

**HOME AND WORK DEMANDS AND RESOURCES, SOCIAL
SUPPORT AND WORK-HOME INTERACTION OF
POTCHEFSTROOM EDUCATORS**

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COMMENTS

The reader is reminded of the following:

- The editorial style as well as the references referred to in this mini-dissertation follow the format prescribed by the Publication Manual (5th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University (Potchefstroom) to use APA style in all scientific documents as from January 1999.
- The mini-dissertation is submitted in the form of a research article.

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ABSTRACT

Title: Work demands and resources, social support and negative and positive work/home and home/work interaction in Potchefstroom educators

Key words: Work demands, home demands, work resources, home resources, social support, negative work/home and home/work interaction, positive work/home and home/work interaction, educators, Potchefstroom.

It is universally agreed that education is the key to success. In South Africa, this is evidenced by the effort that the government has put in ensuring that all citizens have equal access to public schools. Despite such effort, the Education System is still experiencing some difficulties in ensuring that those responsible for the provision of education are in good conditions to function optimally. Research has confirmed that educators are most likely to experience stress at work due to their increasingly high work demand and lack of resources to deal with those demands. Integrating their work and personal life can even be more stressful as obligations from both sphere requires them to have sufficient resources to handle such a pressure.

The objective of this study was to investigate the relationship between job characteristics (job demands and resources) and negative and positive work-home interaction in Potchefstroom educators. A cross-sectional survey design was used. A random sample was taken from Potchestroom secondary and primary schools ($N=210$). Age, gender, education, home situation and job situation were included as control variables. Two measuring instruments were administrated. Descriptive statistics and inferential statistics were used to analyse the data.

The results obtained on the scales proved the measuring instruments to be reliable.

OPSOMMING

Title: Werkeienskappe, sosiale ondersteuning en negatiewe en positiewe werk_huisinteraksie van onderwysers

Key words: Werkeinskappe, sosiale ondersteuning, negatiewe werk-huisinteraksie, positiewe werk-huis interaksie, onderwysers

Een van die universeel aanvaarde norme is dat opvoeding die sleutel to sukses. Suid Afrika kan dit waargeneem word in die poging van die regering om te verseker dat alle burgers gelyke toegang tot openbare skole het. Ten spyte van sodanige pogings ondervind die onderwysstelsel steeds probleme daarmee om te verseker dat onderwysers wat vir die voosiening van onderwys verantwoordelik is, in goeie geestesgesondheid verkeer. Ondewysers kan maklik stress en uitbranding ervaar weens die veeleisende aard van hul werk. Om hul werk en persoonlike lewe te intergreer kan selfs nog meer spanningvol wees, aangesien verantwoordelikhede uit beide omgewings vereis dat hulle oor voldoende hulpbronne moet beskik om die moeilike eise te kan hanteer.

Die doel van hierdie studie is om ondersoek in te na die verhouding tussen werkeienskappe (werkseise en hulpbronne), sosiale ondersteuning en negatiewe en positiewe werk-huisinteraksie by onderwysers. 'n Dwarsduersnitopname-ontwerp is gebruik. 'n Ewekansige steekproef is getrek uit Potchesfstromse sekondere en primere skole ($n=210$). Metings van werkeienskappe, sosiale ondersteuning en werk-huisinteraksie is toegepas. Beskrywende statistiek en inferensiel statistiek is aangewend om die data te analiseer.

Die resultate wat op die skale verkry is, het bewys dat die meetinstrumente betroubaar is. Die resultate toon dat onderwysers bepaalde aspekte van hul werk as veeleinsend ervaar, Meer spesifiek is bewys dat hoe werlading, tyd-eise en rol-onsekerheid negatiewe werk-huisinteraksie kan voorspel. Daar is egter ook aangedui dat, wanner onderwysers meen dat hulle beheer oor hul werk het (outonomie), hul welstand ten geode daardeur beïnvloed word. Die resultate het ook getoon dat onderwysers hul werk as veeleisend ervaar, ongeag die ondersteuning wat hulle van kollegas en toesighoues ontvang. In teenstelling met vorige studies oor sosiale ondersteuning is dies temperende effek van sosiale ondersteuning tussen werkeienskappe en werk-lewe-interaksie in hierdie studie nie betekenisvol bewys nie.

Ten slotte is aanbevelings aan die hand gedoen vir die organisasie en vir verdere navorsing.

CHAPTER 1

INTRODUCTION

This mini-dissertation focuses on educators in Potchefstroom, North-West Province, and the influence that their experienced job and home characteristics have on their health, as evidenced by negative and positive work-home (WHI). This chapter contains the problem statement and a discussion of the research objectives, which include the general and specific objectives. The research method is explained and the chapter layout is given.

1.1 PROBLEM STATEMENT

1.1.1 Overview of the problem

Change and transformation have been two dominant features in South Africa over the past years under a new democratic government. Much has been changed, not even the work of educators was left untouched. Studies in the work-life interaction of educators have empirically confirmed that educators are very likely to experience stress, burnout and ill health, because their jobs are increasingly demanding, with increases in work (over)load, numbers of pupils and administration (Mesthrie, 1999). Furthermore, educators have to deal with departmental changes like the introduction of outcomes-based education (OBE), affirmative action and multicultural issues (Jackson & Rothman, 2004; Montgomery, Mostert & Jackson, 2005; Steyn & Wolhuter, 2000).

Given the increasing rate of burnout and stress among educators (Friedman, 2000; Mesthrie, 1999; Whitehead, Ryba, & O'Driscoll, 2000), it can be argued that both their physical and psychological health is at risk. These authors suggest that educators tend to see their work as a potential source of depression, fatigue and frustration. It is evident that high job demands coupled with a shortage of resources are, amongst others, one of the primary causes of burnout and ill-health amongst educators. Consequently, stress experienced at work can be carried over to other life domains, which may eventually influence these other domains in a negative way (Meijman & Mulder, 1998).

As a result of high levels of stress and burnout, a balance between educators' work and their life outside of work is threatened as more negative load reactions experienced at work (and home) are transferred to the other life sphere. This entails that educators' optimal functioning both at work and at home is impaired as a result of crossover effects, which means that negative load reactions developed from one domain are transferred to the other domain (Mulder & Meijman, 1998). Burnout and stress do not only affect educator's wellbeing in a negative way, it also has an adverse impact on the provision of quality education. This in turn could have a negative impact in securing the country's competitiveness with regard to its labour force as well as the overall economy. Securing the future of the upcoming generation is also threatened, because educators' role has a strategic importance for the intellectual, moral, and cultural preparation of young people in the country.

In order to increase the competitiveness and effectiveness of educators, resources such as social support should be the primary starting point in addressing issues caused by a lack of resources. Social support has been widely investigated as a buffer against psychological distress and ill health (Jonas, 2001; LaMaestro, 2004; Shirley, 2004). When applied to the education profession, social support could have a positive impact upon educators' well-being, regardless of the intensity of their work overloads. This is supported by the fact that supportive relationships (from spouse, children, friends, colleagues and supervisors) provide the individual with resources to better cope in situations of need (Sarason & Duck, 2001). Researchers have found that social support from the work environment has a direct impact on educator's performance, as well as facilitating their well-being (Jackson & Rothman, 2004; Montgomery et al., 2005). Hence, the hypothesis of this study is that social support may moderate the relationship between work demands and resources and positive (well-being) and negative (ill health) work-home interaction (WHI).

The purpose of this study is therefore to focus on both negative and positive aspects of educators' profession in an attempt to understanding the holistic reality of educators' work domains. Many researchers have also argued that work-life interaction is a much broader concept than previously conceptualised, which encompasses both negative (e.g., burnout, ill health) and positive (e.g., work engagement, well-being) aspects (Frone, 2003; Geurts & Demerouti, 2003; Grzywacz & Mark, 2000; Hochchild, 1997). This can also be seen as an expression of a more general trend towards Positive Psychology, which focuses on human strengths and optimal functioning, rather than on weaknesses and malfunctioning (Seligman

& Csikszentmihalyi, 2000). Attention will therefore be given to the role work and home demands and resources and social support plays in educators' well-being (expressed as positive and negative WHI). Particularly, limited research has been done in determining the positive relations between work and home resources and positive influences of work-home interaction.

1.1.2 Literature review

According to Demerouti, Bakker, Nachreiner and Schaufeli (2001, p501), "job characteristics can be divided into two parts namely, job demands and job resources. On the one hand, job demands refer to those physical, psychosocial or organisational aspects of the job that require sustained physical and/or mental effort and are associated with certain physiological and or psychological costs". Educator's job demands include things such as too much administration, controlling a large amount of learners, working overtime, adhering to outcome based education (OBE) regulations and multicultural policies, dealing with social issues of learners, and doing all this in poor environmental conditions (Montgomery et al., 2005).

"On the other hand, job resources refer to those physical, psychological, social or organisational aspects of the job that (1) are functional in achieving work goals; (2) reduce job demands (3) stimulate personal growth and development (Demerouti et al., 2001, p. 501.)". Hence, job resources are not only important to deal with demands and to get things done, but they are important in their own right. According to Demerouti et al. (2001), educator's resources may be located to the following categories: (i) task itself (task control, task identity, and flexible working hours), (ii) organisation itself (the provision of sufficient technical equipment needed to pursue their daily duties, career opportunities, job security), and lastly, (iii) social climate (access to psychological or social work support group services, support from co-workers and supervisors). An example of the erosion of educators' work resources is the stoppage of many social support services previously provided by the Department of Education, which are now provided by private professional or non-governmental organisation (NGO's) (Steyn & Wolhuter 2000). Some of these services are not easily accessible to educators, since they are expensive.

Montgomery et al. (2005) found that high job demands and a lack of resources leads to educators becoming exhausted, incapable of performing (because all their energy has been drained), developing an increased intolerance of any effort and an unwillingness to perform. As such, this could lead to burnout and ill health (Demerouti et al., 2001; Schaufeli & Bakker, 2004). Conversely, it is also argued that sufficient resources will have positive effects on health. Hakanan, Bakker and Schaufeli (2005) found that teachers who are able to draw upon job resources like job control, supervisory support and innovativeness, may become more vigorous and dedicated, thus leading to more work engagement. Work engagement is in turn positively correlated to organisational commitment and low turnover (Hakanan et al., 2005; Mostert, Cronje, & Pienaar 2006; Mostert & Oosthuizen, 2006).

In addition to job demands and resources, social support forms an integral part of this framework. Social support can be defined as a mesh of relationships and transactions (emotional, cognitive and behavioural), whose function is to complement personal resources that allow adaptive coping in a situation of need (Sarason & Duck, 2001). House (1981) proposed that a social support network has four explicit functions. Specifically, it can provide the individual with a (i) a sense of acceptance and self worth (emotional support), (ii) affiliation and contact with others (social companionship), (iii) concrete aid, material resources, and financial assistance (instrumental support), or (iv) information useful in understanding and coping with potentially stressful events (informational support). Social support may come from different sources. In the work environment, potential sources of support can be colleagues and supervisors. In the home situation, potential sources of support can be the spouse, children, friends and relatives (Anderson & Sabatelli, 1999; Fink, 1995).

Demands, resources, social support and work-life interaction

Research shows that high job demands, or having too much to do, with constant imposed deadlines and low job control are the most harmful workplace stressors (Karasek & Theorell, 1990). Having social support at work from supervisors can help ameliorate the effects of high demands and low control (Karasek & Theorell, 1990), while many studies have shown direct and indirect links between social support and general health or well-being (Jonas, 2001; LaMaestro, 2004; Shirley, 2004). Among other relevant findings, research found casual and correlation ties between social support and (i) job performance and satisfaction, work motivation (Lee, 2002), (ii) the reduction of work-family conflicts (Poelms, Spector, Cooper,

Allen, O'Driscoll, & Sanchez, 2003), and (iii) the reduction of stress and strain by providing individuals with the ability to deal effectively with work and home demands (Demerouti et al., 2001; Haslam, O'Brein, Vormedal, & Penna, 2005). LaMaestro (2004) further argued that teachers who feel that they can depend on their organisation for social support are more excited and enthusiastic on a daily basis than those who do not experience such social support. Therefore, it is empirically evident that there is a positive relation between the availability of social support and well-being.

Well-being in this framework is used to refer to positive WHI, since both terms emphasise the individual's optimal functioning (Seligman & Csikszentmihalyi, 2000). Well-being can therefore be seen as an individuals' optimal functioning both on a physical and psychological level. The interaction between a person's work and non-work situation is known as work-home interaction (WHI) or home-work interaction (HWI) (Geurts & Dijkers, 2002). This interaction may be negative (work negatively influencing home, or home negatively influencing work) or positive (work positively influencing home or home positively influencing work). This study focuses on both the negative and positive WHI.

To illustrate the underlying mechanism of the WHI process, a useful model to use as a theoretical framework is the Effort- Recovery (E-R) model (Meijman & Mulder, 1998). The basic assumption of this model is that time to recover is vital in order to prevent fatigue and other stressful effects caused by demands. It is argued that physiological reactions occur when effort is exerted to deal with workloads. Therefore, when demands do not cease, or when the demands exceed the personal resources available for dealing with demands, failure to recover might occur. Consequently, the original adaptive response develops into a negative reaction (sustained activation, strain, short-term psychosomatic complaints) that might spill over to the other life spheres (Mulder & Meijman, 1998). Research found a strong relationship between job resources such as job control and job support and positive load reaction spill-over between work and family (Mark, 2000).

Mostert et al. (2006) found that when the organisation offers valuable resources (such as social support, autonomy, performance feedback and possibilities for professional development), the employee is able to invest more time and energy to complete tasks, which could lead to opportunities to develop skills and increase satisfaction. Consequently, energy will be produced rather than consumed and effort-expenditure will remain within acceptable

limits. This implies that the positive load reactions that develop during work will spill over to the home domain, affecting it in a positive manner. Fulfilling multiple roles in the work and home domain may produce resources (energy mobilisation, skill acquisition, greater self-esteem) that can facilitate functioning in both life spheres in a positive way (Mark, 2000). Because the individual has the opportunity to mobilise energy, the need for recovery at home is reduced and the person will start the next day in an optimal condition. Over time, this process should result in increased positive outcomes such as work engagement (Hackman & Olham, 1976).

Positive WHI is attributed mostly to sufficient resources whereas negative WHI is attributed to a lack of resources and high job demands (Mostert et al., 2005). Negative WHI is often the result of job stressors that impair psychological health and can lead to a state of burnout (Peeters, Montgomery, Bakker, & Schaufeli, 2005). Negative WHI can be associated with psychosomatic health complaints and sleep deprivation as well as anxiety or depression (Mulder & Meijman, 1998). Along with this, there have been many research findings that indicate that negative WHI can be linked with consequences such as lowered levels of organisational commitment and job performance for the organisation (Hakanan et al., 2005; LaMaestro, 2005). Poor interaction between work and personal life is associated with less job satisfaction and greater intention to quit, with lower levels of family satisfaction, and with higher levels of emotional exhaustion and psychosomatic symptoms (Mulder & Meijman, 1998). Therefore, it is of equal importance to investigate both positive and negative aspects of WHI.

The objective of this research study is therefore to investigate the relationship between work demands and resources, social support and positive and negative WHI. More specifically, the emphasis also is on whether social support can moderate the relationship between work demands/resources on the one hand, and positive and negative WHI on the other.

The following research questions emerge from the problem statement:

- What is the relationship between job characteristics (work demands and resources), social support and positive and negative WHI according to literature?

- What is the relationship between job characteristics, social support and positive and negative WHI in a sample of educators across different demographic groups (age, gender, educational and home situation)?
- Is a measuring battery of job characteristics, social support and positive and negative WHI reliable in a sample of educators across different demographic groups?
- Can positive and negative WHI be predicted by social support and job characteristics?
- Does social support moderate the relationship between job characteristics and positive and negative WHI?
- What recommendations can be made for future research and managing educators in Potchefstroom?

1.2 RESEARCH OBJECTIVES

The research objectives are divided into general and specific objectives.

1.2.1 General objectives

The objective of this research study is to investigate the relationship between job characteristics, social support and positive and negative WHI across different cultures in a sample of educators in Potchefstroom in the North-West Province.

1.2.2 Specific objectives

The specific objectives of this research are to:

- To conceptualize the relationship between job characteristics, social support and positive and negative WHI according to literature.
- To determine the relationship between job characteristics, social support and positive and negative WHI in a sample of educators across different demographic groups (age, gender, education and home situation).
- To determine if a measuring battery of job characteristics, social support and positive and negative WHI is reliable in a sample of educators across different demographic groups.
- To determine if positive and negative WHI can be predicted by social support and job characteristics.

- To determine if social support moderate the relationship between job characteristics and positive and negative WHI.
- To make recommendations for future research and for managing educators in Potchefstroom.

1.3 PARADIGM PERSPECTIVE OF THE RESEARCH

According to Mouton and Marais (1992), any research is directed by a specific paradigm perspective, which includes theoretical and methodological convictions. Due to the fact that individual researchers are brought up in a certain tradition or paradigm, it has a direct influence on the choices of the researcher in terms of theory and methodology. The researcher is therefore bound by specific theories, methodology and research techniques as prescribed by the paradigm and adheres to certain meta-theoretical assumptions on which the paradigm is based (Mouton & Marais, 1992).

According to the integrated model of Mouton and Marais (1992), the research process in the social sciences consists of three subsystems that are in interaction with each other and with the research domain as defined in a specific domain. These form the intellectual climate of a specific discipline; the market of intellectual resources in the discipline (theoretical statements and methodological beliefs), and the research process itself. Consequently, the intellectual climate and the market of intellectual resources are clarified for the present study.

1.3.1 Intellectual climate

According to Mouton and Marais (1992), the intellectual climate refers to the variety of convictions in a specific discipline at a certain time. In the social sciences, the intellectual climate includes beliefs about human beings in general, as well as more discipline-specific beliefs about society, culture and history. The intellectual climate takes on the form of presuppositions.

1.3.2 Discipline

In the present study, the disciplinary focus is Industrial Psychology, which can be defined as the scientific study of human behaviour and psychological conditions in the work-related context, and the application of this knowledge to minimise problems that might arise (McCormick & Ilgen, 1981). It includes organisational variables such as recruitment and placement of personnel, training, task analysis, job evaluation, motivation of personnel, performance appraisal, the management of morale and weariness, ergonomics, organisational psychology, market and consumer psychology and industrial safety (Plug, Louw, Gouws, & Meyer, 1997).

The sub-disciplines relevant to the present study are organisational psychology and psychometrics. Organisational psychology can be defined as the study of organisations, the elements and systems of which they consist, as well as factors that influence the effective functioning of organisations. Educators represent an important element/part of the organisation (Department of Education), and it is through the provision of resources that their performance, commitment and engagement at work can be improved - this in turn can facilitate the overall effective functioning of the organisation. Hence, in this study, factors influencing the work-life interaction of educators both positively and negatively are investigated (work resources and demands, and social support).

Psychometrics is defined as the branch of psychology that focuses on the development and application of mathematical and statistical procedures in psychology, in other words the study of all aspects of psychological measurement, including the development and standardisation of psychometric tests (Plug et al., 1977). In this study the intention is to measure human behaviour, and then explain or predict behaviour or performance by gathering information from the educators through the use of questionnaires, which will be scored and interpreted so as to answer the research questions of this study. The validity of these measures will also be investigated.

1.3.3 Meta-theoretical assumptions

Numerous paradigms are relevant to this research. Firstly, the literature review is done within the Positive Psychology framework by focusing on the Effort-Recovery (E-R) model and theory, and secondly the empirical study is done within the positivistic and functionalist frameworks.

1.3.3.1 Literature review

According to Snyder and Lopez (2004, p. 6), “the positive psychology framework is a school of thought that emphasises human strengths and optimal functioning instead of weakness”. The basic assumption of this approach is the issue of prevention. This entails that treatment is not just fixing what is wrong, it is also about building on what is right, by focusing on strengths and resources. Hence, in the present study, it is acknowledged that work and home demands are problematic aspects that may cause ill health and malfunctioning among educators, as reflected in negative WHI. However, the focus is to also determine if home and work resources and the availability of social support can facilitate educators’ well being, as reflected in positive WHI.

1.3.3.2 Empirical study

The empirical study is presented from the positivistic and functionalist frameworks. Basic assumptions of the positivistic framework are that knowledge can only be obtained through the study of observable phenomena. Knowledge can furthermore be obtained via the objective empirical operational method (Lundin, 1996; Plug et al., 1997). The basic assumption of the functionalistic framework is that comprehensive, meaningful units of psychological phenomena (thoughts, opinions and beliefs) can be classified in relationship with their purpose to explain relevance thereof for human adaptation and survival (Plug, et al., 1997).

In the present study, the variables are measured quantitatively, and the relationships between variables investigated statistically in order to clarify the relevance thereof for managing work-home interaction among educators.

1.3.4 Market of intellectual resources

According to Mouton and Marais (1990), the market of intellectual resources consists of the collection of beliefs, which gives to scientific hypothesis their status as knowledge suppositions. This means that the market of intellectual resources consists of both theoretical and methodological beliefs.

1.3.4.1 Theoretical beliefs

Theoretical beliefs are testable statements about social phenomena. These are the *what* and *why* aspects of human behaviour and include statements which form part of the hypothesis.

A. Conceptual definitions

This current study focuses on social support, which can be defined as the mesh of relationships and transactions (emotional, cognitive and behavioural), whose function is to complement personal resources to allow adaptive coping in a situation of need (Sarason & Duck, 2001).

Job characteristics can be divided into work demands and resources. On the one hand, work demands can be defined as aspects of the job that require physiological and psychological effort. On the other hand, work resources refers to those physical, psychological, social or organisational aspects of the job that (1) are functional in achieving work goals; and (2) reduce job demands and the associated physiological and psychological costs (Demerouti et al., 2001).

According to the E-R model (Meijman & Mulder, 1998), positive WHI refers to an interactive process in which a worker's functioning in one domain (home) is influenced (positively or negatively) by load reactions that have built up in another domain (work), and vice versa (work influenced by the home).

B. Models and theories

A model is defined as an abstract outline specifying hypothesised relations in a set of data (Kerlinger & Lee, 2000). Mouton and Marais (1992) argue that the heuristic or discovering function is the most important characteristic of a social science model. A model is therefore used to suggest new areas of research because certain relationships and dimensions are emphasised to an unusual degree. Models that govern this research are the Effort-Recovery model as proposed by Meijman and Mulder (1998), the Job Demands-Resources (JD-R) model as proposed by Demerouti et al. (2001), lastly the Job Demand-Control Support model

as proposed by Karasek and Theorell (1990). The hypothesis model of the present study involves the relationship between work and home demands/resources, social support and positive and negative work/home and home/work interaction.

1.3.4.2 Methodological beliefs

According to Mouton and Marais (1992), methodological beliefs concern the nature of social science and scientific research. The methodological model used in this research will be quantitative.

1.4 RESEARCH METHOD

This research, pertaining to the specific objectives, consists of two phases, namely a literature review and an empirical study.

1.4.1 Phase 1: Literature review

The literature review focuses on social support, work demands and resources as well as positive and negative WHI. The following sources of information will be consulted:

- Library catalogues.
- South African as well as international journals.
- Internet search.
- Electronic databases, such as PsychInfo.

1.4.2 Phase 2: Empirical study

The empirical study consists of the research design, participants, measuring battery and statistical analysis.

1.4.2.1 Research Design

The research design refers to the plan and structure of investigation, conceived as to obtain answers to the research questions as well as to control for variance. A plan refers to the overall scheme or program of research, whereas a structure is the framework or organisation of elements that are related in a specified way (Kerlinger & Lee, 2000). Research has various functions, amongst others it is used for explorative and descriptive purposes. Exploratory studies are focussed on the exploration of a relatively unknown area. Aims can be to (i) obtain new insights into a phenomenon, (ii) conduct a preliminary investigation as a precursor to a more structured study, (iii) explicate central concepts and constructs, and (iv) determine priorities for further research and develop new hypotheses about an existing phenomenon (de Vos, Strydom, Fouche, & Delpont, 2005).

The purpose of a descriptive study is to describe that which exists as accurately and clearly as possible. Examples would include (i) an in-depth description of a specific individual or group, (ii) a description of the frequency with which a certain characteristic occurs in a sample, (iii) statistical summary, which entails systematic classification of variables and (iv) correlation studies, which demonstrate relationships among variables (de Vos et al., 2005). This research includes both explorative and descriptive elements, since the purpose is to investigate the relationship between work demands and resources, social support and positive and negative WHI in educators' profession, because limited research has been done on these constructs. The main purpose is to gather information, formulate hypotheses and investigate questions about the relationship of the above-mentioned constructs through a literature review, previous research and empirical investigation. The frequency of the demographic characteristics of educators will also be investigated (cultural groups, gender and age).

For the purpose of gathering the data as well as the achievement of the objectives, a *cross-sectional survey* design will be used. During cross-sectional designs, a sample is drawn from the population and observed at one point of time, in a short period such as a day or a few weeks. This design is also used to assess interrelationship among variables within a population. This research design is well suited to address the descriptive and predictive functions associated with correlation research (Shaughnessy & Zechmeister, 1997).

1.4.2.2 Participants and procedure

A list of schools is obtained from the Potchefstroom Municipality. A random sample ($n = 201$) is drawn from primary and secondary schools in Potchefstroom, Ikageng and Promosa, which all fall under the greater Tlokwe City Council. In total, 900 questionnaires are distributed. A large amount of questionnaires are not completed correctly, and finally only 201 out of 900 are used (response rate of 22%). Consent to conduct the research is received from the Department of Education and participating schools. Thereafter, appointments were made with the principals of the schools and the questionnaires were distributed amongst the participants. A letter requesting participation was included in the test books, as well as an explanation of ethical aspects and a motivation regarding the importance of the research. Individuals could complete the questionnaires in their own time. They were given four weeks to complete the questionnaires, after which these are personally collected.

1.4.2.3 Measuring Battery

Measures investigating the work demands and resources, experiences of social support and work-home interaction are administered. A description of the measures is given below:

Job characteristics. Items are formulated for several job characteristics. Job demands include *Workload* (nine items, e.g., “Do you have too much work to do?”); *Time Demands* (four items, e.g., “Do you have to work overtime?”); and *Role Ambiguity* (five items, e.g., “Do you receive incompatible requests from two or more people?”). Three job resources are measured, including Autonomy, Supervisor Support and Colleague Support. *Autonomy* is measured by eight items from the validated questionnaire on experience and evaluation of work (Van Veldhoven, Meijman, Broersen & Fortuin, 1997) (e.g. “Do you have influence in the planning of your work activities?”). All items are scaled on a four-point scale, ranging from 1 (*never*) to 4 (*always*), with higher scores indicating higher levels on that particular dimension. Roux (2007) confirmed the reliability of these job characteristics in the sample of working females and reported Cronbach alphas as follows: Overload = 0,82; Time Demands = 0,81; Role Ambiguity = 0,72 and Autonomy = 0,86.

The **Social Support Survey** (Oosthuizen, 2007) is used to measure the structural, functional and perceptual facets of Social Support. The structural dimension refers to the sources of support (i.e., Supervisor and Colleague Support). The functional dimension refers to the type of support received from a specific source. Types of support encompass *instrumental*,

emotional, informational and appraisal facets of the dimension. The respondent can then rate the different types of support that he/she receives from a specific source, and indicate if they receive that type of support on a scale of 1 (*a little*) to 4 (*a lot*). The perceptual dimension refers to the characteristics of the support. The characteristics encompass the importance, the adequacy, the accessibility, and the amount of the support that is received. The latter characteristics can be rated on a Likert-type scale ranging from 1 (low levels) to 5 (high levels). As this is a newly constructed instrument, no previous studies regarding the reliabilities are available.

Work-home Interaction. The ‘*Survey Work-home Interaction-NijmeGen*’ (SWING; Geurts et al., 2005) is used to measure negative WHI and positive WHI. Eight items are used to measure negative WHI (e.g., “you do not fully enjoy the company of your spouse/family/friends because you worry about your work”) and four items to measure positive WHI (e.g., “you come home cheerfully after a successful day at work, positively affecting the atmosphere at home”). All items are scored on a four point frequency rating scale ranging from 0 (*never*) to 3 (*always*). It seems that the factors are internally consistent, where alpha values of 0,84 (Negative WHI) and 0,75 (Positive WHI) are reported by Geurts et al. (2005). The following Cronbach alpha coefficients were obtained by Pieterse and Mostert (2005) in a South African sample: Negative WHI = 0,87 and Positive WHI = 0,79.

1.4.2.4 Statistical analysis

The SPSS programme (SPSS, 2007) is used to carry out the statistical analysis. Exploratory factor analysis is used to determine the construct validity of the measuring instruments. The following procedure is followed: Firstly, a principal axis factoring analysis is conducted on the study variables. The eigenvalues and scree plot are studied to determine the number of factors. Secondly, a principal axis factoring analysis with a direct oblimin rotation is conducted on factors that are related ($r > 0,30$). Alternatively, a principal axis factoring analysis with varimax rotation is used if the obtained factors are not related (Tabachnick & Fidel, 2001). Cronbach alpha coefficients are used to determine the reliability. To analyse the data, descriptive statistics (e.g., means, standard deviations, skewness and kurtosis) and inferential statistics are used. Pearson product-moment correlation coefficients are used to specify the relationship between the variables. In terms of statistical significance, it is decided to set the value at a 95% confidence interval level ($p \leq 0,05$). Effect sizes (Steyn, 1999) are

used to decide on the practical significance of the findings. A cut-off point of 0,30 (medium effect, Cohen, 1988) is set for the practical significance of correlation coefficients.

Multiple regression analyses are carried out to determine the percentage variance explained in the dependent variable (e.g., negative and positive WHI) that is predicted by the independent variables (e.g., job demands and job resources). The main and interactive effects of social support were tested using hierarchical multiple regression analysis. Firstly, job demands (for negative WHI) and job resources (for positive WHI) are entered. The interaction terms created for Supervisor and Colleague Support with the particular job characteristics were entered in the second step in order to test for the hypothesised moderating effect of social support in the relation of job demands/resources and negative/positive WHI. Following Aiken and West (1991), the means of interaction terms are set to zero, while their standard deviations are kept intact. Where a moderating effect is indicated, the relevant variables are dichotomised via a median-split, and graphically represented with a univariate general linear model.

1.5 CHAPTER LAYOUT

In Chapter 2, the relationship between job characteristics and work-home interference is discussed in the form of a research article. Chapter 3 deals with the conclusions, limitations and recommendations of this research.

1.6 CHAPTER SUMMARY

This chapter discussed the problem statement and research objectives. The measuring instruments and the research method used in this study were explained, followed by a brief overview of the chapters that follow.

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CHAPTER 2

RESEARCH ARTICLE

HOME AND WORK DEMANDS AND RESOURCES, SOCIAL SUPPORT AND WORK-HOME INTERACTION OF POTCHEFSTROOM EDUCATORS

S. Tshabalala

ABSTRACT

The objectives of this study were to investigate the relationship between work and home demands and resources, social support and negative and positive work-home and home-work interaction of Potchefstroom educators. A cross-sectional survey design was used. An availability sample was taken ($n = 201$), and questionnaires on job and home characteristics, social support and work-home interaction were administered. Descriptive statistics (e.g., standard deviations, skewness and kurtosis), exploratory factor analysis, reliability analysis, regression and (multivariate) analysis of variance were used to analyse the data. The results indicated that educators experience high workload, time demands and role ambiguity, which in turn predicted negative work-home interference. However, it is also indicated that when educators feel that they have control over their work (autonomy), their well-being can probably be facilitated. The results also indicated that educators still experience their work as demanding regardless of the support they received from their colleague and supervisors.

OPSOMMING

Die doelwit van hierdie studie was om die verhouding tussen werk- en huis eise en hulpbronne, sosiale ondersteuning en negatiewe en positiewe werk-huis en huis-werk interaksie van opvoeders in Potchefstroom te ondersoek. 'n Dwarssnitopname is gebruik. 'n Beskikbaarheidssteekproef is geneem van onderwyseres ($n = 201$) en opname-vraelyste rakende die werk en huis eenskappe, sosiale ondersteuning en werk-huis interaksie is geadministreer. Beskrywende statistiek, (standaard afwykings, skeefheid en kurtose), verkennende faktor analise, betroubaarheidsanalise, regressies en (meervoudige) variansie analise is gebruik om die data te analiseer. Die resultate het aangewys dat onderwysers hoe werklading, tydeise en roldubbelsinnigheid ondervind, wat op hul beurt negatiewe werk-huisinteraksie voorspel. Daar is egter ook aangedui dat wanneer opvoeders voel dat hulle beheer (outonomie) oor hul werk, hulle welsyn waarskynlik gefasiliteer word. Die resultate

dui ook aan dat opvoeders steeds hul wer as veeleisend ondervind, ongeag die ondersteuning wat hulle van hul kollegas en toesighouers ontvang.

Educators are the single largest occupational group and profession in South Africa. Their role has a strategic importance for the intellectual, moral, and cultural preparation of young people in the country, through the provision of knowledge and skills (National Policy Framework for Teachers and Development, 2006). Furthermore, educators are regarded as important agents for social transformation, technological innovation and individual empowerment, which consequently contribute to the economic growth of the country (Marais & Meier, 2004; Steyn & Wolhuter, 2000). In 2006, there were 386 595 educators employed by the department of education, of which only 5% were in independent schools (National Policy Framework for Teachers and Development, 2006).

Research in the educational literature has indicated that the number of educators who leave the profession is rapidly increasing (Johson, 2002; Master, 2002). As such, the Department of Education is faced with a major challenge of retaining and maintaining its employees. According to the North-West Department of Education Statistics (2004), the number of educators using sick leave increased by 339,27% (or 57 666 days) and resignations increased by 82,74% (139 resignations) between 2001 and 2002. A report on educator supply and demand projected a shortfall of around 15 000 educators by 2008 (National Policy Framework for Teachers and Development, 2006). These figures are of major concern; hence, it is deemed relevant to investigate factors such as the home and work characteristics of educators, in order to begin identifying causes or antecedents of educator's absenteeism and resignation.

Particularly to the North-West province, Wentzel (2006) found that educators have to deal with undisciplined children and the abolishment of corporal punishment, large numbers of children, a shortage of educators, language difficulties and work overload. Additionally, it was found that educators have insufficient resources to deal with the above demands. Educators experience a lack of communication and planning from the Department, a lack of material aids (technical equipment), low salaries, lack of acknowledgement, a lack of task autonomy, and a lack of career movement (Buys, 2006; Montgomery, Mostert, & Jackson, 2005; Wentzel, 2006).

Inadequate salaries are one of the major problems experienced by South African educators. It is evident that educators are not satisfied with the amounts they receive from their employer

(Wentzel, 2006). Educators feel that they are not being paid according to the nature of their job, characterised by high work-demands. Olivier and Venter (2003) found that because of insufficient salaries, educators experienced a great deal of stress, especially when taking into account the after-hours effort their jobs demanded from them and how negative their salaries compare to people in the private sector and other departments of government. Another impeding aspect for educators is the issue of job insecurity (Jackson & Rothman, 2004). Due to increasing departmental changes, educators feel that their skills are becoming obsolete; hence they are in a constant fear of losing their jobs (Buys, 2006; Jackson & Rothmann, 2004).

Amongst other relevant findings, it has been found that stress and burnout play a significant role in determining the leaving intention of educators (Jackson & Rothmann, 2004; Montgomery et al., 2005). This is due to the fact that educators work under extremely complex conditions and their work is increasingly demanding (Friedman, 2000; Jackson & Rothmann, 2004; Mesthrine, 1999; Whitehead, Ryba O'Driscoll, 2000). Educators have to cope with demands such as the rationalisation of personnel, increased specialisation, the growing scope of syllabuses and a higher number of pupils per class (Myburg & Poggenpoel, 2002; Niehaus, Myburg & Kok, 1996). Furthermore, educators have to deal with broader governmental changes such as the transition of working in nineteen departments of education to one national, and nine provincial departments. Further issues are the introduction of affirmative action, outcome based education (OBE), diversity, retrenchment and redeployment (Myburg & Poggenpoel, 2002; Niehaus, Myburg, & Kok, 1996).

Empirical studies have confirmed that when educators experience high job demands with limited resources to cope with these demands, burnout is likely to develop, which could eventually lead to physical ill health (indigestion or heartburn, insomnia, headaches, lack of appetite or over-eating) and psychological ill health (constant irritability, feeling unable to cope, mood swings or difficulties in decision making) (Jackson & Rothmann, 2004; Montgomery et al., 2005).

Over the past years, empirical studies have consistently proven that interaction between personal life and work does exist (Hochchild, 1997; Kirchmeyer, 1993). Boundaries between work and personal life have become more blurred as organisations become increasingly virtual, and more people work at or from home for all or part of the week, using information

and communication technologies (Montgomery et al., 2005). In this light, many researchers focused exclusively on how the work and personal life may influence each other in a negative way (Barnett, 1998; Grzywacz & Marks, 2000). For instance, issues pertaining to ill health (burnout, stress) received more attention with regard to how they influence functioning both in the work and home domain (Frone, 2003; Geurts & Demerouti, 2003; Grzywacz & Mark, 2000; Hochchild, 1997). Contrarily, the study conducted by Mostert, Cronje and Pienaar (2006) found that positive interaction between the work and home domain of police officers is facilitated by the availability of resources in the work domain. Therefore negative and positive WHI is of interest in this study.

Within the education profession, research proves that having job resources at work can facilitate health, work engagement or organisational commitment (Hakanan, Bakker, & Schaufeli, 2005; LaMaestro, 2004; Leiter, 1993). Based on this line of reasoning, it is of interest to investigate social support and its properties as the integral resource and the role it plays at work. In broad terms, social support can be defined as the availability of helping relationships (networks e.g., friends, family) and the quality of those relationships (House, 1981; Leavy, 1983; Sarason & Duck, 2001). Researchers in behavioural medicine have conceptualized social support in cognitive terms as the perception that one is loved and esteemed by others (perceived support) (Wethington & Kessler, 1986). The view here is that a perception of being cared for can itself promote health.

In models of stress, social support is typically hypothesized to have a main and/or moderating effect (Cohen & Wills, 1985; House, 1981). Authors propose that the main effects operate by changing the amount of stress that an actor perceives in a situation or by directly affecting well-being. On the other hand, the moderating effect changes the relationship between the perception of potentially stressful events and the degree of strain experienced. In most studies, colleagues and supervisory support were found to have a positive correlation with employees organisational commitment, job satisfaction and low turnover (Park, Wilson, & Lee, 2004; Sieberhagen, 2006). Thus, it is the hypothesis of this study that social support can moderate the relationship between work demands and resources and positive (well-being) and negative (ill health) WHI experienced by educators.

Job demands and resources

The Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) can be used to investigate the influence of job demands and resources on work-related outcomes. According to Demerouti et al. (2001, p. 501), job characteristics can be divided into two parts namely, job demands and job resources. "On the one hand, job demands refer to those physical, psychosocial or organisational aspects of the job that require sustained physical and/or mental effort and are associated with certain physiological and or psychological costs." Educator's job demands include things such as too much administration, controlling a large amount of learners, working overtime, adhering to outcome based education and multicultural policies, dealing with social issues of learners, and poor environmental conditions (Montgomery et al., 2005).

On the other hand, job resources refer to "those physical, psychological, social or organisational aspects of the job that (1) are functional in achieving work goals; (2) reduce job demands (3) stimulate personal growth and development" (Demerouti et al, 2001, p 501). Hence, job resources are not only important to deal with demands and to get things done, but they are important in their own right. According to Demerouti et al. (2001), educator's resources may be categorised into the following categories: (i) the task itself (task control, task identity, and flexible working hours), (ii) the organisation itself (the provision of sufficient technical equipment needed to pursue their daily duties, career opportunities, job security) and lastly, (iii) the social climate (access to psychological or social work support group services, support from co-workers and supervisors).

According to Bakker, Demerouti and Schaufeli (2003), these two sets of working conditions (i.e., job demands and job resources) may each evoke different processes. Firstly, job demands may lead to a health impairment process, where high job demands may exhaust employees' mental, emotional and physical resources. This exhaustion of resources may further lead to the depletion of energy and to health problems (Demerouti et al., 2001; Leiter, 1993). Secondly, job resources may lead to a motivational process, where the presence of adequate job resources reduces job demands, fosters goal accomplishment and stimulates personal growth and development. In turn, this process facilitates work engagement (Mostert et al., 2006).

Thus, two conclusions can be made with regards to work resources; firstly, high level of demands combined with a lack of resources in the work environment can predict negative

interaction (burnout and ill health) between work and home domain. Secondly, positive interaction (well-being) between work and home domain can be predicted by the presence of sufficient resources in both domains.

Social support

Social support has emerged as an important factor in predicting individual and organisational health outcomes (LaMaestro, 2004; Shirley, 2004). Social support can be defined as a mesh of relationships and transactions (emotional, cognitive and behavioural), of which the function is to complement personal resources to allow adaptive coping in a situation of need (Sarason & Duck, 2001). House (1981) proposed that a social support network has four explicit functions. Specifically, it can provide the individual with, (i) a sense of acceptance and self worth (emotional support), (ii) affiliation and contact with others (social companionship), (iii) concrete aid, material resources, and financial assistance (instrumental support), or (iv) information useful in understanding and coping with potentially stressful events (informational support).

Sources of social support can found in the organisation or at work (e.g., colleagues, supervisors or unions) and in the non-work environment (e.g., family, friends, relative) (Oosthuizen, 2007). Social support at work is positively correlated to job autonomy, lower levels of depression and high job performance (Park, Wilson, & Lee, 2004; Sieberhagen, 2006). More specifically, supervisor and colleague support is directly related to overall job satisfaction (Ramesh, 2006). Kirmeyer (1990) further proposed that social support at work may be critically important because of its potential for moderating or attenuating the detrimental effect of organisational stressors.

Research shows that high job demands, or having too much to do, with constant imposed deadlines and low job control are the most harmful workplace stressors. However, having social support at work from supervisors can help ameliorate the effects of high demands and low control (Karasek & Theorell, 1990). Many studies have shown direct and indirect links between social support and general health or well-being (Jonas, 2001; LaMaestro, 2004; Shirley, 2004). Among other relevant findings, research found casual and correlation ties between social support and, (i) job performance and satisfaction, work motivation (Lee, 2002; Terry, Nielsen & Perchard, 1993), (ii) reduction of work-family conflicts (Jonas,

2001), and (iii) reduction of stress and strain by providing individuals the ability to deal effectively with work and home demands (Demerouti et al., 2001; Haslam, O'Brein, Vormedal, & Penna, 2005). LaMaestro (2004) further argued that educators who feel that they can depend on their organisation for social support are more excited and enthusiastic on a daily basis than those who do not experience such social support.

It is therefore apparent that social support is important, and that it leads a person to believe that he/she is valued and belongs to a network of communication and mutual obligations. As such, social support can be regarded as a form of *assistance* (informational and instrumental) and *protection* (emotional and appraisal) given to other individuals. As such, it is reasonable to argue that social support could moderate the relationship between work demands and resources and negative and/or positive WHI.

Negative and positive work/home

According to Geurts and Dikkers (2002), the work-home interface is seen as an interactive process in which a worker's functioning in one domain (home) is influenced (positively or negatively) by load reactions that have built up in another domain (work), and vice versa. Based on this definition, work-home interface can be divided into work influencing the home positively and negatively, and home influencing the work positively and negatively. For the purpose of this study, only negative and positive WHI is of interest.

Work-family conflict can be seen as a form of an inter-role conflict in which the role pressures from the work or home are mutually incompatible (i.e., participating in one domain makes it difficult to participate in the other domain) (Greenhaus & Beutell, 1985). In the literature, three types of work-home conflict have been identified, (i) time-based conflict, which develops when the time devoted to work (home) makes it physically impossible to meet obligation in another domain, (ii) strain-based conflict, which refers to the process in which tension developed at work (or home) is transferred to the home (or work) domain, and (iii) behaviour-based conflict, which refers to a situation in which a specific behaviour at work (or home) is incompatible with behaviour expected at home (or work).

Negative WHI is the result of negative load reactions developed in one domain which might eventually spill over to the other domain (Meijman & Mulder, 1998). Along this line of

reasoning, high work demands can cause strain on individuals and may lead to limitations of personal time (Buys, 2006; Wentzel, 2006). These work-home conflicts have been proven to have unfavourable health outcomes, such as burnout, anxiety, work stress and psychosomatic symptoms for individuals (Meijman & Mulder, 1998; Kandonlin, 1993; Wentzel, 2006)

Conversely, positive WHI focuses mostly on factors that facilitates individual's well-being. For instance, it has been proven that if an individual has sufficient resources and time to recover after work, positive spill over across the two domains is facilitated (Meijman & Mulder, 1998; Mostert et al., 2006). Contrary to negative interaction (negative spill over), positive WHI/HWI proposes that fulfilling multiple roles in the work and home domain may produce resources (energy mobilisation, skill acquisition, greater self esteem) that can facilitate functioning in both life spheres in a positive way (Mark, 2000). Because the individual has the opportunity to mobilise energy, the need for recovery at home is reduced and the person will start the next day in an optimal condition. Over time, this process should result in increased positive outcomes such as work engagement (Hackman & Olham, 1976; Mostert et al., 2006).

Demands, resources, social support and work-life interaction

Positive work-home interaction is attributed mostly to sufficient resources, whereas negative work-home interaction is attributed to a lack of resources and high job demands (Montgomery et al., 2005). Research found that social support from co-workers and one's superior, performance feedback, coaching, job autonomy, task variety, and training facilities can predict work engagement, which is known to be related to well-being (Demerouti et al., 2001; Hakanan et al., 2005; Mostert et al., 2006; Schaufeli & Bakker, 2004).

Studies show that social support can serve as a buffer against psychological distress (Jonas, 2001; LaMaestro, 2004; Withington & Kessler, 1986). As such, it seems reasonable to argue that negative WHI (negative moods, experience of stress, psychosomatic symptoms) could also be moderated by social support. Therefore, it is of equal importance to investigate both positive and negative aspects of W/H interaction. As discussed above, it is apparent that educators leave their work because, amongst other reasons, they can no longer tolerate the level of stress and burnout caused by their demanding job (Jackson & Rothman 2004; Montgomery et al., 2005). In the same vein, it might be argued that they also leave because

they have to deal with high demands with limited resources which results in strain and tension, which in turn might spill-over to their family lives (negative WHI) (Mostert et al., 2006). In the light of this, work demands and resources, social support, positive and negative WHI are worthy of investigation in order to provide a holistic reality to educator's work-life interaction.

Based on the above reasoning, the objective of this research study is to investigate the relationship between work demands and resources, social support and positive and negative work-home interaction among educators. More specifically, the focus also falls on whether the presence of social support can moderate the relationship between home and work demands/resources on the one hand, and positive and negative WHI on the other.

In the light of the major objective of this study, the following hypotheses are formulated:

- H1: Negative WHI can be predicted by work demands and low levels of social support.
- H2: Positive WHI can be predicted by work resources and high levels of social support.
- H3: Social support moderates the relationship between work demands and resources and negative and positive W/H interaction, respectively.

METHOD

Research Design

A cross-sectional survey design was used, during which a sample was drawn from the population of educators in Potchefstroom, Ikageng and Promosa and observed at one point in time, that is from July 2007 to September 2007. This design is used to assess interrelationship among variables within a population. This research design is well suited to address the descriptive and predictive functions associated with correlation research (Shaughnessy & Zechmeister, 1997).

Participants and procedure

A list of schools was obtained from the Potchefstroom Municipality. A random sample ($n = 201$) was drawn from primary and secondary schools in Potchefstroom, Ikageng and Promosa, which all comes within the jurisdiction of the greater Tlokwe City Council. In total, 900 questionnaires were distributed. A large amount of questionnaires were not completed correctly, and finally only 201 out of 900 could be used (response rate of 22%). Consent to conduct the research was received from the Department of Education and participating schools. Thereafter, appointments were made with the principals of the schools and the questionnaires were distributed amongst the participants. A letter requesting participation was included in the test books, as well as an explanation of ethical aspects and a motivation regarding the importance of the research. Individuals could complete the questionnaires at their own time. They were provided four weeks to complete the questionnaires, after which these were personally collected. Table 1 provides an indication of the characteristics of the participants included in this study.

Table 1

Demographic Characteristics of Participants (n = 201)

Item	Category	Frequency	Percentage
Gender	Male	43	21,4
	Female	158	78,6
Language	Afrikaans	103	51,2
	English	14	7,0
	Sepedi	4	2,0
	Sesotho	18	9,0
	Setswana	54	26,9
	IsiNdebele	1	0,5
	IsiXhosa	5	2,5
	IsiZulu	2	1,0
Household situation	Single without children	30	14,9
	Single with children	28	13,9
	Married/partner without children	26	12,9
	Married/partner with children	105	52,2
	Living with parents	7	3,5
	Other	4	2,0
Qualification	Grade 12	10	5,0
	Technical college	49	24,4
	Technicon diploma	26	12,9
	University degree	102	50,7
	Postgraduate degree	8	4,0

Note. Where percentages do not sum to 100, this is due to missing values

The majority (78,6%) of the participants were female. Only 7% were English speaking, while 51,2% of the participants were Afrikaans speaking. The languages Sepedi, Sesotho, Setswana, isiNdebele, isiXhosa and isiZulu accounted for the remaining 41,9%. The majority of the participants (52,2%) were married/living with a partner, with children living at home. Only 3,5% were living with parents. A quarter of the participants (50,7%) had a university degree, while 5% of responding educators indicated that they were only in possession of a Grade 12 qualification (these were likely to be teachers in training). The second largest group had technical college diplomas (24,4%).

Measuring Battery

Measures investigating the work demands and resources, experiences of social support and work-home interaction were administered. A description of the measures is given below:

Job characteristics. Items were formulated for several job characteristics. Job demands included *Workload* (nine items, e.g., “Do you have too much work to do?”); *Time Demands* (four items, e.g., “Do you have to work overtime?”); and *Role Ambiguity* (five items, e.g., “Do you receive incompatible requests from two or more people?”). Three job resources were measured, including Autonomy, Supervisor Support and Colleague Support. *Autonomy* was measured by eight items from the validated questionnaire on experience and evaluation of work (Van Veldhoven, Meijman, Broersen, & Fortuin, 1997) (e.g., “Do you have influence in the planning of your work activities?”). All items are scaled on a four-point scale, ranging from 1 (*never*) to 4 (*always*), with higher scores indicating higher levels on that particular dimension. Roux (2007) confirmed the reliability of these job characteristics in the sample of working females and reported Cronbach alphas as follows: Overload = 0,82; Time Demands = 0,81; Role Ambiguity = 0,72 and Autonomy = 0,86.

The **Social Support Survey** (Oosthuizen, 2007) was used to measure the structural, functional and perceptual facets of Social Support. The structural dimension refers to the sources of support (i.e., Supervisor and Colleague Support). The functional dimension refers to the type of support received from a specific source. Types of support encompass *instrumental*, *emotional*, *informational* and *appraisal* facets of the dimension. The respondent can then rate the different types of support that he/she receives from a specific source, and indicate if they receive that type of support on a scale of 1 (*a little*) to 4 (*a lot*). The perceptual dimension refers to the characteristics of the support. The characteristics encompass the importance, the adequacy, the accessibility, and the amount of the support that is received. The latter characteristics can be rated on a Likert-type scale ranging from 1 (low levels) to 5 (high levels). As this is a newly constructed instrument, no previous studies regarding the reliabilities are available.

Work-home Interaction. The ‘*Survey Work-home Interaction-Nijmegen*’ (SWING; Geurts et al., 2005) was used to measure negative WHI and positive WHI. Eight items were used to measure negative WHI (e.g., “you do not fully enjoy the company of your spouse/family/friends because you worry about your work”) and four items to measure positive WHI (e.g., “you come home cheerfully after a successful day at work, positively affecting the atmosphere at home”). All items are scored on a four point frequency rating scale ranging from 0 (*never*) to 3 (*always*). It seems that the factors are internally consistent,

where alpha values of 0,84 (Negative WHI) and 0,75 (Positive WHI) are reported by Geurts et al. (2005). The following Cronbach alpha coefficients were obtained by Pieterse and Mostert (2005) in a South African sample: Negative WHI = 0,87 and Positive WHI = 0,79.

1.4.2.4 Statistical analysis

The SPSS programme (SPSS, 2007) was used to carry out the statistical analysis. Exploratory factor analysis was used to determine the construct validity of the measuring instruments. The following procedure was followed: Firstly, a principal axis factoring analysis was conducted on the study variables. The eigenvalues and scree plot were studied to determine the number of factors. Secondly, a principal axis factoring analysis with a direct oblimin rotation was conducted on factors that were related ($r > 0,30$). Alternatively, a principal axis factoring analysis with varimax rotation was used if the obtained factors were not related (Tabachnick & Fidel, 2001). Cronbach alpha coefficients were used to determine the reliability. To analyse the data, descriptive statistics (e.g., means, standard deviations, skewness and kurtosis) and inferential statistics was used. Pearson product-moment correlation coefficients was used to specify the relationship between the variables. In terms of statistical significance, it was decided to set the value at a 95% confidence interval level ($p \leq 0,05$). Effect sizes (Steyn, 1999) were used to decide on the practical significance of the findings. A cut-off point of 0,30 (medium effect, Cohen, 1988) was set for the practical significance of correlation coefficients.

Multiple regression analyses were carried out to determine the percentage variance explained in the dependent variable (e.g., negative and positive WHI) that is predicted by the independent variables (e.g., job demands and job resources). The main and interactive effects of social support were tested using hierarchical multiple regression analysis. Firstly, job demands (for negative WHI) and job resources (for positive WHI). The interaction terms created for Supervisor and Colleague Support with the particular job characteristics were entered in the second step in order to test for the hypothesised moderating effect of social support in the relation of job demands/resources and negative/positive WHI. Following Aiken and West (1991), the means of interaction terms were set to zero, while their standard deviations were kept intact.

RESULTS

Descriptive statistics for the different variables are given in Table 2 below.

Table 2

Descriptive Statistics and Cronbach Alpha Coefficients of the Measuring Instruments

Item	Mean	SD	Skewness	Kurtosis	α
Workload	2,77	0,60	-0,17	-0,49	0,86
Time Demands	2,35	0,86	0,22	-0,91	0,89
Role Ambiguity	1,96	0,58	0,53	0,36	0,79
Autonomy	2,78	0,57	-0,01	-0,40	0,79
Supervisor Support	2,70	1,08	-0,58	0,10	0,81
Colleague Support	2,97	0,99	-0,44	0,91	0,71
Negative WHI	1,40	0,67	0,18	-0,48	0,89
Positive WHI	1,32	0,68	0,26	-0,46	0,76

Inspection of Table 2 shows that acceptable Cronbach Alpha were obtained for all scales. It therefore appears that all the measuring instruments have acceptable levels of internal consistency. All the alpha coefficients were higher than the guideline of $\alpha > 0,70$ (Nunnally & Bernstein, 1994). All the scores were normally distributed.

Table 3 shows the correlations between the job characteristics and WHI. Pearson product-moment correlation coefficients were used to specify the relationship between all variables.

Table 3

Correlation Coefficients between Job Characteristics, Negative WHI and Positive WHI

	1	2	3	4	5	6	7	8
1. Workload	1,00							
2. Time Demands	0,59**	1,00						
3 Role Ambiguity	0,42**	0,23*	1,00					
4. Autonomy	-0,11	0,18*	-0,10	1,00				
5. Supervisor Support	0,06	-0,04	-0,13	0,06	1,00			
6. Colleague Support	0,09	0,01	-0,09	0,02	0,46**	1,00		
7. Negative WHI	0,56**	0,51**	0,37**	-0,18*	-0,02	0,02	1,00	
8. Positive WHI	0,10	-0,07	-0,07	0,34**	0,00	0,10	0,00	1,00

* Correlation is significant at the 0,01 level

+ Correlation is practically significant $r > 0,30$ (medium effect)

**Correlation is practically significant $r > 0,50$ (large effect)

As it can be seen in Table 3, Negative WHI correlates practically, statistically significantly and positively with Workload (large-effect), Time Demands (large-effect) and Role Ambiguity (medium-effect). Contrarily, Autonomy correlate negatively and statistically significantly with Negative WHI, but did not reach a practical significance. Positive WHI correlates practically, statistically significantly and positively with Autonomy (medium effect).

The results of multiple regression analysis with Negative WHI as dependent variable are given in Table 4. Workload, Time Demands and Role Ambiguity were entered in the first step, Supervisory and Colleague Support in the second step and the interaction terms in the third.

Table 4

Multiple Regression Analysis with Negative WHI as a Dependent variable

Model		Unstandardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	ΔR^2
		B	SE	Beta						
1	(Constant)	-0,60	0,196		-3,06	0,00	40,10	0,64	0,41	0,40
	Workload	0,42	0,087	0,37	4,78	0,00				
	Time Demands	0,20	0,057	0,25	3,47	0,00				
	Role Ambiguity	0,20	0,074	0,17	2,66	0,01				
2	(Constant)	-0,57	0,230		-2,49	0,01	0,04	0,64	0,41	0,40
	Workload	0,42	0,089	0,37	4,71	0,00				
	Time Demands	0,20	0,058	0,25	3,41	0,00				
	Role Ambiguity	0,19	0,076	0,17	2,54	0,01				
	Supervisor Support	-0,01	0,041	-0,02	-0,26	0,79				
	Colleague Support	0,00	0,044	0,00	0,03	0,98				
3	(Constant)	-0,55	0,242		-2,26	0,03	1,37	0,66	0,44	0,40
	Workload	0,41	0,090	0,36	4,58	0,00				
	Time Demands	0,22	0,060	0,28	3,64	0,00				
	Role Ambiguity	0,18	0,078	0,16	2,36	0,02				
	Supervisor Support	-0,02	0,042	-0,03	-0,51	0,61				
2	Colleague Support	0,00	0,044	0,01	0,10	0,92				
	Sosical Support x Workload	-0,09	0,088	-0,10	-1,02	0,31				
	Social Support x Time Demands	0,04	0,060	0,07	0,66	0,51				
	Social Support x Role Ambiguity	-0,06	0,085	-0,05	-0,64	0,52				
	Colleague Support x Workload	-0,15	0,095	-0,12	-1,52	0,13				
	Colleague Support x Time Demands	-0,00	0,058	-0,01	-0,11	0,91				
	Colleague Support x Role Ambiguity	0,04	0,067	0,04	0,56	0,58				

* $p < 0,05$

Table 4 summarises the regression analysis with job demands and social support as predictors of Negative WHI. Entry of Workload, Time Demands and Role Ambiguity in the first step, produced a statistical significant model ($F = 40,10$; $p = 0,00$) accounting 41% of the total variance. More specifically, it seems that Workload ($\beta = 0,37$; $t = 4,78$; $p \leq 0,05$), Time Demands ($\beta = 0,25$; $t = 3,50$; $p \leq 0,05$) and Role Ambiguity ($\beta = 0,17$; $t = 2,66$; $p \leq 0,05$) predict Negative WHI. When Supervisory and Colleague support (second step) and

interaction terms (third step) were added, neither model was statistically significant, although the three job demands remained significant throughout. Therefore, social support was not a predictor or moderator in this regression.

Table 5

Multiple Regression Analysis with Positive WHI as a Dependent variable

Model		Unstandardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> ²	ΔR^2
		B	SE	Beta						
1	(Constant)	0,08	0,29		0,26	0,79	8,09	0,35	0,12	0,11
	Autonomy	0,41	0,088	0,33	4,66	0,00				
	Supervisor Support	-0,05	0,05	-0,09	-1,06	0,29				
	Colleague Support	0,09	0,05	0,13	1,65	0,10				
2	(Constant)	0,09	0,29		0,33	0,75	1,73	0,37	0,14	0,11
	Autonomy	0,40	0,08	0,32	4,58	0,00				
	Supervisor Support	-0,05	0,05	-0,07	-0,92	0,36				
	Colleague Support	0,08	0,05	0,12	1,54	0,13				
	Social Support x Autonomy	0,167	0,10	0,14	1,71	0,09				
	Colleague Support x Autonomy	-0,183	0,12	-0,13	-1,53	0,13				

* $p < 0,05$

Table 5 summarises the regression analysis with job resources as predictors of Positive WHI. Entry of Autonomy, Supervisory Support and Colleague Support in the first step, produced a statistical significant model ($F = 8,09$; $p = 0,00$) accounting 12% of the total variance. More specifically, it seems that Autonomy ($\beta = 0,33$; $t = 4,66$; $p \leq 0,05$) predict Positive WHI. When interaction terms (second step) were added, the results produced a statistically insignificant model (accounting 14% of the total variance). Therefore, Social Support did also not moderate in this regression. Autonomy remained significant throughout.

DISCUSSION

The general aim of this research was to investigate the relationship between job characteristics (as indicated by work demands and resources), social support and negative and positive WHI. To attain the general aim, more specific objectives were developed namely (i) to determine if work demands predict negative WHI, (ii) to determine if work resources predict positive WHI, (iii) and to determine if social support moderates the relationship work demands and resources and negative and positive WHI.

Results indicate that Cronbach alpha values obtained for the measuring instruments of work demands and resources (workload, time demands, role ambiguity and autonomy), social support (supervisory and colleague support) and negative and positive WHI were all acceptable. Therefore, it can be concluded that all measuring instruments showed acceptable reliability for the current sample. In the study conducted by Roux (2006), it was found that work demands (e.g. workload, time demands, role ambiguity) are the most predictors of negative WHI in a sample of working females. Negative and positive WHI scale (SWING) was found to be reliable in South African samples (Mostert, Cronje & Pienaar, 2006; Mostert & Oosthuizen, 2005; Pieterse & Mostert, 2005). In most research, positive WHI is attributed mostly to sufficient resources whereas negative WHI is attributed to a lack of resources and high job demands (Montgomery et al., 2006, Mostert & Oosthuizen, 2005; Bakker & Schaufeli, 2005). In a study into multidimensionality of social support, sample reliability was illustrated for scales that indicate social support from various sources, and were applied in this study (Oosthuizen, 2007).

It is evident that a significant relationship between educators' work demands and negative WHI exist. More specifically, the results show that educators' experience of high workload is positively related to their experience of negative WHI. According to Beehr, Walsh and Taber (1976), two dimension of workload can be identified, namely, quantitative and qualitative workload. On the one hand, quantitative workload can be defined as more work that a person can accomplish in time available, irrespective of the difficulty of the work involved. On the other hand, qualitative workload occurs when the work requires skills, abilities and knowledge beyond the individuals (Beehr et al., 1976; Sverke, Hellgren & Ohrming, 1999). In this study workload is viewed from the quantitative perspective (having more work that a

person can accomplish in time available, irrespective of the difficulty of the work involved) (Beehr et al., 1976).

The results indicated that educators' well-being is threatened by high workload they encounter in their working environment. It is therefore evident that high workload relates positively and significantly with negative WHI. Negative WHI is often the results of job stressors that impair psychological health and can lead to a state of burnout (Jackson & Rothman, 2004; Peeters, Montgomery, Bakker, & Schaufeli, 2005). Negative WHI can be associated with psychosomatic health complaints and sleep deprivation as well as anxiety or depression (Mulder & Meijman, 1998). Previous research clarifies the findings of this study by identifying the demanding aspects of educators work attributable to extramural activities (e.g., parent meetings, sports), too much administration, attending to a bigger number of learners per class as well as attending to learners's social needs at school premises (Buys, 2006; Gold & Roth, 1993; Myburg et al., 2002). As such, it can be concluded that educators who experience high workloads, their mental and physical well-being is at risk.

It is also indicated in the results that time demands correlate positively and significantly with negative WHI. The amount of time required by educators' work has been frequently studied as an antecedent of negative WHI, specifically time-based conflict between the work and home domain domains (Greenhaus & Beutell, 1985). In line with this reasoning, it appears that when educators' feel that their work is more than they can accomplish in the time available, they may experience strain in the form of negative WHI, due to work demands interfering with time supposed to be dedicated to home activities and responsibilities.

A positive relationship between time demands and workload educators' also exist. This implies that when educators experience high workloads, they necessarily have to spend additional time at work. Given the technological advancement of the modern society, some of this workload can however be taken home. Nevertheless, this inevitably will lead to a reduction of time available for home activities. These findings might be understood by keeping in mind that the majority of the participants have significant home obligations and responsibilities (i.e., they are married and have children), which eventually may impede educators' health.

Additional to high workloads and time demands, the results indicate that educators experience role ambiguity, which in turn relates positively to negative WHI. Role ambiguity can be defined as an amount of uncertainties in meeting specific requirements (Hall, 1995). This indicates that when educators are confronted with uncertainties or unclear expectations in their work, it could impact negatively on their work-life balance. Role ambiguity relates to negative WHI in a sense that when individuals are confronted with unclear expectations, frustration and tension is most likely to occur. Difficulty in carefully defining the duties of educators can result in stress and lack of personal accomplishment (Jackson & Rothman, 2004). In general, stressful events lead to strain reaction and persistent of chronic strain, which may eventually lead to burnout.

Contrarily, the results also indicate that autonomy relates negatively with negative WHI and positively with positive WHI. This entails that when educators feel that they have control over the execution of their job, their well-being may be facilitated. Although the relationship is not strong, it is arguable that a significant level of work autonomy can have a positive impact on educators' functioning at work, which may eventually spill-over to the home domain, affecting it in a positive way. Sieberhagen (2006) confirmed that a considerable level of autonomy at work is associated with job satisfaction and improved well-being. According to Au and Cheung (2004), the loss of job autonomy leads to constant job stress. This could impact on work behaviour and personal well-being. Research by Bandura (1986), Jackson (1983) and Kasl (1989), indicated that the perception of control and mastery are associated with lower levels of psychological strain, which in turn, reduced employees' job satisfaction and work fulfilment.

In summary, it was evidenced that educators who experience a high workload, time demands and role ambiguity, may be more likely to experience negative WHI, which confirms previous South African research (Roux, 2006). On the other hand, it was indicated that experienced autonomy predicts well-being as evidenced by positive WHI. Ramesh (2006) also found autonomy to have a significant positive relationship with job satisfaction, which in turn has been associated with greater general health satisfaction (Au & Cheung, 2004). Mostert et al., (2006) found that positive WHI is attributed mostly to sufficient resources whereas negative WHI is attributed to a lack of resources and high job demands. As such, when the organisation offers valuable resources (job control, social support), work engagement and commitment is most likely to be facilitated (Hakanan, Bakker and Schaufeli,

2005; Mostert et al., 2006). Negative WHI on the other hand, is often the result of job stressors that impair psychological health and can lead to a state of burnout (Mostert et al., 2006). Negative WHI can be associated with psychosomatic health complaints and sleep deprivation as well as anxiety or depression (Mulder & Meijman, 1998). Along with this, there have been many research findings that indicate that negative WHI can be linked with consequences such as lowered levels of organisational commitment and job performance for the organisation.

In terms of the moderating effect, the research findings of this study are direct contrast with the majority of research conducted on social support (Ramesh, 2006). Sieberhagen (2006) proved the moderating effect of social support between role overload, job satisfaction and turnover intention. Wells (1998) provided evidence that social support reduces the likelihood of the perceived and experienced workloads among employees. Kirmeyer (1990) and French (1989) confirmed the buffering effect of social support with regards to high work demands. According to these findings, it is believed that social support protects people from the harmful effect of stress. As such, most studies have indicated social support to have strong positive effect on well-being. Contrarily, the research findings of this study prove the moderating effect of social support to be insignificant. Hence, it is found that social support did not moderate the relationship between work demands and resources and negative and positive WHI. This could be explained by the fact that the relationship between high workloads, time demands and role ambiguity and negative WHI is very strong. One of the reasons may be the fact that, in the education profession, the working conditions (job descriptions and specification, rules and policies) are regulated directly by the Department of Education. Regardless of the social support that educators receive, they still experience their work as demanding. On a more personal dimension, it seems that most participants are married and living with children, as such, have to deal with serious home demands in the presence of their demanding work. As such, it could be concluded that the pressure from both domains is intolerable and may lead to malfunctioning despite the availability of social support.

Findings also indicate that social support does not moderate between work resources (autonomy) and well-being as indicated by positive WHI. This could be explained by the fact that the relationship between positive WHI and autonomy is not strong enough as compared to the relationship between work demands and negative WHI. This indicates that autonomy

on its own cannot change the perceived and experienced high work demands among educators. Based on this line of reasoning, it is evident that even though educators feel that they have control over their job, their mental and physical well-being is at risk due to high workloads, time demands and role ambiguity.

LIMITATIONS AND RECOMMENDATIONS

The research findings of this study regarding the moderating effect of social support deviates from previous research conducted on the role of social support between job characteristics and individual outcomes. It was indicated that social support did not moderate the relationship between work demands and resources, and negative and positive WHI respectively. More research is needed to validate these findings, as the role of social support between work characteristics and work-life balance has not been investigated thoroughly within the multicultural South African context.

An acknowledged limitation of this research is in the sample size itself. The study consisted of 201 participants, which represents only 10% of the total sample of educators in the surveyed region. It is thus questionable, whether, the moderating effect would not have evidenced if a larger sample of participants have been included in the study.

A third limitation is the cross-sectional nature of this research. A longitudinal design or mixed method approach could have demonstrated stronger casual relations and conclusions. It may have been possible to use a combination of interview, observations and repeated surveys over an extended period of time to enhance our understanding of this complex problem.

Change in the Department of Education has contributed directly to an increase in educators' workloads. National Education policies require educators to abide strictly with certain rules and policies. At some point, rigid abiding to these policies and rules may cause an intolerable level of strain among educators. Educators' work has become more complex and demanding.

With regards to the negative WHI, it was found that high workload, time demands and role ambiguity does predict ill health as evidenced by negative WHI. It is therefore recommended

that the Department of Education intervene by employing more educators in order to reduce high workload. The rationale behind this is that work can be divided reasonably among educators, giving them enough time to complete their work at home as well as to carry out their home activities after work without any time constraint imposed by their work. In terms of role ambiguity, it is recommended that educators' job descriptions be reviewed and responsibilities clearly outlined.

With regards to positive WHI, it was found that the experience of autonomy relates to improved well-being, as evidenced by positive WHI. It is therefore recommended that school principals or supervisors give educators freedom to carry out their work as this may ultimately facilitate their well-being.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to provide an analysis and discussion of the literature and empirical results of the study. Conclusions are drawn with regard to research questions put forward in the first chapter. The limitations of the current study will be pointed out. Finally, recommendations for the organisation and future research are made.

3.1 CONCLUSIONS

3.1.1 Conclusions from the literature

The following conclusions are made in respect of the constructs of job characteristics (work demands and resources), social support and negative and positive WHI. These conclusions provide answers to the first specific objective of this study.

Job characteristics are two pronged, namely job demands and resources. Job demands refer to those physical, psychosocial and or organisational aspects of the job that require sustained physical and/or mental effort and are associated with certain physiological costs, whereas *job resources* refers to those physical, psychological, social or organisational aspects of the job that (1) are functional in achieving work goals; (2) reduce job demands, and (3) stimulate personal growth and development (Demerouti, Bakker, Nachreiner & Schaufeli, 2001, p.501).

Specific characteristics of work demands in this study include workloads which can be viewed as having more work to do than a person can accomplish in the time available, irrespective of difficulty of the work involved (Beehr, Walsh & Taber, 1976). Time demands can be associated with conflict concerning time spent on work and home activities (Greenhaus & Beutell, 1985). Role ambiguity can be defined as an aspect of work resources can be defined as the degree to which an individual is given substantial freedom, independence and discretion in performing the assigned task (Langfred & Moye, 2004).

Most studies have confirmed that when educators feel that their work is demanding in the presence of insufficient resources, stress and burnout are most likely to develop at work, which eventually may impede functioning in the home domain (Friedman, 2000; Jackson & Rothman, 2004; Mesthrie, 1999; Montgomery, Mostert & Jackson, 2005; Whitehead, Ryba & O' Driscoll, 2000).

Social support can be defined as a mesh of relationships and transactions (emotional, cognitive and behavioural), of which the function is to complement personal resources that allow adaptive coping in a situation of need (Sarason & Duck, 2001). House (1981) proposed that a social support network has four explicit functions. Specifically, it can provide the individual with (i) a sense of acceptance and self-worth (emotional support), (ii) affiliation and contact with others (social companionship), (iii) concrete aid, material resources, and financial assistance (instrumental support), or (iv) information useful in coping with and understanding potentially stressful events (informational support). The critical importance of social support at work lies in its potential for moderating or reducing the detrimental effects of organisational stressors on individual outcomes (Sieberhagen; Ramesh, 2006).

Work-Home interference (WHI) can be defined as the interaction between a person's work and non-work domains (Geurts & Dikkers, 2002). This interaction may be negative (work negatively influencing home) or positive (work positively influencing home). Positive WHI is attributed mostly to sufficient resources whereas negative WHI is attributed to a lack of resources and high job demands (Montgomery et al., 2005). Negative WHI is often the result of job stressors that impair psychological health and can lead to a state of burnout (Peeters, Montgomery, Bakker & Schaufeli, 2005).

3.1.2 Conclusions in terms of empirical objectives

- *The first empirical objective of this study was to determine the relationship between work demands and resources, social support and negative and positive WHI in the sample of educators.*

The correlation coefficients between variables revealed that work demands (workloads, time demands, role ambiguity) is significantly and positively related to negative WHI. The suggestion is that an increase in workload, time demands and role ambiguity is associated with an increase in ill health as evidenced by negative WHI. Contrarily, an increase in

autonomy may be associated with an increase in improved well-being as evidenced by positive WHI. Mostert, Cronje and Pienaar (2006) found that positive WHI is attributed mostly to sufficient resources, whereas negative WHI is attributed to a lack of resources and high job demands. As such, when the organisation offers valuable resources (job control, social support), work engagement and commitment are most likely to be facilitated (Hakanan, Bakker & Schaufeli, 2005; Mostert et al., 2006). Negative WHI on the other hand, is often the results of job stressors that impair psychological health and can lead to a state of burnout (Mostert et al., 2006). Negative WHI can be associated with psychosomatic health complaints and sleep deprivation as well as anxiety or depression (Mulder & Meijman, 1998).

- *The second empirical objective was to determine whether a measuring battery of work demands/resources, social support and positive and negative WHI is reliable in a sample of educators across different demographic groups.*

The Cronbach alpha coefficients obtained for the measuring instruments of work demands (workload, time demands and role ambiguity), social support (supervisory and colleague support), negative and positive WHI are higher than 0,70. It can therefore be concluded that all measuring instruments showed an acceptable level of internal consistency and that they are all reliable. The negative and positive WHI scale (SWING) was previously found to be reliable in the South African sample (Mostert et al., 2006; Mostert & Oosthuizen, 2005; Pieters & Mostert, 2005). In a study on the multidimensionality of social support, sample reliability was illustrated for scales that indicate social support from various sources, and were applied in this study (Oosthuizen, 2007).

- *The third empirical objective of this study was to determine whether positive and negative WHI can be predicted by social support, work demands and resources as well as to determine whether social support can moderate the relation between work demands and resources and negative and positive WHI.*

Workload, time demands and role ambiguity explained 41% of the variance in negative WHI. More specifically, it seems that workload, time demands and role ambiguity predict negative WHI. Thus it can be concluded that when educators experience high workloads, time demands and role ambiguity, their well-being is compromised and this could result in ill

health or malfunctioning. Social support was not found to be a predictor or moderator in this prediction.

Regarding positive WHI, autonomy, supervisory support and colleague support in the first step of the regression produced a statistically significant model accounting for 12% of the total variance. However, social support did not moderate in this regression, and autonomy remained significant throughout.

3.2 LIMITATIONS

The research findings of this study regarding the moderating effect of social support deviate from most research conducted on social support. It was found that social support did not moderate the relationship between the work demands and resources and negative and positive WHI. As such, these research findings are not supported by much research in terms of the moderating effect of social support. More research is needed to validate these findings, especially among educators.

An acknowledged limitation of this research lies in the sample size itself. The study consisted of 201 participants, which in reality represents only 10% of the total sample of educators in the region where data was gathered. This might also be a reason why the hypothesized moderating effect of social support between work characteristics and individual outcomes was not supported in this study.

3.3 RECOMMENDATIONS

In answering the fourth empirical objective of this study, recommendations are made for future research and for managing educators in Potchefstroom.

3.3.1 Recommendations for managing educators' WHI

The results imply that the Department of Education should intervene in order to make the working conditions conducive for educators to function optimally. This could be done by recruiting enough educators in order to reduce high workloads and time pressures facing educators. Furthermore, headmasters should work closely with the Department of Education

in order to ensure that educators' job descriptions are clear and consistent with the expectations of such descriptions.

The findings of this study confirmed that educators have to deal with high workloads, time demands and role ambiguity. These stressful events may lead to strain reactions and persistent or chronic strain, which may eventually lead to burnout (Maslach, 1978). Consequently, functioning at work can be impaired which might also impair functioning at home. It is therefore recommended that educators' high work demands be reduced by recruiting more educators to reduce the high level of workloads and demands among educators. More role clarity is needed with regard to educators' jobs. Secondly, it is recommended that training in time management, conflict resolution, planning and coping strategies be implemented at schools to assist educators to deal more effectively with pressures arising from their demanding work. Workshops can be useful in this instance.

On a more positive note, autonomy proved to be a valuable resource in this study. It is evident that autonomy may facilitate mental and physical well-being (positive WHI). It is therefore recommended that headmasters allow educators a significant level of control over their work. In addition, the department of education should see to it that resources are available for educators to execute their task. Jackson and Rothman (2004) confirmed that a lack of resources (e.g., insufficient stationery, salaries and equipment) is one of the primary causes of burnout among educators more particularly in the presence of high work demands. Montgomery et al. (2005) proved that positive WHI is predicted mostly by sufficient resources.

3.3.2 Recommendations for future research

Future research should continue to examine additional ways in which work-life balance can be promoted. More specifically, future research should focus more on representation of the total population (e.g., using more participants) in order to draw general conclusions, also across cultural groups. A longitudinal evaluation of educators' social support would provide a better understanding with regard to the moderation effect of social support.

Research within South Africa, and more specifically among educators should focus on helping these educators align their work and home demands in such a way that their work and

home domains do not influence each other negatively. For instance, cultural differences should be taken into account when designing the measuring instruments for assessing work-home interaction.

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