to De Witte (1997, 1999) job insecurity relates to people in their work context who fear that they may lose their jobs and become unemployed, and such feelings are intensified by the growing emphasis on more flexible employment contracts. Job insecurity is demonstrated in labour markets where organisations are downsizing or where there is an oversupply of jobs in a particular area (Feather & Rauter, 2004). Nickell, Jones and Quintini (2002) argue that insecurity can rise in a world where jobs remain secure precisely because wages have become more ‘flexible’. Bryson (2004) supports this view by stating that considerable insecurity is created by casualised employment.

Van Vuuren (1990) propounds that job insecurity consists of the following three components: firstly, job insecurity is a subjective experience or perception, as different employees may perceive the same situation in a different manner. Secondly, it refers to uncertainty about the future; and lastly, doubts concerning the continuation of the job as such are central to the concept. With reference to the global viewpoint, job insecurity may be defined as signifying the threat of job loss or discontinuity (Caplan, Cobb, French, Van Harrison, & Pinneau, 1980).

For the purposes of this study, job insecurity will be viewed according to the definition of Greenhalgh and Rosenblatt (1984), who view job insecurity as being multi-dimensional, consisting of five components, represented by the following formula:
Fully Composite JI = [sum (importance of job feature x likelihood of losing job feature) + sum (importance of changes in total job x likelihood of negative changes in total job)] x [perceived powerlessness to resist threat]

The first four components represent the severity of the threat, which may relate to various features of a job or to the entire job. The first component of the job insecurity construct is a perceived threat to various job features such as opportunities for promotion and freedom in terms of work schedule. The second component relates to the perceived importance of each feature to the individual. Researchers would multiply the perceived threat to each feature by its importance and then sum the scores for each feature to obtain an overall severity rating. According to Greenhalgh and Rosenblatt (1984), this formula is based on the assumption that a threat to an important job feature will contribute more to job insecurity than a minor feature. The third component is the perceived threat of the occurrence of various events that would negatively affect an individual’s total job, with the fourth component relating to the importance attached to each of these potentialities. Once again, components three and four would be combined by multiplication, with the sum providing a weighted rating of the severity of the threat of a total job. The fifth and final component of the job insecurity construct is powerlessness, which relates to an individual’s ability to counteract threats to the job or job features. An individual low on powerlessness should not experience job insecurity to be as severe as a person measuring high on powerlessness would. Powerlessness is multiplied by the perceived severity of the threat to generate a measure of overall perceptions of job insecurity.

Job insecurity is significant due to the fact that it is a critical influence not only on individual employees, but also on work-related outcomes, including employee health, physical and psychological well-being, employee turnover, job satisfaction and organisational commitment (Yousef, 1998). Greenhalgh and Rosenblatt (1984) support this notion by stating that the impact of job insecurity on individual employees might erode the effectiveness of the organisation as a whole when productivity decreases to the extent of diminishing the company’s competitive strength. The risk of further redundancies is increased, in turn amplifying feelings of job insecurity.
Jacobson (1991) describes job insecurity as a perceptual phenomenon which is likely to differ between employees working in the same organisation, because perceptions vary as a function of contextual factors and personal attributes. Feather and Rauter (2004) found that contract employees reported more job insecurity than their permanent counterparts by scoring higher on opportunities for influence and variety in their jobs. Bernhard-Oettel, Sverke and De Witte (2005) similarly reported in their findings that the type of employment contract interacted with perceptions of job insecurity, in that insecurity was associated with impaired well-being among permanent full-time workers, while no relationship was found for on-call or core part-time employees.

On a multidimensional measure of job insecurity, Rosenblatt, Talmud and Ruvio (1999) found that males and females differed significantly regarding their levels and profiles of job insecurity: males were more insecure and emphasised financial concerns, whereas females expressed concerns about intrinsic facets of their jobs as well as financial concerns. Furthermore, job insecurity affected work attitudes differently for men and women: for females, all job attitudes (organisational commitment, tendency to quit, resistance to change, perceived performance and perceived organisational support) were adversely affected by job insecurity; for males, only organisational commitment, intention to leave, and resistance to change were affected.

Job insecurity can affect an individual’s marriage and family life by disrupting the equilibrium of the family system (Canaff & Wright, 2004). Wilson, Larson and Stone (1993) found that stress levels of spouses whose partners were experiencing a downsizing resulted in poorer health and emotional difficulties. Although job insecurity can be identified as a marital stressor, some couples find mutual support during this period and are able to weather negative effects, while others experience an increase in stress and consequently also withdrawal. In addition, Wilson et al. (1993) found that younger employees and their spouses were more affected by job insecurity and hypothesised that older couples have negotiated ways of dealing with stressful events in their marriages.

Ferrie, Shipley, Stansfeld and Marmot (2002), in a series of qualitative interviews with 38 British civil servants whose current jobs were insecure, indicated a range of potential explanations of the
job insecurity-health relationship, including: demographic, personal, material and behavioural characteristics, other psychosocial features of the work environment and job satisfaction. Findings of Ferrie, Shipley, Newman, Stansfield and Marmot (2005) indicate that self-reported job insecurity was associated with fewer educational qualifications, especially among men, and with being single for women. High and moderate levels of pessimism were associated with self-reported job insecurity in both sexes, but a statistically significant association with emotional action was observed only in men. Compared to participants with high job control; moderate, as well as low job control was strongly associated with self-reported job insecurity in both sexes, but high demands were only associated with women. In both sexes there were strong associations between self-reported job insecurity and low social support at work, and with both low and moderate job satisfaction. Self-reported job insecurity was strongly related to most material measures in both sexes, prevalence being higher among the more deprived and those with lower incomes and wealth. Interestingly, there was no association found between job insecurity and alcohol or nicotine consumption (Ferrie et al., 2005).

Although it would be expected that during a period of job insecurity, employees would focus on their work to avoid potential lay-offs, the opposite in fact occurs. This was established in the research of Lim (1997), who studied the relationship between social support and job insecurity as measured by job dissatisfaction and noncompliant behaviours. Lim (1997) hypothesised that an inequitable employment relationship develops, resulting in withdrawal and reduction in communication among employees and the organisation.

In a comparative study, public sector employees displayed greater affective job insecurity than their private sector counterparts, something that can most likely be explained by government’s drive to ensure the self-sustainability of local governmental agencies (Grant, 2005). In the same study, no significant differences were found regarding job insecurity based on age, qualifications, gender, culture, or tenure. Similarly, Elbert (2002) found no significant differences with regard to job insecurity and gender, age, qualifications, tenure, grading, category or section. Findings on the relationship between race and job insecurity have been mixed. Whereas some studies found higher job insecurity levels among black participants (Elbert, 2002), others found higher levels of job insecurity among white participants (Bosman,
Buitendach & Rothmann, 2005). Possible explanations for the divergent findings have been attributed to the white category being more highly educated within that particular sample (Elbert, 2002); and within another, that those least advantaged by Employment Equity legislation (i.e. white participants) would experience higher levels of job insecurity than those who benefit from the new dispensation (i.e. black participants).

Cheng et al. (2005) synthesised existing literature and proposed a causal model linking job insecurity to health, as illustrated in Figure 1. It can be expected that when a flexible workforce is favoured by management, employees often encounter deteriorating work conditions, including shrinking size of workforce, increasing workloads, loss of collective power at work, lowering wages, benefits, or promotion opportunities, and increasing tension and conflicts between employers and co-workers; thus leading to decreased health and well-being (Cheng et al., 2005).

![Figure 1. Pathways linking job insecurity to health](chart)

Jahoda (1979) is of the opinion that unemployment leads to psychological distress. The latent deprivation model justifies this theoretical leap, because people are found to be deprived of the five latent functions that employment provides, namely time structure; regular shared experiences and contact with people outside the nuclear family; information about personal identity (these define those aspects of persona, identity and status); a link with collective purpose (linking individuals to goals and purposes surpassing their own) and enforced activity. Waters and Moore (2002) expand on the above, citing that previous research conducted by Evans and Haworth (1991) and Haworth and Ducker (1991), has demonstrated that all the above-mentioned latent functions, bar one – time structure - were associated with low self-esteem, poor psychological health and reduced life satisfaction in unemployed people. Furthermore, Warr's
A vitamin model identifies nine environmental features influencing mental health, one of which is "environmental clarity", or - stated differently - feedback about tasks, role ambiguity and job insecurity.

The theoretical framework of this research is based on the model of effort-reward imbalance (ERI) at work. In this model, chronic work-related stress is identified as non-reciprocity or imbalance between high efforts spent and low gain levels received (Siegrist et al., 2004). The experience of a lack of reciprocity in terms of high "costs" and low "gains" elicits negative emotions in exposed people; these are paralleled by sustained strain reactions in the autonomic nervous system, due to the fact that the recurrent experience of reward deficiency in a core social role impairs successful self-regulation (Siegrist, 2000; Siegrist et al., 2004). Siegrist et al. (2004) state that thus, in the long run, the imbalance between high effort and low reward at work increases illness susceptibility as a result of continued strain reactions. The "job strain model" similarly states that most adverse health effects are to be expected in workers perceiving high job demands and low job control, i.e. workers with high strain jobs (Pelfrene et al., 2003). Worthington and Scherer (2004) support this theory when stating that a sizable body of literature has developed about how negative emotions (of which stress may be one) is related to, and can cause dysregulation of the immune system.

Based on the literature, it is postulated that the degree to which employees' health and well-being are negatively affected by job insecurity, will be influenced by how resilient that particular employee may be. Resilience derives from the verb *resile*, which means that when something is stretched or bent, it tends to spring back elastically, to recoil and resume its former shape and size. In the case of humans, resilience refers to recuperation and a source of strength, but it could also include constructive and growth-enhancing consequences of challenges and adversity (Strümpfer, 2003). Johnson and Wiechelt (2004) support this notion by stating that the process of resilience is what helps people sustain lives of health and hope, despite adversity. Furthermore, they propound that individuals and families demonstrate resilience when they draw on their inner strengths, skills and supports to keep adversity from derailing their lives. Resilience remains latent until activated, and is therefore situationally contextualised by becoming temporarily activated by passing situational influences (Fleming, 1982; McClelland, 1985; Mischel & Shoda, 1987).
1995; 1998). According to Kim-Cohen, Moffitt, Caspi and Taylor (2004), resilience is partly heritable, and protective processes operate through both genetic and environmental effects. From the literature it is evident that resilience is both state-like and trait-like, and therefore although resilience is heritable, it is also affected by the external constituencies.

Resilience as a dynamic process emerges from the interplay of the individual, the event and the environment (Johnson & Wiechelt, 2004). The context demanding resilience from a particular individual is co-produced by issues such as gender, age, genetic constitution, present and past levels of physical and psychological health, personality variables, physical strength and fitness, bodily intactness, family situation and role, socio-economic and educational status, past history of trauma and adversity, economic, political/legal systems and conditions, and global variables (Strümpfer, 2001). Furthermore, Strümpfer (2003) argues that there are psychological variables subsumed under the heading of resilience, including engagement, meaningfulness, subjective well-being, positive emotions, and proactive coping that enhance fortigenesis; thus furthering resistance (to burnout and ill health, for example). Strümpfer (2001) is of the opinion that one would expect a measure of resilience to correlate significantly with educational level.

Masten (2000) notes that individuals whose adaptation systems remain intact are more likely to obtain healthy outcomes, but once these adaptation systems are compromised or damaged, deleterious outcomes become more prevalent. Masten (1994) presents the following ten protective factors that play a role in resilience: effective parenting; connections to other competent adults; appeal to other people, particularly adults; good intellectual skills; areas of talent or accomplishment valued by self and others; self-efficacy, self-worth, and hopelessness; religious faith or affiliations; socio-economic advantages; good schools and other community assets; and good fortune. Similarly, the protective factors held in common in predicting resilience include higher intelligence scores; good positive relationships with peers, parents, and teachers; and healthy coping mechanisms as manifested during childhood (Johnson & Wiechelt, 2004). However, Johnson and Wiechelt (2004) note that a protective factor for a group of individuals may not necessarily be a protective factor for others, or even for the same group in a different context.
Schein (1992) acknowledges that individuals who have dominant managerial competence anchors and the security/stability type career anchors - which in the traditional organisational career paradigm form the basis of organisational career systems - would be particularly at risk (to be less career resilient) in less than optimal career conditions. Furthermore, Van Vuuren and Fourie (2000) state that the South African career context could well be classified as a “less than optimal environment” based on the multitude of additional and potentially prolonged career disruptions such as the high unemployment rate; large-scale retrenchments; so-called no-fault retrenchments; employment equity targets, fewer employment opportunities in formal sectors; education and skills shortages; and financial and emotional stressors.

It is likely, as depicted by the above, that job insecurity may well be an issue causing poorer general health to manifest itself in individuals, and that a person’s level of resilience may have an impact on the severity of the health outcomes of job insecurity; in other words, play a role in the relationship between job insecurity and health.

In this research, general health is conceptualised by the theory of Goldberg and Hillier (1979) which identifies four concepts, namely (1) somatic symptoms, (2) anxiety and insomnia, (3) social dysfunction, and (4) severe depression. Research has consistently found job insecurity to be linked to impaired employee well-being, and furthermore, that physical health problems and mental distress increase proportionately with the level of job insecurity experienced (Ashford et al., 1989; Hartley, Jacobson, Klandermans, & Van Vuuren, 1991; Lim, 1996). An analysis of data retrieved from a Canadian National probability sample conducted in 1994 shows that high levels of job insecurity are linked to lower self-rated health and increased distress (McDonough, 2000). In a South African study in a government organisation, Viljoen (2004) found that job insecurity is associated with increased somatic symptoms, social dysfunction, anxiety/insomnia and severe depression. Grant (2005) similarly found job insecurity to be practically significantly related to somatic systems, anxiety, insomnia, and social dysfunction; however, not with severe depression.

Wissing and Van Eeden (2002) note that variables such as age, gender and ethnic/cultural context influence the manifestation of psychological well-being. It is thus expected that different
levels of resilience and health will manifest differently among different demographic groups. Stümpfer (2001) supports the above by stating that the demand (for resilience) by a particular individual should always be viewed in context. Those personal details (such as age) should be included in such a context, along with community and broader environmental co-producers such as the availability of social support, social networks, the socio-economic condition and the solidarity of the community, urban versus rural environment, geography and climate, and so forth; and together with these, the context of ever widening circles of co-production; such as economic, political/legal conditions and systems, as well as global variables should be taken into consideration. Lastly, the effects of the historical epoch – the time in the individual’s life – should be considered because all of these numerous co-producers act in synergistic concert. In a South African study, Viljoen (2004) found that culture and tenure held predictive value with regard to general health, whereas Grant (2005) found no significant relationship between demographic variables such as age, qualification, gender, culture, tenure and sector and general health levels.

Limited research has been conducted regarding job insecurity and its consequences in the motor trade, as well as the role of resilience in the stressor-strain relationship. This necessitates the current study. Furthermore, results obtained can be used in future training and development programmes. Limited job insecurity research in South African has made use of a multi-dimensional measure of job insecurity; researchers usually rather make use of a global job insecurity measure, which only focuses on the prospect of job loss, not including aspects such as loss of promotional prospects.

The research was undertaken in sixteen motor-trade dealerships. The respondents included the entire populations of motor and parts salespersons, mechanics, administrative staff and management employed by Dealerships within the Vaal Triangle and the East Rand of Johannesburg. Job insecurity plays a significant part in the sphere of the motor industry, where stiff competition forces down profit margins and job availability. Being continually exposed to the stress of job insecurity may negatively impact upon employees’ health and well-being. The degree to which the impact occurs, may be affected by how resilient these employees are. Thus, the aim of the research is to examine the relationship between job insecurity, resilience and
general health and to determine whether differences exist regarding the levels of job insecurity, resilience and general health among different demographic groups.

Based on the above problem statement, the following hypotheses are proposed:

H1: A significant relationship exists between job insecurity and general health.

H2: Resilience influences the relationship between job insecurity and general health.

H3: Differences exist in the job insecurity levels of different demographic groups.

H4: Differences exist in the resilience levels of different demographic groups.

H5: Differences exist in the general health levels of different demographic groups.

METHOD

Research design

A cross-sectional survey design was utilised to describe the information on the population collected at that time. This design (Shaughnessy & Zechmeister, 1997) can also be used to evaluate interrelationships among variables within a population. According to Shaughnessy and Zechmeister (1997), this design is also ideal to describe and predict functions associated with correlative research.

Participants

The entire population of employees working in sixteen motor dealerships ($N = +/- 600$) were targeted for this research, although a response rate of only 207 (35%) participants was obtained. This low response rate, however acceptable, proved disappointing as a larger response was expected. The population included workers from all levels, ranging from general workers to
professionals. The lowest level employees were, however, of a literacy level adequate enough to allow for the valid completion of the questionnaires. The biographical characteristics of the study population are detailed in Table 1.

Table 1

Characteristics of the Participants (N = 207)

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</table>

The sample consisted mainly of male (68.6%), white participants (73.4%) with a Grade 10 to 12 (66.7%) level of education, considering themselves skilled (38.6%). The majority of the participants fell within the 25 to 35 year age group (34.3%), and have been employed at the particular branch for less than a year. Black participants represented 14.5% of the population, while 31.4% were female. Those participants aged 24 years and younger contributed to 20.8% of the study population, the same percentage of those aged 36 to 55 years. The group falling between the ages of 46 to 55 years were represented by a smaller percentage (14.5%), and smaller still was the 56 years and older group (9.7%). Of the representatives, 29.5% possessed a
diploma, while 1,5% had a degree. Participants working for between 2 and 5 years represented 32,9% of the population; those employed between 6 to 10 years, 10,6%; 11 to 20 years, 6,3%; and those tenured over 20 years only 3,4%. The high turnover rate as illustrated by the findings is not unusual within the sales environment. New car salespersons represented 28% of the participants; while used car salespersons, 10,6%; parts and workshop employees, 12,1% and 21,3% respectively; and administration and management, 17,4% and 6,8% each. Registered professionals accounted for 14,5% of the population; semi-professionals for 27,1%; semi-skilled for 10,1%, and unskilled for 4,8%. Of the participants 69,1% were unionised, and 28,5% were not.

Measuring instruments

The Job Insecurity Scale (JIS) (Ashford et al., 1989), the Resilience Scale (RS) (Mallak, 1998), and the General Health Questionnaire (GHQ) (Goldberg & Hillier, 1979) were used in this study. Biographical information was also gathered regarding race, age, education, gender, tenure, unionisation, and category and place of work.

The **Job Insecurity Scale (JIS)** (Ashford et al., 1989) was used to measure the levels of job insecurity. The 57 items are divided into three subscales, namely Job Features (importance of job features X perceived threat to job features), Total Job (importance of possible changes to job X perceived threat to total job), and Powerlessness. The 34 items of the Job Features subscale are divided into two parts. The first part captures the importance of job features along a five-point scale, varying from 1 (very unimportant) to 5 (very important). An example of a question to be rated relating to the importance of job features is: ‘In your work life, how important is having promotion opportunities to you personally?’ The second part captures the perceived threat to job features according to a five-point scale from 1 (negative change very unlikely) to 5 (negative change very likely). An example of a question to be rated according to perceived job feature is: ‘Looking to the future, what is the probability that changes could occur – changes you don’t want or might disagree with – that would negatively affect your potential to get ahead in the organisation?’ The 20 items of the subscale Total Job are also divided into two parts. The first part relates to capturing the importance of possible changes to a total job along a five point scale,
varying from 1 (very unimportant) to 5 (very important). An example of a question to be rated regarding the importance of possible changes to a total job is: ‘Assume for a moment that the following event could happen to you; how important is it to you personally that you may lose your job and be moved to a lower level within the organisation?’ The second part captures the perceived threat to total job along a five-point scale from 1 (very unlikely) to 5 (very likely). An example of a question to be asked in accordance with the perceived threat to a total job is: ‘Thinking about your future, how likely is it that this event might actually occur to you in your current job – be moved to a higher position within your current location?’ The three items of the Powerlessness subscale are arranged along a five-point scale, varying from 1 (strongly disagree) to 5 (strongly agree). An example of a question to be asked relating to powerlessness is: ‘I have enough power in this organisation to control events that might affect my job’. The JIS is shown to be reliable, with the three subscales attaining alpha coefficients for the Job Features subscale (0.85), the Total Job subscale (0.75), and the Powerlessness subscale (0.83) (Ashford et al., 1989).

*The Resilience Scale (RS)* (Mallak, 1998) was utilised to determine the amount of resilience experienced. The six subscales used to measure resilience include Goal-directed solution-seeking (e.g. enjoy improvising solutions to problems); Avoidance (e.g. feel overwhelmed when situation becomes chaotic); Critical understanding (e.g. know what resources to access); Role dependence (e.g. team members can act in the place of another); Source reliance (e.g. rely on multiple source of information); and Resource access (have access to resources). Each subscale has been found to be reliable, demonstrating the following alpha coefficients: Goal-directed solution seeking-subscale (0.85), Avoidance subscale (0.78), Critical understanding subscale (0.70), Role dependence subscale (0.79), Source reliance subscale (0.89) and Resource access subscale (0.70) (Mallak, 1998).

*The General Health Questionnaire (GHQ)* (28-item version) of Goldberg and Hillier (1979) was used to measure well-being. Responses are given on a 4-point Likert-type scale, with the total score ranging from 28 to 112. Four subscales measure the degree of somatic symptoms; anxiety and insomnia; social dysfunction and severe depression. An example of a question to be rated relating to the somatic symptoms is: ‘Have you recently been feeling run down and out of sorts?’
An example of a question to be rated in accordance with anxiety and insomnia is: ‘Have you recently been getting edgy and bad-tempered?’ An example of a question to be rated dealing with social dysfunction is: ‘Have you recently been managing to keep yourself busy and occupied?’ An example of a question relating to severe depression is: ‘Have you recently felt that life is empty and hopeless?’ A high score on the GHQ is indicative of a high level of psychological distress, whereas a low score is indicative of a low level of psychological distress. Cronbach alpha coefficients of 0.86 (Isaksson & Johansson, 2000) and 0.89 (Oosthuizen, 2001) were obtained for the total GHQ. Viljoen (2004) obtained the following Cronbach alphas: 0.71 for the Somatic Symptoms subscale, 0.79 for the Anxiety and Insomnia subscale, 0.74 for the Social Dysfunction subscale and 0.80 for the Severe Depression subscale, therefore, making the use of this instrument applicable in a South African context.

Statistical analysis

The statistical analysis is carried out with the SPSS programme (SPSS Inc, 2003), making use of descriptive statistics, Cronbach alpha coefficients and inter-item correlation coefficients, Pearson product-moment correlation coefficients and multiple regression analyses.

Cronbach alpha coefficients (α) and inter-item correlation coefficients were used to assess the internal consistency of the measuring instruments (Clark & Watson, 1995). Confirmatory factor analyses were conducted to determine the construct validity of the measuring instruments. Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) were used to analyse the data. The significance of differences in job insecurity, resilience and general health scores between biographic groups was established by means of MANOVA, ANOVA and Tukey's HSD tests. Pearson product-moment correlation coefficients were used to specify the relationships between variables. The level of statistical significance is set at $p \leq 0.05$. Steyn (2002) criticises the sole uses of statistical significance testing, and recommends that effect sizes be established to determine the importance of a statistically significant relationship. While the reporting of effect sizes is encouraged by the American Psychological Association (APA) in their Publication Manual (APA, 1994), most of these measures are rarely found in published reports (Kirk, 1996; Steyn, 2002). Therefore, effect sizes will be computed to assess the practical
significance of relationships in this study. A cut-off point of 0.30, which represents a medium effect (Cohen, 1988; Steyn, 2002), is set for the practical significance of correlation coefficients.

Regression analysis will also be used in order to determine whether resilience plays a role in the relationship between job insecurity and general health. A correlation can be better understood by determining $r$ squared (Cohen, 1988). The square of the correlation coefficient indicates the proportion of variance in any two variables, which is predicted by the variance in the other.

**RESULTS**

Confirmatory factor analyses were conducted to determine the construct validity of the Resilience Scale and the General Health Questionnaire. Given the limited sample size and the large amount of items (57) included in the Job Insecurity Scale, factor analyses would not be appropriate for determining the construct validity of this particular measuring instrument.

A simple principal components analysis was done to verify the construct validity of the components of the Resilience Scale (RS). Six factors emerged which together explained 60% of the total variance, with commonalities ranging between 0.49 – 0.82. A simple principal components analysis was also conducted to verify the construct validity of the components of the General Health Questionnaire (GHQ). Four factors emerged which together explained 66% of the total variance, with commonalities ranging between 0.49 – 0.82.

Descriptive statistics, Cronbach alpha coefficients and the inter-item correlation coefficients of the JIS, RS, and the GHQ for employees ($N = 207$) working in motor dealerships are presented in Table 2.
Table 2
Descriptive Statistics, Cronbach Alpha Coefficients and Inter-Item Correlation Coefficients of the Measuring Instruments

<table>
<thead>
<tr>
<th>Tests and subscales</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Alpha</th>
<th>Inter-item r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of job features</td>
<td>4.25</td>
<td>0.59</td>
<td>-2.06</td>
<td>7.05</td>
<td>0.91</td>
<td>0.39</td>
</tr>
<tr>
<td>Perceived threat to job features</td>
<td>3.14</td>
<td>1.03</td>
<td>-0.18</td>
<td>-0.81</td>
<td>0.96</td>
<td>0.59</td>
</tr>
<tr>
<td>Importance of total job</td>
<td>4.02</td>
<td>0.92</td>
<td>-1.10</td>
<td>0.45</td>
<td>0.91</td>
<td>0.53</td>
</tr>
<tr>
<td>Perceived threat to total job</td>
<td>2.47</td>
<td>0.76</td>
<td>0.98</td>
<td>1.43</td>
<td>0.82</td>
<td>0.36</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>3.35</td>
<td>0.97</td>
<td>-0.57</td>
<td>0.12</td>
<td>0.77</td>
<td>0.54</td>
</tr>
<tr>
<td>Total job insecurity</td>
<td>1088.20</td>
<td>502.21</td>
<td>0.99</td>
<td>1.23</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Goal-directed solution seeking</td>
<td>2.11</td>
<td>0.82</td>
<td>1.09</td>
<td>2.08</td>
<td>0.79</td>
<td>0.36</td>
</tr>
<tr>
<td>Avoidance</td>
<td>3.94</td>
<td>0.93</td>
<td>-0.01</td>
<td>-0.76</td>
<td>0.57</td>
<td>0.22</td>
</tr>
<tr>
<td>Critical Understanding</td>
<td>3.35</td>
<td>0.82</td>
<td>1.23</td>
<td>3.96</td>
<td>0.63</td>
<td>0.24</td>
</tr>
<tr>
<td>Role Dependence</td>
<td>3.52</td>
<td>1.22</td>
<td>1.06</td>
<td>0.81</td>
<td>0.82</td>
<td>0.61</td>
</tr>
<tr>
<td>Source Reliance</td>
<td>2.64</td>
<td>1.10</td>
<td>0.23</td>
<td>-0.56</td>
<td>0.16</td>
<td>0.09</td>
</tr>
<tr>
<td>Resource Access</td>
<td>2.70</td>
<td>0.89</td>
<td>0.39</td>
<td>0.28</td>
<td>0.21</td>
<td>0.11</td>
</tr>
<tr>
<td>Resilience Total</td>
<td>2.74</td>
<td>0.53</td>
<td>1.42</td>
<td>6.53</td>
<td>0.76</td>
<td>0.14</td>
</tr>
<tr>
<td>Somatic symptoms</td>
<td>11.66</td>
<td>4.21</td>
<td>1.18</td>
<td>1.77</td>
<td>0.88</td>
<td>0.50</td>
</tr>
<tr>
<td>Anxiety and insomnia</td>
<td>12.11</td>
<td>4.98</td>
<td>1.10</td>
<td>0.76</td>
<td>0.91</td>
<td>0.59</td>
</tr>
<tr>
<td>Social dysfunction</td>
<td>12.43</td>
<td>3.58</td>
<td>0.66</td>
<td>1.82</td>
<td>0.87</td>
<td>0.50</td>
</tr>
<tr>
<td>Severe depression</td>
<td>8.84</td>
<td>4.06</td>
<td>2.95</td>
<td>9.17</td>
<td>0.94</td>
<td>0.71</td>
</tr>
<tr>
<td>Health Total</td>
<td>45.05</td>
<td>14.23</td>
<td>1.65</td>
<td>4.13</td>
<td>0.95</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Table 2 shows that acceptable Cronbach alpha coefficients were obtained on the scales, with the exception of the Avoidance (0.57); Critical understanding (0.53); Source Reliance (0.16); and Resource Access (0.21) subscales, which fell substantially below the 0.70 cut-off point as set by Nunnally and Bernstein (1995). Given the poor reliability coefficients obtained on the subscales of the RS, only the total scale (α = 0.76) was used for subsequent analyses. Cronbach Alpha for Total Job Insecurity is not reflected, as it is worked out by a multiplication formula utilising the other subscales, which was not possible.

Inter-item correlation coefficients of all scales may be considered acceptable, as none fell well outside the cut-off points between 0.15 and 0.50 (Clark & Watson, 1995). Those subscales
falling just outside the limits (and are hence still acceptable) include: perceived threat to job features (0.59), importance of total job (0.53), powerlessness (0.54), role dependence (0.61), source reliance (0.09), resource access (0.11), resilience total (0.14), anxiety and insomnia (0.59) and severe depression (0.71).

Skewness is a measure of 'lack of symmetry'. A distribution, or data set, is symmetric if it looks the same to the left and right of the centrepoint. Kurtosis indicates whether a data set is peaked or flat relative to a normal distribution. Data sets with high kurtosis tend to have a distinct peak near the mean, decline rather rapidly, and have heavy tails. Data sets with low kurtosis, on the other hand, tend to have a flat top near the mean rather than a sharp peak (http://www.itl.nist.gov/div898/handbook). The majority of the scores on the dimensions seem to be distributed normally (skewness and kurtosis are smaller than one) with the exceptions of the following subscales which fell beyond the cut-off points substantially, for kurtosis: importance of job features (7.05), resilience total (6.53), severe depression (9.17) and total health (4.13). The following subscales fell just above one and can thus still be considered acceptable for kurtosis: perceived threat to total job (1.43), total job insecurity (1.23), goal-directed solution-seeking (2.08), critical understanding (2.96), somatic symptoms (1.77) and social dysfunction (1.82). Similarly, for skewness the following subscales are acceptable: goal-directed solution-seeking (1.09), critical understanding (1.23), role dependence (1.06), resilience total (1.42), somatic symptoms (1.18), anxiety and insomnia (1.10), severe depression (2.95) and health total (1.65).

The correlation coefficients between the measuring instruments for employees working in motor-dealerships are reported in Table 3.
Table 3

Correlation Coefficients

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>TJI</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Resilience total</td>
<td>0.02</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Somatic symptoms</td>
<td>-0.17*</td>
<td>0.27*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Anxiety and insomnia</td>
<td>-0.12</td>
<td>0.22*</td>
<td>0.79***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Social dysfunction</td>
<td>-0.19*</td>
<td>0.33***</td>
<td>0.57***</td>
<td>0.57***</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Severe depression</td>
<td>-0.05*</td>
<td>0.31***</td>
<td>0.62***</td>
<td>0.57***</td>
<td>0.53***</td>
<td>-</td>
</tr>
<tr>
<td>7.</td>
<td>Health total</td>
<td>-0.15*</td>
<td>0.33***</td>
<td>0.89***</td>
<td>0.89***</td>
<td>0.77***</td>
<td>0.80***</td>
</tr>
</tbody>
</table>

*Statistically significant p ≤ 0.05
+ Correlation is practically significant r ≥ 0.30 (medium effect)
++ Correlation is practically significant r ≥ 0.50 (large effect)

Job insecurity displayed statistically significant (but not practically significant) negative correlations with the somatic symptoms, social dysfunction and severe depression subscales of the GHQ. Given that a higher score on the GHQ indicates good health, this implies that as job insecurity increases, somatic symptoms and social dysfunction increase. Hypothesis 1, which states that higher levels of job insecurity are associated with poorer levels of health, can only be partially accepted, given that no statistically significant relationships were found between job insecurity and anxiety and insomnia. Job insecurity was not found to be statistically significantly related to resilience. Statistically significant correlations were found between resilience and general health, as well as all of its subscales. The correlations between resilience and the somatic symptoms subscale of the GHQ, as well as resilience and the anxiety and insomnia subscale of the GHQ, fell below what is considered to be a medium effect in terms of practical significance. Practically significant positive correlations of medium effect were, however, found between resilience and the social dysfunction and severe depression subscales of the GHQ. Given that a higher score on the GHQ is indicative of good health, this implies that as resilience decreases, social dysfunction and severe depression increase and vice versa.

Next, MANOVA and ANOVA analyses followed to determine the relationship between various demographic characteristics such as culture, age, qualifications and tenure, and job insecurity, resilience and general health; the results of which are reported in Table 4.
Table 4

**MANOVA – Differences in Job Insecurity, Resilience, and General Health Levels of Demographic Groups**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>F</th>
<th>Df</th>
<th>Den Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.00</td>
<td>0.17</td>
<td>3</td>
<td>200</td>
<td>0.91</td>
</tr>
<tr>
<td>Culture</td>
<td>0.95</td>
<td>1.79</td>
<td>6</td>
<td>396</td>
<td>0.10</td>
</tr>
<tr>
<td>Age</td>
<td>0.95</td>
<td>1.13</td>
<td>9</td>
<td>482</td>
<td>0.34</td>
</tr>
<tr>
<td>Qualification</td>
<td>0.99</td>
<td>0.86</td>
<td>3</td>
<td>196</td>
<td>0.46</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.96</td>
<td>1.44</td>
<td>6</td>
<td>396</td>
<td>0.20</td>
</tr>
</tbody>
</table>

* Statistically significant difference: $p < 0.05$

In an analysis of Wilk’s Lambda values ($p < 0.05$), no statistically significant differences were obtained for any of the mean scores of job insecurity, resilience and general health as demonstrated above. Based on this finding, hypotheses 3, 4, and 5 are rejected, as no significant differences exist based on biographical characteristics regarding job insecurity, resilience and general health.

Given the results of the correlations matrix (Table 3) as discussed above, it is evident that there is not a statistically significant relationship between job insecurity and resilience. Hence, although resilience is described in the literature as being situationally contextualised, to some extent it is clear from these results that resilience does not play a mediating role in the relationship between job insecurity and general health (by implication, this would mean that job insecurity should affect resilience levels). However, from these results it can be seen that resilience might play a moderating role in the stressor-strain relationship. Consequently, hierarchical regression analyses (Table 5) were conducted to examine the possible moderating role of resilience in the relationship between job insecurity and the various general health dimensions (somatic symptoms, social dysfunction and severe depression).
Table 5

Hierarchical Regression Analyses

<table>
<thead>
<tr>
<th></th>
<th>Somatic symptoms</th>
<th>Social dysfunction</th>
<th>Severe depression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Gender</td>
<td>0.05</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>Culture</td>
<td>0.08</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Age</td>
<td>-0.17*</td>
<td>-0.19*</td>
<td>-0.18*</td>
</tr>
<tr>
<td>Qualification</td>
<td>0.05</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>Tenure</td>
<td>-0.04</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Job insecurity</td>
<td>-</td>
<td>-0.18*</td>
<td>-0.20*</td>
</tr>
<tr>
<td>Resilience</td>
<td>-</td>
<td>-0.04</td>
<td>0.02</td>
</tr>
<tr>
<td>JPR</td>
<td>-</td>
<td>-</td>
<td>0.13</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.03</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>ΔR²</td>
<td>-</td>
<td>0.09</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* P ≤ 0.05  ** P ≤ 0.01  *** P ≤ 0.001

The two predictors (job insecurity and resilience) were first centred and thereafter multiplied to create the interaction term. Demographic variables were entered in the first step as control variables. In the second step, job insecurity and resilience were entered. In the third step, the interaction term (job insecurity X resilience) was entered in order to test for the potential moderating effect of resilience.

In the first step of the analysis relating to somatic symptoms, age predicted a statistically significant amount of variance in somatic symptoms. Once job insecurity and resilience were entered in the second step, it was found that both predictors predicted a statistically significant amount of variance in somatic symptoms (ΔR² = 0.09). Upon inclusion of the interaction term in the third step, the variance explained increased (ΔR² = 0.01), although this interaction effect was not statistically significant. No moderation effect was thus found.

With regard to social dysfunction, no demographic variables were found to hold a statistically significant amount of predictive value with regard to the dependent variable. In the second step upon inclusion of job insecurity and resilience, both predictors were found to hold a statistically significant amount of predictive value with regard to somatic symptoms. In the third step, upon
inclusion of the interaction term, the $R^2$ increased by 3%, and was statistically significant, suggesting the presence of a significant interaction effect. A slope examination (Figure 2) was conducted in order to interpret the direction of the interaction. The predicted values of social dysfunction were plotted as a function of the job insecurity scores and two levels of resilience, being low (one standard deviation below the mean) and high (one standard deviation above the mean). As demonstrated in Figure 2, social dysfunction increases (a high score is indicative of good health) as job insecurity increases. However, when resilience is low, the increase in social dysfunction appears to be somewhat stronger compared to when resilience is high.

![Figure 2. Slope examination](image)

Regarding the regression analysis relating to severe depression, no demographic variables were found to hold a statistically significant amount of predictive value with regard to the dependent variable. In the second step, it was found that job insecurity did not hold a statistically amount of predictive value with regard to severe depression, suggesting that resilience does not play a moderating role in the relationship between job insecurity and severe depression (the significance of the interaction term in the third step was most probably as a function of the statistically significant influence of resilience on general health). Based on these findings, hypothesis 2 can only be partially accepted, given that resilience was only found to play a moderating role in the relationship between job insecurity and social dysfunction (and not in any of the other general health dimensions).
DISCUSSION

The objectives of this research were to examine the relationship between job insecurity, resilience and general health, as well as to determine whether differences exist in the job insecurity, resilience and general health levels of different groups.

In terms of the model of effort-reward imbalance (ERI) at work, it was expected that job insecurity would increase illness susceptibility as a result of continued strain reactions. At the same time, there was an expectation based on the literature, that the degree to which employees’ health and well-being would be negatively affected by job insecurity, would be influenced by the amount of resilience possessed by that particular employee. Furthermore, it was expected that different levels of job insecurity, resilience and health would manifest differently among different demographic groups.

With regard to the Job Insecurity Survey, all subscales presented good levels of reliability. The Resilience Scale, however, proved to be somewhat problematic, given the exceptionally low Cronbach alpha coefficients obtained for the various subscales. Consequently, only the total scale was used. The General Health Questionnaire presented an adequate level of reliability.

The results indicated that increased levels of job insecurity demonstrated a statistically significant association with increased levels of somatic symptoms, social dysfunction and severe depression. These findings correspond with those of Probst (2002) and Siegrist (2000) who found that when stress exists, the resultant strain increases individuals’ vulnerability to illness, which may become evident at the physiological, behavioural or psychological level, or any combination of these. Hypothesis 1 - which stated that a significant relationship exists between job insecurity and general health - was thus only partially accepted, as a significant relationship was not obtained between job insecurity and all general health subscales (job insecurity did not demonstrate a statistically significant relationship with anxiety and insomnia).

Increased levels of resilience were found to be associated with decreased levels of somatic symptoms, anxiety and insomnia, social dysfunction and severe depression. Regression analyses
suggested that resilience plays a moderating role in the relationship between job insecurity and social dysfunction; i.e. that individuals displaying higher levels of resilience tend to be less severely affected (in terms of social dysfunction) by job insecurity when compared to those individuals measuring low on resilience. This confirms the expectations as based on the literature; for example, Johnson and Wiechelt (2004) who state that resilience is a process enabling people to sustain lives of health and hope, despite facing adversity. Hypothesis 2 - which stated that resilience plays a role in the relationship between job insecurity and health - was therefore also only partially accepted, given that resilience was only found to moderate the relationship between job insecurity and one general health subscale, namely social dysfunction.

No significant differences were obtained for any of the mean scores of job insecurity, resilience and general health across the biographical characteristics. Hypotheses 3, 4, and 5 were therefore rejected. These findings are contrary to those of Yousef (1998) and Mallak (1998) who found that variables such as age, gender, marital status, ethnic/cultural background, job level, monthly income and tenure account for variations in the security of employees as well as manifestations of psychological well-being. However, the findings are in line with those of Grant (2005) and Elbert (2002) who found no significant differences with regard to job insecurity and age, qualifications and tenure.

This study had several limitations. Firstly, the sample size may be considered a limitation, which placed restrictions on the statistical analyses that could be conducted, as well as the generalisability of the research findings. Furthermore, the sample was imbalanced in terms of the distribution of cultural/racial groups. Stratified random sampling may have ensured sufficient representation of the different groups. Another limitation is the exclusive reliance on self-reporting measures by participants, which increases the likelihood that at least part of the shared variance between measures can be attributed to method variance (Schaufeli, Enzmann & Girault, 1993). Regarding research design, future studies should focus on longitudinal designs where causal inferences can be made, as the cross-sectional design does not allow one to determine the direction of the relationship between the variables (Kerlinger & Lee, 2000). Also, the sample should be extended to include employees working in various other geographical locations and industry niches.
RECOMMENDATIONS

The old adage states ‘prevention is better than cure.’ This notion in line with the emergent positive psychology perspective, which emphasises human strengths in managing stress rather than trying to heal the damage, as Iwasaki, Mactavish and Mackay (2005) cite Seligman and Peterson (2003). Organisations should take cognisance of this view in an attempt to pre-empt the negative effects caused by job insecurity and poor general health of employees. Potential mechanisms that organisations could implement are outlined below.

Building trust and fostering concern for others may offer some hope for mitigating the effects of job insecurity (Bultena, 1998). A means for employers to achieve such aims, and manage or decrease uncertainty or false perceptions held by employees, is effectively communicating intentions and goals. Two aspects should be of priority in organisational communication, namely honestly informing employees about their tasks, policy and other issues related to the organisation, and communicating with the intention of creating community within the organisation (DiFonzo & Bordia, 1998).

As previously stated, for the purposes of this research, job insecurity is viewed as chronic work-related stress. There is substantial evidence that a high level of occupational stress in general is associated with low levels of self-reported health and well-being (Arafa, Nazael, Ibrahim, & Attia, 2003). Stress management training is designed to help individuals manage the effects of stress in the work environment (Cartwright & Cooper, 1997). Gardner, Rose, Mason, Tyler, and Cushway (2005) found that stress management training is effective in reducing occupational stress over a sustained period by utilising behavioural coping and cognitive strategies.

Similarly, Williams et al. (2004) found that ‘at risk’ candidates for depression (a subscale of general health), after receiving a specific training intervention, significantly increased their sense of belonging, experienced less loneliness, used more problem-solving coping skills, and decreased insecure attachment by the end of their training. The training intervention provided includes:
• Teaching simple cognitive-behavioural techniques to identify ways of thinking that were not helpful and to reframe individuals’ experience, in this manner restructuring thinking about one’s experience.

• Providing techniques to identify trainees’ emotionality and stress levels and to monitor these on a weekly basis, thus enabling the trainees to attend to, and monitor selected aspects of their affective behavioural and cognitive states; recognising, influencing and controlling their reactivity.

• By improving a sense of belonging and decreasing loneliness and insecure attachment, enabling trainees to be better able to provide and receive peer support, as interpersonal connections are vital to individuals facing stressful conditions and adversity.

• Creating the opportunity to connect with other trainees in a non-threatening situation in which specific interpersonal skills may be identified and encouraged.

Given the finding that resilience moderates the relationship between job insecurity and social dysfunction, it may be worthwhile for organisations to stimulate resilience among their employees, in an attempt to decrease their levels of social dysfunction. In support of the above, work settings designed to sustain the positive development of energy, vigour, dedication, absorption and effectiveness among its employees, are likely to be successful in promoting their well-being and productivity (Maslach, Schaufeli & Leiter, 2001). Iwasaki et al. (2005) discovered after a multi-year study of stress and coping, that leisure provided opportunities for promoting life balance, whereby the intentional creation of leisure space became an oasis for personal renewal (physical, psychological and emotional) that facilitated a sense of balance, survival and resilience, or the capacity to cope proactively with or counteract stress, as demonstrated in the figure below.
Creation of leisure space (e.g. personal, social, cultural, spiritual oasis)

Leisure as a survival strategy with the use of human strengths and resilience e.g. meaning creation through leisure

Life as leisure (e.g. stop 'the world from spinning round', harmony, holistic healing, humour)

Palliative coping through leisure (e.g. time-out, diverting thoughts about stress, feeling re-charged, renewal)

Figure 3. An emergent model of leisure as stress-coping/counteraction (Iwasaki et al., 2005)

The emergent model as presented by Iwasaki et al. (2005) contains one central overarching theme, namely the meaning of leisure stress-coping/counteraction to life survival, as well as three specific contributing themes that make the core meanings functional and operative. The two-way arrows indicate that facilitation of the core meanings, in turn, provides a context for further activating each of the three leisure-specific ways of stress-coping. Thus, this emergent model is a dynamic system in which the one central theme is embedded in the three identified themes of leisure stress-coping/counteraction, which also flow into the central or core theme, and flow out again as actions and consequences.

Career counsellors may be utilised as a mechanism for assisting job insecure employees (Holm & Hovland, 1999). During this guidance or counselling process it is important to identify the strengths and resilience of clients with respect to their preferred leisure styles, which are assumed to be conductive to meaning creation and effective stress-coping. From a positive
perspective, this proactive empowering process seems much more relevant to help clients promote good health and life quality (Iwasaki et al., 2005).

Future research examining the influence of resilience on the stressor-strain relationship is required, also making use of larger and more culturally balanced samples, in a variety of occupational settings in South Africa. It is therefore recommended that more powerful sampling methods be utilised and that longitudinal studies be conducted, thereby enabling causal inferences. By using larger samples, the chance of error is reduced (Kerlinger & Lee, 2000), thus increasing confidence in both the study findings, and that these would prevail across similar groups.
REFERENCES


Worthington, E.L., & Scherer, M. (2004). Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: Theory, review, and hypothesis.


CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

In this chapter conclusions regarding the literature study and the results of the empirical research are presented. Shortcomings of the research are presented, and recommendations for the industry and future research are suggested.

3.1. CONCLUSIONS

Next, conclusions regarding the specific theoretical objectives and the results of the empirical research are offered.

3.1.1. Conclusions regarding the specific theoretical objectives

In line with the first specific objective stated in Chapter 1, job insecurity, resilience, and general health, as well as the relationships between these constructs were conceptualised from literature.

Job insecurity was conceptualised from literature as being a subjective experience regarding uncertainty about the future, especially with regard to the continuation of a job. In this research, job insecurity is viewed as being multidimensional and consisting of various components, including the severity of threat, the perceived importance of each threat to the individual, the perceived threat of the occurrence of various threats that would negatively affect an individual’s total job, and the component relating to the importance attached to each of these potentialities. Job insecurity was shown to have a negative impact on both the individual and the industry, eroding the effectiveness of organisations as a whole by the decreased productivity of an unwell workforce.

Resilience was depicted as a dynamic process, allowing for the recuperation and growth-enhancement of the individual. It was described as possessing both state-like and trait-like qualities, due to it being partly heritable, and partly influenced by the external environment.
Within the theoretical framework of the Resilience Scale - which was used as the measure of resilience in this research -, resilience was conceptualised as being concerned with goal-directed solution-seeking, avoidance, critical understanding, role dependence, source reliance and resource access.

General health was presented as the all-encompassing well-being of individuals: physically, mentally, emotionally and psychologically. Within this study, general health was conceptualised as being made up of four concepts, namely somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression.

A literature review indicated that a negative correlation exists between the levels job insecurity and health and well-being of individuals (Yousef, 1998; Greenhalgh & Rossenblatt, 1984). Previous research had postulated that resilience affects the stressor-strain link (Strümpfer, 2003).

The importance of this research is highlighted by Rothmann (2003), who is of the opinion that it is crucial to track employees' effectiveness in coping with the demands of work and motivating their development in areas that could possibly impact on individual well-being as well as organisational efficiency and effectiveness.

3.1.2. Conclusions regarding the specific empirical objectives

In line with the second objective, the relationships between job insecurity, resilience and general health of motor-trade employees were investigated. It was found that job insecurity was not statistically significantly related to resilience. However, statistically significant correlations were found between resilience and general health, as well as all of its subscales. As resilience decreased, social dysfunction and severe depression increased and vice versa. This finding is in support of the literature.

Job insecurity was not found to be statistically significantly related to resilience. Statistically significant correlations were found between resilience and general health, as well as all of its subscales. The correlations between resilience and the somatic symptoms subscale of the GHQ,
as well as resilience and the anxiety and insomnia subscale of the GHQ, fell below what is considered to be a medium effect in terms of practical significance, but were statistically significant. Practically significant positive correlations of medium effect were, however, found between resilience and the social dysfunction and severe depression subscales of the GHQ. Hence, the relationships found between resilience and social dysfunction, as well as resilience and severe depression, can be considered as more important in practical terms than the relationships between resilience and the anxiety and insomnia, and resilience and somatic symptoms.

In terms of the third specific objective, the results indicated that job insecurity, resilience and general health did not differ with regard to gender, culture, age, qualifications, and tenure of the participants from the motor-trade. This finding corresponds with those of Grant (2005) and Elbert (2002) who found no significant differences with regard to job insecurity and age, qualifications and tenure. However, in a study by Wissing and Van Eeden (2002), it was found that variables such as age, gender and ethnic/cultural context influence the manifestation of psychological well-being. Furthermore, in South African research conducted by Viljoen (2004), it was found that culture and tenure held predictive value with regard to general health.

As stated, the fourth empirical objective was to determine whether job insecurity can be used to predict general health of motor-trade employees. The findings suggest that higher levels of job insecurity are only partly and not fully associated with poorer levels of general health, as no statistically significant relationships were found between job insecurity and anxiety and insomnia, one of the subscales of general health. These findings are not in line with those of Viljoen (2004) who found that job insecurity was practically significantly related to all four subscales of general health.

Regarding the final empirical objective, it was that found resilience does moderate the relationship between job insecurity and social dysfunction, but not with regard to the remaining three general health subscales (somatic symptoms, anxiety and insomnia, and severe depression).
3.2. LIMITATIONS OF THE RESEARCH

A limitation of this study is the size of the sample, especially considering the distribution of the cultural groups and the sampling method. Future studies could benefit by utilising the random, stratified sampling method, thereby increasing representativity, by the proportionate inclusion of cultural groups.

A further limitation of this study was its absolute dependence on self-reporting measures. According to Schaufeli, Enzmann and Girault (1993), the exclusive use of self-report measures in validation studies results in that phenomenon known as 'method variance'. A number of participants may have also doubted the confidentiality with which their responses were handled, thus influencing a proportion of the resultant outcomes.

Regarding the research design, future studies should concentrate on longitudinal and quasi-experimental designs where causal inferences may be made. The cross-sectional design does not allow for relationship directionality to be determined between variables (Kerlinger & Lee, 2000).

This research was conducted in a specific geography and industry that probably possess certain unique characteristics and influences, for example that of operating in a particular segment of the market, being continually and heavily influenced by the economy; and consequently, driven by consumer-related habits and preferences. These characteristics (as well as traditional cultural influences) could have influenced the participants’ perceptions, and thus their responses. By implication, results cannot be generalised to other contexts or professions. The sample should therefore be extended to include employees working in various other sectors of the labour market, as well as in other geographic locations.

3.3. RECOMMENDATIONS

Recommendations are made below with regard to the applicable industry, as well as with regard to future research.
3.3.1. Recommendations for the industry

Career counsellors may be employed to counsel or guide employees in an effort to reduce job insecurity, as well as building on, or determining coping mechanisms, as a function of resilience (Holm & Hovland, 1999). During this guidance or counselling process it is important to identify the strengths and resilience of clients (Iwasaki et al., 2005).

Organisational management should focus on building trust and fostering concern for employees in an attempt to mitigate the effects of job insecurity (Bultena, 1998). Communication, or the transference and understanding of meaning (Robbins, 2003) may be viewed as a means to this end. Organisational communication should focus on informing employees about their tasks, policy and other organisational issues as well as communicating with the intention of creating community within the organisation (DiFonzo & Bordia, 1998).

As stated, for the purposes of this investigation, job insecurity is viewed as a chronic work-related stressor. Substantial evidence exists to demonstrate that high or continued levels of occupational stress are associated with lowered levels of self-reported health and well-being (Araf, Nazael, Ibrahim & Attia, 2003). Stress management training has been shown to assist employees to manage or reduce the effects of occupational stress over time by employing behavioural coping and cognitive strategies (Cartwright & Cooper, 1997; Gardner et al., 2005; Williams et al., 2004).

Organisations would, in all likelihood benefit, from increased well-being of staff, and their related increased productivity, by designing their places of work to sustain positive development of energy, vigour, dedication, absorption and effectiveness (Maslach, Schaufeli & Leiter, 2001). Iwasaki et al. (2005) argue that leisure provides opportunities for promoting life balance, whereby the intentional creation of leisure space becomes an oasis for personal renewal (physical, psychological and emotional) that facilitates a sense of balance, survival, and resilience, or the capacity to cope proactively with or counteract stress.
These recommendations are in line with the positive psychology perspective, which emphasises human strengths in managing stress rather than trying to heal already caused damage.

3.3.2. Recommendations for further research

Future studies should focus on the bias and equivalence of the various measuring instruments for different cultural and language groups. Furthermore, measuring instruments should be translated into other South African languages, to ensure absolute clarity in understanding by all cultural groups participating in subsequent studies.

Much research exists regarding the relationship between job insecurity and various organisational outcomes. However, although resilience was found to play a partially moderating role in the relationship between job insecurity and social dysfunction (in this research), further studies are required regarding those other potential mediators and/or moderators underlying the job-insecurity outcome relationship, and how these constructs dynamically interact. Such insights could spark the means by which to reduce those negative consequences of job insecurity experienced by individuals and organisations/industries alike.

To counteract representativity and generalisability issues, further studies should determine practical as well as statistical significance, utilising adequate statistical techniques (i.e. SEM), a more powerful sampling method, and longitudinal designs, to allow for causal inferences to be made.

3.4. CHAPTER SUMMARY

In this chapter, conclusions regarding the theoretical and empirical objectives were made. The limitations of the research were pointed out and recommendations were made for the industry in which the study was conducted, as well as for future research. All theoretical and empirical objectives formulated for this research have been attained.
REFERENCES


