Work-Related Stress in Zimbabwe: An Investigation Into the Nature and Understanding of the Psychosocial Work Environment in the Financial Services Sector

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In memory of my brother Joachim Muendesi Gwenzi whom I lost during the course of this journey

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Abstract

Most people value work because of the material and psychological benefits that it offers. However, the workplace has become a source of both joy and in some situations sorrow in terms of ill health and in some cases fatalities. Nevertheless, the workplace is also a key place for safeguarding employees' health through effective work organisation, management and design.

Most developing countries are concerned with the effect of physical aspects of the work environment on workers' health, safety and well-being whereas most developed countries are now focusing on emerging psychosocial risks. Psychosocial risks have been established as important antecedents of health especially in developed countries where information on them is abundant. However, despite this information, there is a dearth of knowledge on the nature and effects of psychosocial risks in developing countries. The ILO (2016) observed the limited prevalence data on psychosocial hazards and on work-related stress in developing countries. The rise of psychosocial risks has been associated with globalisation, which has brought about many changes in the world of work, including intense competition (Jain & Leka, 2019). The banking sector has not been spared from these changes and their effects and is the focus of this research.

Moreover, psychosocial factors are associated with organisational costs in terms of absenteeism, poor performance, negative work attitudes and health costs. Psychosocial risks affect all workers despite their location. This is currently an understudied area in developing countries like Zimbabwe. Consequently, the overall objectives of this thesis were to first explore key stakeholder perspectives and their understanding of psychosocial risks and their relationship with individual and organisational health. Additionally, on the basis of the job demands-resources model, this research sought to explore the relationship between job demands (quantitative demands, emotional demands, work pace, work family conflict), and job resources (possibilities for development, social support from colleagues, social support from supervisors, quality of leadership, influence at work) with general well-being, job satisfaction, job performance, commitment to the workplace and work engagement.

A mixed method design was adopted in this research. Thirteen semi-structured interviews were conducted with key stakeholders representing government, regulatory

authorities, workers' unions, employers' organisations and relevant professions. A follow-up quantitative study comprised of an online survey that was administered to five banks in Zimbabwe.

Thematic analysis results indicated that key stakeholders are generally aware of psychosocial risks and their effect on health but these are not prioritized due to other competing needs. There is no legislation pertaining to psychosocial risks and work-related stress although the Occupational Safety and Health policy of 2014 covers a few relevant aspects. Currently, there are no guidelines on implementation. Identified stressors included targets, long working hours and none or late payment of salaries. Barriers included lack of occupational health and safety funding, psychosocial risk prioritization and perception, cultural aspects and lack of research. Opportunities included supportive structures, knowledge of psychosocial issues and current interventions in place to manage safety and health. The priorities for action included training on psychosocial risks and inclusion of risk assessment principles in managing occupational safety and health.

Multiple regression analysis results indicated that job demands were negatively associated with general well-being and other organisational health criteria whilst job resources had positive relationships with the same. Interestingly, only work pace had a positive relationship with job performance, work engagement and good general-well-being. Finally, interaction results indicated that some specific job resources moderate the relationship of specific job demands on organisational outcomes. Furthermore, the findings suggest that certain job demands weakened the relationship between specific job resources and organisational outcomes.

This research has provided empirical support for the job demands-resources theory in an African country. Developing countries are encouraged to develop comprehensive policies in their efforts to manage occupational health. Workers are exposed to chemical, physical and psychosocial risks, therefore legislation, policies and guidelines should reflect this in a more comprehensive manner. This also implies that occupational safety and health inspections should cover all hazards as much as possible. The level of awareness and knowledge should be scaled up on the nature of psychosocial risks, their effects and how to prevent, monitor and manage them. There is also need to identify the specific job demands that need to be reduced, those that

are impossible to reduce but should be monitored and complemented by high job resources, and the specific job resources that need to be availed in each situation according to the work context. The research indicated that workers' well-being is influenced negatively by different types of demands at work, which calls for serious preventative actions from all stakeholders.

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Chapter 1: Work-Related Stress

"..Everyone has the right to the enjoyment of the highest attainable standard of physical and mental health" (Ministerial declaration, High-level Segment implementing the internationally agreed goals and commitments in regard to public health, 2009, p.1).

1.1. Background

Academics and practitioners have become more conscious of the serious impact that work can pose on workers' health and well-being (Ahmad et al., 2018; Landsbergis et al., 2018; Mapfumo, Chitsiko & Chireshe, 2012; Nowrouzi-ki, Li, Nguyen & Casole, 2018). This can be seen from some few but notable research efforts and practices being implemented in developing countries to ensure the safety and health of workers (e.g. Amponsah-Tawiah, 2016; Katsuro et al., 2010; Kortum, Leka & Cox, 2011; Okeke, Adu, Drake & Duku, 2014).

Previously, occupational health management seemed to be a priority of only developed countries, however, workers are affected by occupational hazards in the same way whether they are in a developing or developed country, differences may only be found in the nature and context of the specific hazards affecting the two groups and how they are being managed (Kortum & Leka, 2014). This applies even to new types of health and safety concerns. For example, any job, regardless of location, can potentially cause stress (Raj & Julius, 2018). Moreover, the first inter-ministerial conference on health and environment 2008 report observed, "African workers now suffer increasingly from asthmatic conditions and psychological stress" (p.5).

The issue of work-related stress has become topical as researchers and practitioners are looking at ways to protect workers' health and improve productivity. Work-related stress has been considered to be central to the relationship between psychosocial hazards and health which is one of the emerging occupational safety and health concerns (Houdmont, Kerr & Addley, 2012; Oakman et al., 2019). It is also related to workplace violence, bullying and harassment (Join, Saeed, Arnout & Kortum, 2012).

Psychosocial hazards have been defined as those interactions that prove to have a hazardous influence over employees' health through their perceptions and

experience (ILO, 1986). Cox and Griffiths (2005) provide a simpler definition of “those aspects of the design and management of work and their social and environmental context that have the potential for causing psychological, social or physical harm” (p.4). The interactions occur between job content, how work is managed and organised and other organisational and environmental factors on one hand and the individual needs and competence on the other hand (Jain, Leka & Zwetsloot, 2011). ILO (2016) broadened the earlier definition of 1984 and considered psychosocial factors as “interactions between and among work environment, job content, organisational conditions and workers’ capacities, needs, culture, personal, extra–job considerations that may, through perceptions and experience influence health, work performance and job satisfaction” (p. 2). They went further to classify them into hazards emanating from work content like workload and work schedule and those emanating from the context of work like organisational culture and function, interpersonal conflict and career development. In summary, psychosocial factors are associated with how work is designed, organized and managed, they focus on the psychological and social aspects of work (Leka & Jain, 2016).

Although some researchers have a tendency of using the terms psychosocial hazards and risks interchangeably or in combination as in the definition above, the two terms are different although they are closely related. All social and organisational factors have the potential to cause ill health culminating in the notion of psychosocial risks (Langenhan, Leka & Jain, 2013; Leka, Van Wassenhove & Jain, 2015). In that regard, psychosocial risks have been defined as the risk of harm to a worker’s psychological or physical well-being resulting from the interaction between the design and management of work within the organisational and social context (Cox & Griffiths, 2005). If risks associated with exposure to psychosocial factors are not managed properly, they impact negatively on individual and organisational health and if properly managed they bring about positive benefits on individuals and organisations (Di Tecco et al., 2017).

A definition of the related concept of work-related stress is in order. According to ILO (2016), “work-related stress is the harmful physical and emotional response caused by an imbalance between the perceived demands and the perceived resources and abilities of individuals to cope with those demands” (p.2). It is important to note that there is an appraisal process in the stress reaction, when an imbalance is

perceived between demands and resources that can be mobilised, including personal resources, a stress reaction may occur which may include physiological, emotional, cognitive or behavioural responses (Chauvet-Gelinier & Bonin, 2017; Crum, Akinola, Martin & Fath, 2017).

There has been a lot of research on the relationship between psychosocial factors and health especially in the developed world where they are now established as serious occupational health hazards (Kortum, Leka & Cox, 2010). Despite this knowledge, the lack of substantive research on psychosocial factors in developing countries was identified as early as the 1960s when research in the area gained momentum and more recently by several authors (e.g., Emmanuel & Collins, 2016; Kortum & Leka 2014). It is startling to note that since 1986 when the ILO provided a definition of psychosocial hazards, not much has been done to shed light on our understanding of the impact of psychosocial work factors on health in developing countries, especially in African countries (Asumeng, Acqua-Coleman & Dadzie, 2015; Kyaw-Myint et al., 2017). Moreover, it was observed that research and statistics on work-related stress and mental illness in developing countries are still very scarce and awareness of the issues is low based on the available studies (Khamisa, Peltzer, Illic & Oldenburg, 2016; Papkalla & Collison, 2017). There is lack of in-depth information and statistical data on prevalence rates and the specific psychosocial factors that affect health in developing countries (Houtman & Jettinghoff, 2007; Kortum, Leka & Cox, 2010).

Little but growing research on psychosocial factors has been conducted in developing countries but the evidence is not conclusive to provide an informed status for decision making and even for reporting. The limited research that has been conducted lacks organisation (Amiri et al., 2017). In that respect, prevalence data on psychosocial factors and work-related stress has been reported by the ILO to be more common in Europe and North America but only to a limited extent in Africa and the Arab States (ILO, 2016).

In addition, Atilola (2012) observed that models of best practice, literature, tools and even authors of occupational mental health mostly emanate from developed countries. Guidance on how to identify, assess, prevent or manage psychosocial risks is readily available but most of it is based on European data (Papkalla & Collison,

2017; Widerszal-Bazyl, Zolnierczyk-Zreda & Jain, 2008). Context may influence implementation and application of that knowledge in countries like Zimbabwe (EU-OSHA, 2010). Therefore, there is need to test the applicability of robust interventions like the risk assessment approach to managing psychosocial factors and enhance as necessary. This calls for an urgent need to develop indigenous knowledge (Kamoche, et al., 2015; Nhundu, 1999).

1.1.1 Impact of Adverse Working Conditions

It has now been established through evidence that working conditions can affect individual health negatively (Fischer et al., 2019). It is devastating to note that each year about 2.78 million workers lose their lives whilst working, through either accidents or injuries of which 2.4 million are attributed to work-related diseases (ILO, 2019). One can only imagine the serious impact to families and the community. It is a loss that cannot be recovered or reasonably compensated when children and spouses are made widows and orphans. In most cases, these fatalities could have been avoided if only some preventative measures had been taken (Mutetwa, Dozva & Mahembe, 2015).

Work-related health problems cost between 1.8-6% of GDP for most countries (Jain, Leka & Zwetsloot, 2018), whilst non-communicable diseases caused by work, cardiovascular diseases and depression emanating from work-related stress, increase long term illness and absence (WHO, 2017). Furthermore, an estimate of 12.2 million workers die from non–communicable diseases (NCDs) mostly in developing countries each year (WHO, 2017), and worldwide about 70% of all workers (Nugent et al., 2018). Moreover, in some African countries, non-communicable diseases were responsible for about 50% of annual deaths (Bigria & Noubiap, 2019), leading to the suggestion that the workplace should target prevention interventions for NCDs (Schouw, Mash & Kolbe-Alexander, 2018). Additionally, in 2016, 3.02 million out of 8.8 million deaths in the African region were attributed to non-communicable diseases recording a 17.8% increase from the 2010 statistics of 2.53 million. Furthermore, it is sad to note that 8% of depression related diseases are associated with occupational risks (WHO, 2010). The International Labour Organisation and the World Health Organisation stress that the right to life is a fundamental human right (ILO, 2016; WHO, 2008). Consequently, given the loss of life from non-communicable diseases, more than 41 million people die each year

(WHO, 2018), the Sustainable Development Goals target 3.4 aims to decrease deaths caused by non-communicable diseases in all countries by one third and encourages the prevention, promotion and treatment of mental health and well-being (Nugent et al., 2018). The Sustainable Development Goals focus on 17 goals with 169 targets for economic, social and environmental aspects for development based on the United Nations 2030 Agenda (El-Maghrabi, Gable, Osorio-Rodarte & Verbeek, 2018).

In Europe, where information and guidance on psychosocial issues is readily available and is legislated (Potter, Fattori & Dollard, 2016), 25% of workers were reported to experience work-related stress related to psychosocial risks for most of their time at work. In addition, psychosocial risks were found to be of concern to most companies with 80% of managers concerned about work-related stress (Eurofound, 2014). Indeed, the cost of work-related stress in 2014 was estimated to range between US$221.13 million and $187 billion at the national and pan-European level. Productivity losses were ranging between 70-90% whilst health care costs took up the remaining 10 to 30% of the costs. These statistics were based on studies conducted in Australia, Canada, Denmark, France, Sweden, Switzerland, the United Kingdom and United States of America. (Hassard et al., 2018).

Some workers have gone to the extent of committing suicide because of exposure to psychosocial risks (Milner & LaMontagne, 2018; Tang, Leka & MacLennan, 2013; Virtanen, 2018). These problems are costly to society and organisations. In addition, most sickness absenteeism is related to the experience of work-related stress. Between 2018 and 2019 in Britain, an estimated 12.8 million working days were lost due to problems of self-reported work-related stress, depression or anxiety. New reported cases amounted to 246 000 (Health & Safety Executive, 2019). Moreover, Gray and Collie (2018) found that workers with depressive symptoms took more time off work compared to those with work-related stress symptoms. However, their findings show that ill health whether associated with work-related stress or work-related depression still cost the organisation with paid sick leave. Certain occupations are more at risk of adverse health than others (Schaufeli, Bakker & Van Rhenen, 2009). Such statistics are non-existent in developing countries like Zimbabwe, so the extent of the problem is not known.

However, research shows that health interventions at work can assist in decreasing sick leave absenteeism by 27% and healthcare costs by 26% (WHO, 2017). There has been mixed findings on the organisational costs associated with absenteeism and presenteeism. Interestingly, Kirsten (2010) reported that for chronic conditions that were studied, the cost associated with presenteeism far exceeded the combined costs of absence and related medical costs. Schmidt et al. (2019) found that absenteeism costs exceeded presenteeism costs whilst Kimura et al. (2018) found that presenteeism costs were higher. This is an area that deserves further investigation as the costs associated with work-related ill health are being explored.

The negative health outcomes emanating from psychosocial risks have been associated with undesirable organisational outcomes and job-related well-being (Warr, 1990). These include lack of work engagement and commitment, job dissatisfaction, burnout and lack of organisational citizenship behaviour (Akhtar, Naheed, Akhtar & Farooq, 2018; Llorens, Bakker & Schaufeli, 2006) and a lack of intention to stay at the organisation (Li, Liu & Cheng, 2019). These outcomes subsequently affect organisational performance, effectiveness and competitive advantage negatively (EU-OSHA, 2014). It is in the interest of both employers and workers to invest, prevent and manage occupational, safety and health issues in order to save lives, avoid losses associated with loss of production, sickness absenteeism, litigation and compensation, lost time and reputation risk amongst other costs. (Condon & Edwards, 2018; Mutetwa, Dozva & Mahembe, 2015). Additionally, investing in good occupational safety and health (OSH) systems does not only make economic, moral and ethical sense but it is also a way to leverage on competitive advantage, thus contributing positively to the economy (Jain, Leka & Zwetsloot, 2018; Leka, 2016). Human capital with good mental and physical health are in a better position to contribute to the achievement of organisational goals and economic development (Meswani, 2008). Workers constitute about half of the world's population and their health is of paramount importance (WHO, 2007). Good occupational safety and health ensures compliance with ethical, legal, policy and business incentives (Idubor & Oisamoje, 2013; WHO, 2010).

1.1.2 A Healthy Workplace

It is important to appreciate the mechanisms through which work affects health. However, firstly, key stakeholders need to understand what a healthy work

environment is in order to be able to promote healthy workplaces. This section will present a definition of a healthy workplace followed by a discussion of possible pathways through which work may influence health.

The WHO (2010) Healthy Workplace Framework defines a healthy workplace as one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of workers and the sustainability of the workplace by considering the following, based on identified needs:

- Health and safety concerns in the physical work environment
- Health, safety and well-being concerns in the psychosocial work environment including organisation of work and workplace culture
- Personal health resources in the workplace and
- Ways of participating in the community to improve the health of workers, their families and other members of the community (p.16).

1.1.3 The Relationship Between the Psychosocial and the Physical Work Environment

Psychosocial risks have been associated with both physical and mental health problems through various mechanisms (Eatough, Way & Chang, 2012). One of these is through the experience of work-related stress which can lead to other serious health outcomes as mentioned earlier (Leka, Jain, Iavicoli & Di Tecco, 2015), which include mental health problems like depression and burnout (Kashif, Rehman & Pileliene, 2016). This pathway can be indirect and at times direct (EU-OSHA, 2010). Psychosocial risks are also related to some behavioural problems including abuse of alcohol (Frone, 2018), smoking,and unhealthy diet (Payne, Jones & Harris, 2013; Useche, Ortiz, Boris & Cendales, 2017), and physical health problems, for example, quantitative demands, support and rewards have been reported to influence cardiovascular diseases (Kashif et al., 2016; Punnet et al., 2009). According to Backe et al. (2012), possible pathways through “direct activation of neuroendocrine responses or indirectly through unhealthy behaviours may activate an association between stress and heart disease” (p.1). Further, a stressful psychosocial work environment has been associated with chronic conditions (Siegrist & Li, 2017).

Organic solvents can influence psychological health through their direct effect on the brain and in addition, interactions may occur between physical and psychosocial hazards in influencing health (Cox, Griffiths & Leka, 2005). For instance, low safety specific leadership, high role conflict and low job control influenced strain which was associated with musculoskeletal symptoms of lower back and shoulder symptoms (Eatough, Way & Chang, 2012). Psychosocial risks have also been associated with problems of musculoskeletal disorders (Anderson, Stuckey & Oakman, 2018; Maakip, Keegal & Oakman, 2015).

The work environment can also influence health negatively by way of biological pathways, this can be through indoor risk including toxins and air pollutant factors (Largo-Wright, Chen, Dodd & Weiler (2011). Exposure to chemicals has been associated with poor health in developing countries (Singh & Sekhon (2018). Largo-Wright, Chen, Dodd and Weiler (2011) suggested the promotion of outdoor break areas to reduce work-related stress, for example, enhancing nature contact at work by increasing outdoor plants, opening blinds and taking outside breaks. This is commendable but it will not alleviate problems emanating from psychosocial risks, which may require preventive interventions at the organisational level. Psychosocial risks can cause workers to engage in unsafe behaviours, which may cause accidents especially when under a lot of pressure (Barkhordari, Malmir & Malakoutikhah, 2019; Chimamise et al., 2013).

At this point, it is important to consider changes in the nature of work and globalization issues and how these are related to the psychosocial work environment and especially in the developing country context.

1.2. Changing Nature of Work

The world of work has faced considerable changes at a fast pace, making it unpredictable (Di Fabio & Kenny, 2018; Rurkkum & Bartlett, 2012). These changes consequently influence the characteristics of work, its environment and resultant individual and organisational responses to those changes (Johnson & Szamosi, 2018; Schabracq & Cooper, 2000). Although change is inevitable in our era, any form of change brings about certain feelings of fear of poor outcomes, fear of the unknown, and for some, resistance to change (Giannoccaro, 2018).

The nature of work has changed in many ways which include, an increase in women participating in the workforce as a result of gender equality policies, although they may face problems in getting decision making positions (Brauchli, Bauer& Hammig, 2011; Levine & D' Agostino, 2018). There has been a decrease in stable jobs, an increase in fixed term contracts, casualisation of labour and independent contractors and a move towards flatter organisational structures and long working hours (Iavicoli, Rondinone, Marinaccio & Fingerhut, 2006; Pfeffer, 2018; Urnikyte & Sakenaite, 2011). Major activities in developed countries have also contributed to changes of work in developing countries, for example changes in production strategies (Kortum, 2012).

According to Chernyak-Hai and Rabenu (2018), changes are related to technological, political, globalisation and economic factors. These can be classified into three categories of management skills, workplace characteristics, and factors that affect organisations. Management skills include workplace design competencies, decentralisation of leadership and interpersonal skills. The nature of work has changed together with the characteristics of workers, some work has become more virtual and flexible with some workers having more freedom as in flexi time and freelancers. These freelancers do not have access to some benefits like health insurance (Pfeffer, 2018). The changes in the global economic and social environment has been associated with changes in values of work. The old ways of organising work and control which involved division of labour, top down instructions and close supervision are no longer adequate and responsive to the current globally competitive market and technological advances that require optimum utilisation of human capital who are involved in decision making, exercise discretion and are highly committed (Gallie, 2019). However, there are mixed results regarding the effectiveness of the success of these new forms of organising and managing (Johnson & Szamosi, 2018).

Current work has become more digital as compared to the traditional workplace which included mechanical manufacturing. There are more pressures for organisations to become more agile as demanded by a diverse and globalised workforce. Work is increasingly being performed by teams with more collaborative rather than competitive relationships that are supported by organic structures that facilitate the sharing of information rather than a traditional hierarchical structure.

Further, Boahin (2018) observed that the structure of industry and commerce has changed, in some countries there has been an increase in small to medium enterprises. The current global economic context has forced organisations to reduce their cost of production and engage in continual improvement of production processes and internal systems. These changes in the world of work have been associated with a decline in decent work. This includes lack of access to employment and underemployment, which is failing to meet basic needs of economic survival and social connection. This negatively affects the well-being of individuals and society considering the important role that work plays on well-being (Landsbergis et al., 2018). There is a decrease in organisations that are able to offer employment. Most organisations have restructured and delayered in order to become more responsive (Johnson, 2018). Remaining workers may be subjected to work overload which may cause stress (Duxbury & Halinski, 2018), and as a result, their commitment can be negatively affected (Jain, Leka & Zwetsloot, 2018).

In addition, the replacement of unskilled and semi-skilled jobs by automation has resulted in some organisations requiring only a few employees (Blustein, Kenny, Difabio & Guichard, 2018). Automation has replaced certain jobs whilst leaving those jobs that can only be done by people, which require certain personal attributes like reflectivity and risk taking. Robots can now do the work previously done by some employees even more efficiently, for example, cleaners and cashiers (Lee, Huang & Ashford, 2018), bank tellers may also decrease due to internet and telephone banking (Njanike, 2010). The use of mobile devices has been perceived to have eroded the work and life boundaries through workers becoming more available after work even for communication related to work. This has been associated with an increase in working hours, which may lead to work-related stress especially for managers and other professionals and the notion of work extension where family time can be disturbed. Despite these perceptions, the evidence that mobile technology has changed the nature of work extension is still scarce (Mullan & Wajcman, 2019). These researchers found that work extension was significantly related to an increase in working hours, and that work-related stress could encroach into non-work time which may lead to an increased perception of time pressure. Interestingly, they found that the relationship between subjective time pressure and an increase in working hours was experienced whether using a device or not and suggested that if there exists a

relationship between time pressure and technology, working arrangements would mediate that relationship.

In addition to the changes that come with automation and artificial intelligence, there has been a shift from routine and manual cognitive work to non-routine cognitive tasks. In that regard, workers are expected to engage in continuous learning (Hardy, Lewandowski, Park & Yang, 2018). Moreover, Pfeffer (2018) echoes this decrease in routine work to jobs that call for more flexibility, creativity, problem solving and human interaction skills. This is also related to the rise in precarious work (Abraham, Sandusky, Hattiwanger & Spletzer, 2018; Di Fabio & Kenny, 2018). Workers are largely expected to broaden their skills and be able to apply them in different contexts and adapt to advanced technology. The lack of stable work and the associated job insecurity is a reported prominent stressor (Callea, Lo Presti, Mauno & Urbini, 2019). Job insecurity may negatively affect the health and safety of workers and potentially increase workplace injuries and ill health (Denton et al., 2018). Pfeffer (2018) acknowledges that white collar jobs have become as hazardous as working in a mine, the labour market has become very competitive and some workers are not getting enough time to rest as indicated by unused vacation time.

There has also been an increase in multinational organisations, mergers and acquisitions and internationalisation of the workforce. This has resulted in managerial work becoming more demanding and intensive in a harsh work environment globally (Foster, Hassard, Morris & Wolfram Cox, 2019; Labonte, 2018). Johnson and Szamosi (2018) also noted how people management has become difficult in this turbulent environment.

The following sections explore in more detail globalization and the developing country context.

1.3. Globalisation

Most organisational changes have been attributed to the much-debated issue of globalisation (Cooper, 2001; Juarez-Garela, 2018). The concept of globalisation has been tackled from different viewpoints, which include tourism and migration, information and communication, finance and sociology (Idris, Dollard & Winfield, 2011; Wilpert, 2009). Although it is understood differently, Chapman (2009) defined

globalisation as “a process characterised by the growing interdependence of the world’s people, involves the integration of economies, culture, technologies and governance” (p.1). Globalisation enables the movement of goods, services, ideas, technology, capital and labour across international borders (Ozer, 2019; Prilleltensky, 2012). The projects, processes and practices of globalisation fall into the economic, political, technological and societal domains (Frenkel, 2018). The 1980s saw most developing countries liberalising their economies (Labonte, 2018). Technological advances have facilitated a global work environment where employees can work remotely even in different parts of the world, some of them risking social isolation and reduced work control (Chernyak-Hai & Rabenu, 2018).

1.3.1 The Benefits of Globalisation

Globalisation brings about positive benefits to host countries, which include provision of learning opportunities to workers (Tee, Azman-Saini & Ibrahim, 2018). Global trade which is promoted by regional trade agreements and World Trade Organisations impacts positively on the economic development of host countries especially in spheres of poverty reduction, income redistribution and provision of access to the global market. Arguably, a major advantage of globalisation is employment creation and associated economic development of host countries (Rama, 2003).

Globalisation has been associated with technological advancements (Niemczyk, 2018), for example, in Zimbabwe Standard Chartered Bank which is a multinational bank installed the first ATM machine. Moreover, foreign banks have also assisted in risk management and corporate governance improvements (Njanike, 2010). Further, Dong et al. (2016) noted that foreign banks could attract foreign capital into the host country and introduce advanced management techniques, expertise and improve corporate governance structures. Foreign Direct Investment is the coming in of capital from a foreign country to a host country in order to develop production, services or to control assets (Nyoni, 2018). It is a key driver of economic development and is enabled through governments implementing policies that attract and makes it easier for organisations to come and invest in developing countries (Chigome, 2015). Additionally, Pelletier (2018) stressed the importance of considering the heterogeneity of foreign banks when measuring the impact of Foreign Direct Investment on a host country.

In Sub-Saharan Africa, foreign ownership of banks is above 50% and they assist in enhancing credit delivery efficiency, but in the same way that they can facilitate banking sector stability, foreign banks may cause collapse if they remove their capital from the domestic country (Sulemana, Dramani & Oteng-Abayie, 2018). Global banks and emerging market banks have been reported to perform better than local banks because of better operational efficiency and lower funding costs. However, regional banks may be less able to obtain interest income compared to indigenous banks since they have just recently commenced expansion into other countries (Pelletier, 2018).

In Zimbabwe customers can now bank anytime through virtual banking and a number of customers who did not bank before are now enabled through collaborations with mobile network providers (Datta, 2018; Kaseke & Charira, 2012). However, it was observed that these technological advances are not really supported by local infrastructure which still needs improvements (Njanike, 2010). Similarly, Zayyard and Toycan (2018) noted that despite the benefits of e-health, its adoption and utilization in some developing countries is still low due to poor infrastructure and low technical expertise. Technological advances enable the easy transfer of information through the World-Wide-Web thus promoting global operations and communication (Husam, Naser, Talla & Shobaki, 2018). In addition, this flexibility also facilitates information sharing on best practice in managing occupational health (Bhugra & Mastrogianni, 2004). Globalisation may enhance the spread of human rights and equity in labour laws (Bromley & Lerch, 2018).

1.3.2 Challenges Associated With Globalisation

Although Foreign Direct Investment inflow has been increasing in Sub-Saharan Africa, Zimbabwe has not benefited from it in a significant way compared to other countries like Zambia (Nyoni, 2018). Contrary to the assertion of the benefits of globalisation to economic development, other researchers are of the opinion that globalisation may have negative effects on national economies (Detragiache, Tressel & Gupta, 2008). Takala and Hamalainen (2009) noted that Africa has not benefited much from globalisation. In addition, globalisation has not been associated with long term economic growth (Osabuohien, Beecroft & Efobi, 2018). Interestingly, Tee, Saini and Ibrahim (2018) in their study of the impact of globalisation and innovation activity in developing countries found that the importation of equipment and advanced

machinery was associated with improved productivity and that local workers benefited from learning through the transfer of technology related knowledge. However, the benefits associated with importation of manufacturing goods and foreign direct investment were not supported by evidence.

Economic liberalisation affects the host country at different levels of government, organisations, society and individual workers. At societal level, a mix of cultures may result from migrants or multinational companies where different people will be working and living together (Levy & Reiche, 2018). This may cause stress especially if there is a conflict of beliefs and values. Acculturation may affect workers either positively or negatively (Bhavsar & Bhugra, 2008). Acculturation may negatively affect psychological well-being and can destabilise traditional cultural principles, therefore, some may not embrace it easily (Ozer, 2019).

Globalisation has also been linked with inequalities in wealth distribution which widens the gap between the rich and the poor in developing countries (BeLue et al., 2009). In Hong Kong it was associated with widening the income and wealth gap (Cheung, Wong, Ng & Wong, 2019). Differences between the poor and the rich regarding access to health facilities were observed within and between countries where wealthy countries remain healthier whilst poorer countries have increasing health problems and people die young (Chapman, 2009). Moreover, Frenkel (2018) also observed the unequal shift of manufacturing, service and knowledge work to developing countries through the global supply chain, which influences issues of remuneration, working conditions and unequal income. He recommended that governments should ensure the equal sharing of benefits and costs. Perceived unfairness in pay has been associated with poor well-being (Yearby, 2019).

1.4. Globalisation and the Psychosocial Work Environment

Globalisation influences health through affecting health systems and social, economic, commercial and political determinants of health (Labonte, 2018). The relationship between globalisation and the rise in urbanisation, economic inequities and shifting individual and social identities have influenced how mental health is appreciated and addressed globally and a change in how psychological distress is expressed to ways that are in line with western principles (Labonte, 2018).

Changes because of globalisation including digitilisation, which was discussed earlier, inevitably affect the labour market and related working conditions (Kasparova, 2017). This calls for a need to design working conditions in a way that safeguards the mental health of employees while working more productively (Schneider, Madler, Close & Lang, 2018). Emerging risks emanate from these transformations posing new occupational health and safety challenges (Jain, leka & Zwetsloot, 2011; Jain, leka & Zwetsloot, 2018) and usually these are in addition to traditional physical risks (Kortum, 2012). Most of the emerging risks are of a psychosocial nature as explained earlier, notwithstanding the fact that there are other emerging chemical, biological and technological risks like nanotechnology (Savolainen, 2009; Urnikyte & Sakenaite, 2011). The same expansion of production that is associated with globalisation that has the potential to lessen poverty may lead to unsafe working conditions and ill health of workers through psychosocial risks (Javaid, Isha & Ghazali, 2017). Other countries may outsource certain services to less developed countries which has both positive and negative effects, potentially transferring certain occupational safety and health risks (Jain, Leka & Zwetsloot, 2018; Juarez-Garcia, 2018). Specifically, in some developing countries globalisation has been associated with a transfer of manufacturing together with obsolete machinery and chemicals to these countries (Goldstein, Helmer & Fingercut, 2001). Amponsah-Tawiah et al. (2014) noted “an influx of obsolete and outlawed equipment dumped on mining companies in Ghana by parent companies who operate in the developed world where such equipment have been outlawed” (p.6). Some of the obsolete equipment emits harmful gases that have negative effects on health. The move of production to developing countries is due to the assertion that there is cheap labour (Rama, 2003). Similarly, Kortum, Leka and Cox (2010) observed a shift of industries and services and a rise in multinational companies to some developing countries where regulatory systems are not effective.

Deregulation may be related to decreased protection of workers’ rights (Houtman & Jettinghof, 2007). This is true in cases where governments fail to regulate multinational operations in order to safeguard the health of workers (Corrigall et al., 2008), because of economic and political interests. Bhugra and Mastrogianni (2004) observed that in some cases giant multinational companies may have incomes that exceed the GDP of host countries which makes governments vulnerable in their

own countries. In addition, de-regulation can result in a decrease in labour shares and bargaining power by workers (Ciminelli, Duval & Furceri, 2018).

Globalisation of services has forced organisations to ensure customer delight in order to remain competitive and gain customer loyalty. This has led some organisations to make use of outsourced contact centres especially in developing countries that focus on addressing customer problems and enhancing their experience. In the process, they cut costs and focus on their core business (Dharamdass & Fernando, 2018). Most call centres now operate from developing countries. However, the nature of work in call centres has been reported to pose psychosocial risks which include repetitive work and lack of control (Hidaya Ibrahim, Suan & Karatepe, 2019). These psychosocial risks have been related to emotional labour, job insecurity, role stress and depressive symptoms (Cho et al., 2019). Globalisation has also been associated with a rise in the informal sector (Luebker, 2008), lack of employment contracts in some countries and unstable working conditions (Bhavsar & Bhugra, 2008). Casualisation of work has increased in Sub-Saharan Africa (Bernards, 2019). This has been attributed to employers who want to save themselves from commitments of employee welfare and well-being.

In addition, organisations operating in a globalised market are confronted with intense competition as they now compete with other suppliers from other countries in addition to competition from local businesses and the pressure to strategise for improved productivity (Nguyen, Ngoe, Montague & 2019). As mentioned earlier, there has been an influx of foreign banks in developing countries who seem to have safer loan portfolios due to their strict lending criteria compared to local banks (Detragiache, Tressel & Gupta, 2008; Sulemana, Dranian & Oteng-Aboyie, 2018). In the Zimbabwean banking sector, increased competition with large international banks has led to weakening of some host banks especially with the introduction of new financial products and services (Njanike, 2010). Foreign banks are supported by parent banks which gives them an advantage over local banks (Detragiache, Tressel & Gupta, 2008). Moreover, the presence of Chinese firms in Africa has increased competition especially in small to medium enterprises as they sell cheaper goods and employ fewer locals (Gukurume, 2018).

In light of the competitive environment, organisations become motivated by the need to be productive and survive, at times at the expense of workers' health and safety (Goldstein, Helmer & Fingercut, 2001; Karanikas, Melis & Kourousis, 2018). Quality standards increase as quality and service are the main tools for enhancing competitive advantage (Lopez-Valcarcel, 2001). The effect of these changes cascade to the way organisations do their business like organisational practices and policies which make changes in work design and organisation inevitable (Hosking & Anderson, 2018). Oosthuizen, Visser and Mudzimu (2014) noted that work-related stress as a result of globalisation has also become a growing concern for workers in developing countries.

Idris, Dollard and Winefield (2011), investigated the impact of globalisation on working conditions and job satisfaction in Malaysia and found that 25% of participants felt that their jobs were not secure whilst 24% felt they had lost power and control due to global competition and a further 54% accepted the fact that they need to work harder. All these feelings exert demands on workers and can be detrimental to health. The authors observed the relevance of globalisation for developing countries given that preventative strategies for psychosocial risks are not fully developed in these countries.

Cheng et al. (2013) found that some psychosocial risks had worsened for Taiwanese workers between 2001 and 2010. Specifically, they noted an increase in working hours for both workers who had typically long and short working hours respectively, physical demands and non-standard shifts also increased. A slight positive improvement was observed for decision latitude and opportunities for learning. As other researchers, Cheng et al. (2013) also noted a move of monotonous jobs to low income countries.

Moreover, Daly et al. (2019) observed that most migration has been driven by people looking for decent work in other countries in order to enhance their quality of life. These can be skilled or unskilled, legal or illegal immigrants who may occupy senior or very low positions resulting in exposure to different working standards. It was reported that migrant workers face higher work related injuries and fatalities than indigenous workers because most of them work in poor quality jobs. However, even those migrants that occupy senior positions are exposed to psychosocial hazards of

low control, high job demands and complex jobs, they have low security and may not have fair remuneration. There is evidence that migrant work is associated with poor mental and physical health (Edwards, Anderson & Stranges, 2019). Migrant workers are vulnerable and may accept poor working conditions, especially in circumstances where their work permit is with one employer, and if they decide to leave that employer they may not have enough resources to take care of themselves until they get another job (Cedillo, Lippel & Nakache, 2019).

In light of the above discussion, globalisation has an impact on work processes, which will in turn influence health negatively. Pathways may include the impact of globalisation on increasing work demands and the availability of resources, which then act as mediators or moderators in influencing employee health like burnout and work-related stress and other organisational outcomes like job dissatisfaction (Idris, Dollard & Winefield, 2011). Problems of work-related stress and musculoskeletal disorders associated with globalisation have also been identified (Paudel, Manandhar & Joshi, 2018). When workers fail to cope with demands, stress occurs which is also related to other health and behavioural problems (Leka, Griffiths & Cox, 2004). Change is occurring at a very fast pace to the extent that understanding and knowledge of the occupational safety and health implications of those changes has lagged behind (NORA, 2002).

1.5. The Developing Country Context

This section reviews occupational safety and health literature in developing countries. It has been emphasised that there is considerable literature on the impact of the physical work environment on health in developing countries. Information is even available on how to measure physical risks objectively. However, the picture becomes different when it comes to psychosocial hazards where there is a dearth of information and focus (Asumeng, Acqua-Coleman & Dadzie, 2015; Kortum & Leka, 2014; Nuwayhid, 2004). This could have been attributed to the erroneous opinion that the link of exposure to poor psychosocial health and ill health is not very clear (Backe et al., 2012), most of the factors involved like work-related stress are complex, and can be confounded by other factors (Cox, Griffiths & Leka, 2005; Geraghty, Speelman & Bayes, 2019). However, the extant literature is now providing evidence on various pathways of the relationship between psychosocial risks and ill health as alluded to

earlier. One possible reason that has been discussed is that most developing countries are still struggling to manage physical hazards like risk of chemicals (Loewenson, 1998) and asbestos (McCulloch, 2008), amongst other public health challenges although the situation is improving. Another potential barrier could be lack of awareness (Papkalla & Collison, 2017). However, Lu et al. (2018) are of the view that awareness of work-related stress is rising in developing countries.

Puplampu and Quartey (2012) observed that African countries usually ignore the contribution of improving occupational safety and health in attaining the Millennium Development Goals. However, given the economic situation of most African countries including Zimbabwe, a safe and healthy working environment could be conducive for attracting Foreign Direct Investment which is desperately needed in some of these nations.

It is important to note that even within Africa there are differences concerning the economic status of countries and the labour market. This implies that even if African countries and other developing countries outside Africa face more or less similar occupational safety and health challenges, the economic environment and other contextual factors should be taken into consideration when interpreting results (Nuwayhid, 2004). In contrast, Atilola (2012) believes Sub-Saharan Africa has a homogeneous socioeconomic, political and cultural environment. He observed that given the economic position of most African countries, investing in occupational safety and health including mental health could be seen as a luxury when companies are struggling to remain in business. Atilola (2012) further stresses the need to incorporate and prioritise mental health in OSH schemes. He noted that costs arising from mental health problems could be comparable or more than those emanating from physical problems at work due to absenteeism, presenteeism, job turnover and a higher utilisation of health resources. The high-level segment International Ministerial Declaration of 2009, section 18c also observed the need to “scale up care for mental health conditions, including prevention, treatment and rehabilitation” (p.4). High Level Segment 37 goes on to state that “we recognize the impact that work conditions can have on health status, health equity, and general well-being. Improving employment and working conditions at global, national and local levels, in particular to reduce exposure to work-related physical and psychosocial hazards, would help to reduce negative health effects of the environment in which people work” (p.6). This

International Ministerial Declaration was tasked to implement international goals and commitments on public health.

Various studies have been conducted on work-related stress and the teaching profession in developing countries (Hecker, Goessmann, Nkuba & Hermenau, 2018). This can be attributed to the notion that occupational mental health of teachers is currently a priority internationally, as the profession has been considered a highly stressful occupation (Tang, Leka & Maclennan, 2013). Okeke et al.'s (2014) study on preschool educators suggested a lack of attention on stress-related issues of preschool educators in South Africa and recommended the need to consider demographic factors and their impact on the psychosocial well-being of teachers. Furthermore, Dlamini, Okeke and Mammen (2014) found that high school teachers in the Hhohho region of Swaziland were moderately stressed. In addition, Denhere, Ngobeli and Kutame (2010) reported stressors in teachers that included pupils who lacked motivation, maintaining discipline, time pressure and work overload.

Interestingly, in the transport sector, Ofili et al. (2013) found that drivers in Benin City, Edo in Nigeria were generally satisfied with their jobs and very few drivers were at risk of psychological disorders caused by their work. In the mining industry in Ghana, Amponsah-Tawiah et al. (2014) found mining equipment, ambient conditions, work demands and control to be significant predictors of quality of life and general well-being.

Indeed, Naseem (2018) found that employees with higher emotional intelligence were more likely to perceive less stress and more happiness compared to those with low emotional intelligence in the telecommunications industry of Pakistan. Married men were better able to manage stress than their female counterparts. Furthermore, Chamik, Viiswanathan, Gedeon and Bovet (2018) observed that despite the ongoing debate regarding the relationship between cardiovascular risk factors and psychological stress there is still no data from African countries. They found a few significant and consistent relationships between psychological stress and cardiovascular risk factors. In addition, they found that psychological stress was related to age, socioeconomic status and gender. Perceptions of stress were associated with smoking, drinking and obesity although the associations were

marginal. Interestingly, they found that psychological stress was not related to high blood pressure.

In Zimbabwe, Makoni and Mutanana (2016) found a negative relationship between stress and job performance supporting the negative influence of stress on organisational health. They observed that it seems employers and workers are not aware of stress management techniques, however their interventions focused on individual-level approaches like counselling, exercise and sport which are reactive. Notwithstanding the benefits of these approaches, there is need to instill a preventative culture in our workplaces.

1.6. The Sectorial Context

Research on psychosocial factors and their effects on health may be better understood using a sectorial approach since different sectors may be exposed to different hazards. However, data per industrial sector has been limited (Telle-Lamberton et al., 2018).

There is no economy that can survive and grow without an effective financial sector (George & Zakkariya, 2015; Ibrahim & Alagidede, 2018). For example, the banking sector provides intermediation services which include transfer of funds (Mawanza, Santu & Mdlongwa, 2018). Moreover, the financial sector impacts on the saving culture and investment decisions of a country and, when it is effective, it can maintain financial resource allocations and monitor lending activities (Nyasha & Odhiamho, 2018).

The Reserve Bank of Zimbabwe as the central bank is responsible for ensuring financial stability in the country. It supervises financial institutions and monitors distressed institutions. It is the economic advisor to government and performs the lender of last resort function to financial institutions, it also drafts the Monetary Policy of the country and licenses and de-licenses financial institutions (Reserve Bank of Zimbabwe Act Chapter 22:15).

The Financial Sector in Zimbabwe is made up of banks, insurance companies, pension and micro finance companies. The insurance sector comprises of insurance, reinsurance and brokers. The sector has expanded both physically and

technologically and certain workers have faced difficulties in adjusting to the new demands, which have also impacted on the relationship between work and home (Oosthuizen, Visser & Mudzimu, 2014). The financial situation of the country has resulted in some people viewing insurance as a luxury and not a priority. Claim rates are not compatible with the contributions being made which have been reduced to attract customers (Oosthuizen, Visser & Mudzimu, 2014). Job losses have also impacted on the sector as those who have lost their jobs can no longer afford insurance contributions.

The banking sector is the focus of this research because its operating environment has changed considerably resulting in various psychosocial risks that have the potential to adversely affect the health of banking employees (Mannocci et al., 2018; Silva & Navarro, 2012). Although few studies have been conducted on psychosocial factors in the banking sector of developing countries, they remain scarce in Southern African countries like Zimbabwe. Additional indigenous information becomes necessary. Moreover, Nolte and Stummer (2012) observed that work-related illnesses are increasing not only in manufacturing industries but progressively in service sectors like banking but there is lack of information on the current situation in banks with only sparse factual and statistical information on the health of bank employees (Ntow, Sokro, Dogbe-Zungbey & Bonsu, 2019).

There are 19 operating banking institutions in Zimbabwe, comprised of thirteen commercial banks, five Building Societies and one Savings Bank (RBZ, 2019). Furthermore, the country has registered two Development financial institutions, six deposit taking microfinance institutions and 204 credit only microfinance institutions to support low income and small to medium enterprises, and two deposit taking money lending institutions (RBZ, 2019). The banking sector has grown since 2015 when the country had 13 commercial banks, one merchant bank and three building societies (RBZ, 2015).

In 2019, profitability continued to improve in the banking sector of Zimbabwe. Despite the current macroeconomic challenges, the banking sector's stability has improved as shown by the enhanced performance of earnings and sufficient capitalisation. However, non-performing loans increased, impacting negatively on asset quality (Monetary Policy, 2019). However, the macro-economic situation of the

country did not spare the banking sector which is still facing challenges of liquidity, foreign currency shortages and inflationary pressures coupled with trade policy uncertainty (RBZ, 2018).

1.6.1 Challenges in the Financial Sector

As stressed earlier, the financial sector has gone through a lot of changes internationally (George & Zakkariya, 2015; Nolte & Stummer, 2012). For most countries these changes have been coupled with an economic crisis (Giorgi et al., 2019). These include Information Communication Technologies (ICT), internet banking, downsizing and resultant changes in working conditions, and restructuring resulting in some jobs becoming redundant (Amigo et al., 2014). Some developing countries have seen the expansion of the financial sector as a result of liberalisation and market deregulation which has been associated with increased competition and pressure (Asumeng, Acqua-Coleman & Dadzie, 2015; Khan & Hanif, 2019). Karatepe and Tekinkus (2006) reported changes in the banking sector in Turkey which included a rise of credit cards, Automated Teller Machines (ATMS), telephone and internet banking and an influx of international banks due to economic growth.

The financial sector is considered as a knowledge intensive services sector, which demands that workers should acquire and update their knowledge in order for their organisations to remain relevant and competitive in this global market (Liao et al., 2012). Bank employees who are knowledgeable and skilled are better able to produce quality service, attract investment, and enhance competitiveness (Madamat & Khasawnch, 2018). Furthermore, global banking has resulted in service diversification and technical challenges (Shukla & Garg, 2013; Claessens, 2017). The increase in the use of mobile and internet banking is convenient for customers and enhances financial inclusion but bank employees are under pressure to keep abreast with new and advanced ICT technology (Hammoud, Bizri & El Baba, 2018; Reynolds, Klawitter, Biscaye & Anderson, 2018). The fast pace of change calls for the need for continuous learning in order to keep abreast and adapt to new processes (Shukla & Garg, 2013).

Moreover, developing countries are also under pressure to modernize their financial sectors in order to be consistent with global trends (Nyasha & Odhiambo, 2018). Global competition has forced banks to review their strategies to remain

competitive resulting in more pressure on the workers to perform (Cooper, Wang, Bartram & Cooke, 2019). As a result there have been reports of increased stress levels (Giorgi et al., 2019; Munusamy & Assim, 2019).

Front line bank employees play a critical role especially in the current competitive environment in maintaining quality, implementing strategies and protecting the image and reputation of banks (Babakus, Yavas & Karatepe, 2017; Itani & Inyang, 2015). Recently, Darmawan, Mardikaningsih and Hadi (2017) found that service quality of front line bank employees in Indonesia were positively related to corporate image, customer loyalty and satisfaction. Frontline workers are the ones who pass on information to clients and feedback to the banks in terms of customer complaints and their satisfaction, these factors may result in emotional exhaustion (Karatepe & Tekinkus, 2006).

In their study of Brazilian state bankers, Silva and Barreto (2010) found that women had a higher prevalence rate of minor psychiatric disorders and the prevalence rate was more for bank workers who faced higher psychological demands and low control and those who were exposed to negative psychosocial risks. Workers exposed to low support, low control and high interaction were more susceptible to poor health-related quality of life for the physical domain whilst exposures to effort-reward imbalance and overcommitment were associated with poor health-related quality of life in the mental domain in Brazilian banks (Silva & Barreto, 2012).

Li et al. (2015) considered the mediating role of psychological capital on the relationship between occupational stress and burnout among workers in state owned banks in China. They found that extrinsic effort and overcommitment were positively related to emotional exhaustion and depersonalization whilst reward was negatively related to the same. Reward was positively related to personal accomplishment. Psychological capital mediated the relationship between occupational stress and job burnout. Gender differences were observed in the mediating role of psychological capital, where in females it partially mediated between extrinsic effort, reward and overcommitment with emotional exhaustion and depersonalisation as well as on the relationship between reward and personal accomplishment. In males, it mediated between extrinsic effort and reward with emotional exhaustion and depersonalisation.

Asumeng, Acqua-Coleman and Dadzie (2015) noted that when one works in a bank there are able to satisfy their social and economic needs. Remuneration is arguably better than in other sectors (Dartey-Baah & Ampofo, 2015). They found that older workers and those with a long tenure had lower scores of emotional exhaustion which was attributed to the development of coping skills during their service. Like previous findings, women were more affected by burnout compared to men. Branch office workers were more affected because they interact more with customers. Differences in burnout symptoms were attributed to differences on the extent of contact with the public. The most frequent combination of burnout was emotional exhaustion and cynicism. These levels of burnout were suggested to be higher than those of other professions who are normally regarded as more prone to burnout (Amigo et al., 2014). This is contrary to the perception that the financial sector is at low risk with regards to health and safety.

Furthermore, a major component of bank employees' work of providing financial services to customers involves a lot of interaction and engagement, as mentioned above, coupled with high expectations from the public in terms of customer care and professionalism. Bank employees must be careful of their emotional expression when dealing directly with customers, and in the process, they may become susceptible to occupational stress (Li et al., 2015).

Moreover, occupational stress had a significant effect on behavioural outcomes like fatigue among female workers in Nigerian commercial banks, in contrast, there was no influence with regards to depression and absenteeism (Stephen, 2014). Where marketing executives failed to meet deadlines, they were reprimanded or threatened to lose their jobs subjecting them to undue pressure in the process. In operations, hours of work could exceed 10 hours per day due to balancing accounts. Some bank employees felt that their rewards were not commensurate with the annual profits that they contribute which is also causing stress (Dartey-Baah & Ampofo (2015).

Emmanuel and Collins (2016) found that most bank employees from branches of a commercial bank in Ghana were moderately to highly stressed with the highest stress levels found in females. This research was looking at the moderating effect of

gender, taking into consideration other roles that women take outside work in most African countries.

Akhtar, Naheed, Akhtar and Farroq (2018) found a negative relationship between a poor work environment, monetary rewards, decision-making authority and management behaviour with job satisfaction in Pakistan. However, a positive relationship was observed between workload and job satisfaction contrary to most studies. Further, in a Nigerian banking sector, Eberendu et al. (2018) found common workplace health risks to include excessive workload, working during weekends, prolonged static posture and computer usage, high targets, friction with colleagues and unhealthy eating. The negative health effects that bank employees experienced included work-related stress issues with 86.4% being affected, prolonged headaches with 71.2% and concentration problems with 63.6% being affected. Musculoskeletal disorders were reported by 80.3%.

In summary, the most common stressors that have been reported in the financial services sector include, time pressure, job insecurity, relationships with customers and organisational structure and policies, work overload, lack of administrative support, riskiness of the work and interpersonal relationships (Giga & Hoel, 2003; Malik, 2011).

1.7. The current study

Changes in the work environment have exacerbated the presence of psychosocial risks in workplaces (Bergh, Hinna, Leka & Zwetsloot, 2016; Toderi, Gaggia, Balducci & Sarchielli, 2015). Work-related stress has been acknowledged as a global concern, affecting all countries (Ghobrial et al., 2015). To highlight the importance of these issues, mental health and non-communicable diseases are key indicators in the health-related Sustainable Development Goals 2030 agenda.

It is clear that there is need to have a coordinated research agenda for psychosocial risk management in Africa and developing countries at large, but for anything to be prioritised or any policy to be implemented, one may argue that there is need for awareness on the nature of the problem for appropriate interventions to be implemented.

Currently there is no legal mandate to manage psychosocial risks but only physical, chemical and biological hazards in Zimbabwe. It is up to individual companies to ensure that psychosocial risks are addressed. However, psychosocial risk management is not evident in the country except for a few companies who may talk about work-related stress as part of a wellness program. Potential barriers could be lack of awareness and understanding on the issues (Papkalla & Collison, 2017). Another potential reason for non-action is that Zimbabwe is still facing challenges with traditional physical and chemical hazards. This is excercabated by the challenging socioeconomic environment (Thobejane & Nyathi, 2018).

Most studies in developing studies have utilised either a qualitative or a quantitative research method to investigate the impact of work characteristics on health. In Zimbabwe most studies have mainly focused on work-related stress issues in the education sector looking at individual coping interventions. The researcher is not aware of any study that has investigated psychosocial issues in the banking sector of Zimbabwe. Moreover, this research adopted a mixed methods approach commencing with a qualitative study to explore understanding and awareness of key stakeholders given the fact that this is an understudied area in the country. This was complemented with a quantitative study which aimed to establish the relationship between psychosocial factors, organisational and individual health. A mixed-method approach provides a deeper understanding of the issues and may achieve better results compared to a single method, especially when assessing different aspects of the overall research question (Choy, 2014). In addition, interactions of job demands and job resources were also investigated to provide a better understanding of how they influence health and organisational outcomes, on the basis of the job demands resources model, which will be discussed in detail in the following chapter (Demerouti, Bakker, Nachreiner & Schaufeli, 2001).

In light of the above, this research aims to contribute to theory on the relationship between psychosocial factors and occupational health in developing countries like Zimbabwe. In addition, information on the perceptions and awareness levels of key stakeholders with regards to psychosocial risks in developing countries is limited, therefore it also aims to address that gap in knowledge. Furthermore, key stakeholders play a critical role in formulating policies for psychosocial risks management and ensuring their implementation. In that regard, this research has

been motivated by the need to contribute to our limited knowledge of psychosocial risks and their impact on individual and organisational health in developing countries and by the need to safeguard the health of workers through evidence-based interventions. It will extend our understanding of the nature and effects of psychosocial hazards and risks in Zimbabwe and how this knowledge can be utilised for the benefit of individuals, organisations and society at large. The study will contribute to the call for more research on psychosocial issues in developing countries given the current gaps that have been highlighted (Kortum & Leka, 2014).

1.8. Outline of the Study

This thesis is made up of six chapters. Chapter 1 provided a summary of the nature of psychosocial risks as they relate to the changing nature of work and globalisation. The developing country context was then presented as the contextual background of this research. Finally, the rationale of this thesis was delineated.

Chapter 2 explains the theoretical framework of the thesis followed by research evidence and justification regarding the study variables. An outline of the country context including the policy and legal context and a review of the literature on the psychosocial environment in Zimbabwe is presented. An overview of the research aims and questions concludes the chapter.

Chapter 3 provides an overview of the research methodology adopted and the rationale behind the selection of methods.

Chapter 4 outlines and discusses findings from the qualitative study, which explored the perceptions and understanding of key stakeholders regarding the relationship between psychosocial hazards, organisational and individual health on the basis of semi-structured interviews.

Chapter 5 presents findings from the quantitative study, which sought to investigate the relationship between psychosocial factors and work-related stress. It also sought to establish the relationship between psychosocial factors and organisational health including commitment to the workplace, job satisfaction and job performance.

Chapter 6 presents a discussion and integration of the qualitative and quantitative study findings. Limitations and implications of the study are outlined together with recommendations for future research.

Chapter 2: Theoretical Underpinnings of This Research and the Zimbabwean Context

The workplace is now considered as an important area for investigating antecedents of individual health. This may be attributed to the fact that workers spend most of their time at work. In that regard, a number of models have been proposed in an attempt to understand and explain the complex relationship between work characteristics and workers' mental, emotional and physical health (Harvey et al., 2017). Most of these models have been used to predict and understand the onset of work-related stress. This section will review some of the most influential models of work-related stress namely the job demand-control model (Karasek, 1979), the job demand-control support model (Karasek & Theorell, 1990), the effort-reward-imbalance model and the job demands-resources model. These will be discussed in the following sections in terms of their propositions and associated research evidence. Although they complement each other, eventually the job demands-resources model was selected as the theoretical foundation for the current research.

2.1 The Job Demand-Control Model

The job demand-control model or the job strain model was developed by Karasek in 1979. It is considered to be one of the most influential models of work-related stress (van der Doef & Maes, 1999). The model tries to explain the effect of work characteristics on employee health and well-being, specifically the impact of job demands and control on strain at work focusing on situational factors. Karasek (1979) was motivated to find a theoretical basis for the observations he had made regarding strain at work. He identified case studies that indirectly considered important interactive effects of job demands and job decision latitude. Whyte (1948) reported a background study where some restaurant workers who were exposed to heavy customer demands that they could not control experienced the heaviest strain. Further, miners who were subjected to close supervision in the face of heavy workloads resulted in personal and organisational tensions (Gouldner, 1954 as cited in Karasek, 1979).

Job demands have been operationally defined as quantitative workload and role conflict (Kain & Jex, 2010), or usually as quantitative variables like workload and time

pressure or role conflict, physical and emotional demands (Hausser et al., 2010; Javed & Janjua, 2018). Job control refers to the worker's opportunity to influence his or her work activities (van der Doef & Maes, 1999). It is sometimes used interchangeably with decision latitude. Decision latitude has two key aspects, skill discretion, which is the worker's opportunity to use specific skills, and decision authority which has been defined as the discretion one has on which methods to apply at work and the allocation of time (Hausser et al., 2010). Job control was originally termed decision latitude, which refers to the extent to which an employee is given authority to make decisions and use skills on the job (Dawson, Obrien & Beehr, 2016). Karasek (1979) stressed the importance of differentiating between job demands and job discretion and separating problems emanating from job demands which are distinct from those caused by decision latitude. He noted that some researchers were including all job characteristics under job demands which contributed to inconsistent research findings.

The job demand-control model proposes that the level of job demands and control can influence job outcomes including job satisfaction and learning (Karasek, 1989). The main assumptions of this model are four-fold. To begin with, high job demands are associated with psychological and physical strain when there is little control (Hadzibajramovic, 2019). This has been termed the strain hypothesis. Workers in this situation have a high risk of ill health, psychological, physical and poor well-being (Hausser et al., 2010). Strain in this respect can be attributed to both additive and interactive effects of job control and demands. Karasek (1979) proposed that if a worker sacrifices other needs because of low control, unused energy might manifest itself internally as mental strain.

Secondly, high job demands coupled with high control leads to job motivation, learning and skills development. Jobs in this category have been termed "active jobs" (Karasek, 1979). The availability of job control or decision latitude over work processes in this model is assumed to reduce stress and enhance learning. In addition, decision latitude satisfies the basic need of autonomy, which is related to intrinsic motivation (Heinrichs et al., 2019). However, psychological demands may result in both learning and stress (van der Doef & Maes, 1999). Moreover, the amount of decision latitude has been considered to occur within a curvilinear relationship where it increases well-being up to a certain level, beyond which well-being begins to

decrease, potentially as a result of increased planning and demands (Heinrichs et al., 2019). Thirdly, jobs that have low demands and low control have no effect on job strain, they pose the lowest risk of ill health. According to the buffer hypothesis, control has been suggested to have a moderating effect on job strain (Salanova, Peiro & Schaufeli, 2002), i.e. reducing the effect of job demands on the experience of strain. In this case, the experience of strain is not attributed to additive effects but only to interactive effects (van der Doef & Maes, 1999).

The job demand–control model was extended to include support in the job demand-control-support model (Johnson & Hall, 1988). This broadened the relationship between work and health through a social component (Larsen, Ramstrand & Fransson, 2019). According to Javed and Janjua (2018), the JDCS model is well researched and posits the following; “high strain jobs” where employees are faced with high job demands and low control as discussed before, “high iso-strain jobs” occur when employees are faced with high job demands, low job control and low social support, which may lead to stress responses. Low strain jobs are characterised by low job demands and high control whilst “low iso-strain jobs” involve low demands, high control and high social support, which has been associated with enhanced well-being.

The following section discusses results of different studies testing the assumptions of the job demand-control model.

Van der doef and Maes (1999) conducted a review of the job demand-control and job demand control-support models from 1979 to 1997, using 63 samples. They found moderate support for additive effects of the strain hypothesis, which purports that high demands and low control result in strain, and weak support for the buffer hypothesis. In an attempt to update the review of van der Doef and Maes (1999), Hausser et al. (2010) subsequently conducted a review on the job demand-control (-support) models on 83 studies covering the period from 1998 to 2007. They found that additive effects of demand, control and social support on general psychological well-being received considerable support when samples were large enough. Research evidence was lower for additive effects on longitudinal studies compared to cross sectional studies with regards to job related well-being despite the consistent support of additive effects of job related well-being in cross sectional studies.

Moreover, Harvey et al. (2017) reported amongst their findings, four reviews that supported the prospective relationship between high job demands, low job control, low social support and poor mental health. Previous research has supported the strain hypothesis where high job demands and low control were associated with an increase in depressive symptoms over time (Theorell et al., 2015). The strain hypothesis and partly the iso-strain hypothesis were supported in their relationship with depression on the basis of the JDCS model among Polish police officers (Baka, 2018). Further, high demands and low job control were among factors that were related to an increase in the development of exhaustion (Aronsson et al., 2017) and distress in office workers (Jun, O' Leary, Mcphail & Johnston, 2019).

As reported by van der Doef and Maes (1999) in their review of the job demand-control model from 1979 to 1997, there has been inconsistent and weak evidence for the buffering hypothesis of control and support. Hausser et al. (2010) found similar results, however, their results put forward that buffering effects occur on condition that demands and control are based on similar dimensions, what they referred to as the matching principle, which had earlier been suggested by Viswesveran, Sanchez and Fisher (1999) and enhanced by de Jonge and Dormann (2006). Moreover, Karasek (1979) tested the interactive effect of control and demands in his first publication. He was of the opinion that the interactive effect was not a major aspect of the model although others like Ganster (1989) were of the opposite view. However, according to Dawson, Obrien & Beehr (2016) the mixed results supporting the buffering hypothesis of the job demand-control-support model may not be attributed to sample size, measures or the issue of matching dimensions, but to the fact that job demands are lumped together in studies and not separated into either hindrance or challenge demands. An example of a challenge demand is workload and for a hindrance demand is interpersonal conflict at work. It is important to note that challenge and hindrance demands are perceived differently by employees and they have different effects on motivation although they may all result in strain. In that regard, Dawson, Obrien and Beehr (2016) found evidence of the three-way interaction of job control, support and hindrance demands in predicting work-related anxiety and physical symptoms. They did not find support for the buffering effect of control and support on strain with challenge demands. In addition, Heinrichs et al. (2019) were of the view that the inconsistent interaction results of the JDC model may be attributed to different

subpopulations in which some people may not embrace high job decision latitude and yet other people are comfortable with it.

The strength of the job demand-control model is that it can be applied to understand occupational health and well-being outcomes in developing countries. However, research on the job demand-control model in Africa and specifically in Zimbabwe is sparse. Consequently, Gyorkos et al. (2012) called for more cross-cultural research from developing countries after observing that there is a serious lack of information from Africa utilising models like the job demand-control model. The job demand-control model offers practical implications for reducing work-related strain by job design methods that involve increasing job control to areas where it will be more beneficial. It was reported that enough evidence on the additive effects of the model has been found so there is no need to continue researching on it. However, more research is needed to determine the interaction or buffering effects of the model by making use of the matching principle (Schaufeli & Taris, 2014). Yet, as discussed above, the matching principle may not be as relevant as making a distinction between hindrance and challenge demands when testing the buffering hypothesis (Dawson, Obrien & Beehr, 2016).

2.2 Effort-Reward Imbalance Model

The effort-reward imbalance (ERI) model is one of the significant social epidemiological models of work-related stress (Siegrist, Siegrist & Weber, 1986; Siegrist, 1996). Social epidemiological approaches propose that some work aspects increase the susceptibility of adverse mental and physical health of employees (Tang, Leka & Maclennan, 2013). Like the JDC model, the ERI model helps us to understand the complicated relationship between job characteristics and employee health. It can be traced back to studies of medical sociology and was initially developed to explain the relationship between occupational stress and cardiovascular disease (van Vegchel, De Jonge, Bosma & Schaufeli, 2005). However, it has now been used to test psychological and behavioural outcomes including innovative behaviour (Niesen et al., 2018).

Drawing from social exchange theory and to an extent determination and expectancy theories, the ERI model purports that workers expend their effort at work

in order to receive rewards that are commensurate with their efforts thus creating a balance (Siegrist, 2008). In addition, the social reciprocity principle highlights the concept of distributive justice at the workplace whereby if workers perceive that their efforts are more than the rewards that they are getting, an imbalance situation or reciprocity deficiency occurs. Distributive justice is concerned with the fairness of exchange for example between efforts and rewards (Juvani et al., 2018). Further, if one is not rewarded consistently with their perceived contributions, this may result in colleagues and superiors thinking that the affected employee has a low social standing and lacks support from their management (Notelaers, Tomroos & Salin, 2019). The failed reciprocity may trigger negative emotions together with associated psychobiological stress responses, which will eventually result in ill health over time (Coronado, Chandola & Steptoe, 2018). Failed reciprocity can be caused by dependence, strategic choice or overcommitment (Siegrist, 2012). According to Coronado, Chandola and Steptoe (2018), the effort-reward imbalance model is relevant to the recent economic trends and working conditions in a globalised world characterized by rapid technological changes and can help to understand the biological stress process.

Rewards in the literature have been operationalized as pay, status or esteem and career opportunities including job security (Notelaers, Tomroos & Salin, 2019). Employees in an imbalance situation may cope by reducing their effort or by trying to increase their rewards. In some cases, employees may choose to stay at a job with an imbalance condition because there are no job alternatives in the labour market or because they are not qualified. Others continue to stay for strategic reasons like anticipation of future benefits (Siegrist, 2008). The model further proposes that:

1. Workers in an imbalance situation of high effort and low reward are prone to ill health. This has been termed the extrinsic hypothesis. According to van Vegchel et al. (2005), considerable evidence has been found in support of this hypothesis. For example, job strain associated with ERI has been associated with depressive disorders, diabetes, musculoskeletal disorders and ischemic heart disease (Eddy, Wertheim, Hale & Wright, 2018; Juvani et al., 2018).

2. Employees who are overcommitted may amplify their efforts and understate their rewards through perceptual distortion (Siegrist, 2012). Overcommitment is a

form of motivation characterised by superfluous commitment and anticipation of high rewards.

3. According to the overcommitment or intrinsic hypothesis, workers who are overcommitted have a higher risk of experiencing stress-related illnesses (Koch, et al., 2014; van Vegchel et al., 2005). This situation is worsened if workers in the above situation have a reciprocity deficiency, what is termed the ERI* OVC or interaction hypothesis. Overcommitment was found to be an independent risk factor for mental and physical health (Kinman, 2019). In addition, Tang, Leka and Maclennan (2013) found that overcommitment was a precursor to Hong Kong teachers' mental health. Siegrist (2008) noted that most of the eight prospective studies on the relationship between effort-reward imbalance, cardiovascular and affective studies supported the complete assumptions of the model or its core aspects. However, it is important to note that the measures used to assess the variables of interest were not similar in some cases. In situations where jobs were characterised by high effort coupled with low reward, the probability of the odds and hazard ratios of developing a cardiovascular or depressive disease rose by 50% to 150% despite the variation of these ratios across studies. This was more common among men, those working in occupations of a lower status and middle aged groups of people compared to early old age groups (Siegrist, 2012). Koch et al. (2014) found moderate support for the relationship between the ERI and musculoskeletal pain based on their review of 13 studies. The relationship could not be ascertained conclusively in that review.

The ERI model stresses the importance of maintaining a balance between the effort expended by workers and the associated rewards. Some researchers have argued that the ERI is a better model in explaining the antecedents of work-related stress as it considers personal factors through overcommitment compared to the JD-C which places less emphasis on personal factors (Tang, Leka & MacLennan, 2013). It also takes into account economic factors which can influence reward aspects of pay and job security (Koch et al., 2014). The ERI model can be used to design workplace interventions for preventing work-related stress and facilitating health promotion by focusing on its core elements at the individual, interpersonal and organisational levels (Siegrist, 2012). However, Juvani et al. (2018) noted limitations of some research on the ERI which focused on single stressors without considering that health effects may vary depending on specific stressors and co-occurring or

multiple stressors which may potentially be associated with more negative effects on workers' health and work ability, as compared to single stressors which may be adapted easily than what occurs in practical life. They found that a combination of job strain and ERI was related to about 40% more risk of coronary heart disease while the additional risk for individual stressors was 16% compared to those without job stressors.

In summary, the effort reward-imbalance model provides an alternative explanation to our understanding of the relationship between the psychosocial work environment and stress through relating lack of perceived reciprocity between effort and rewards and psychobiological processes (Siegrist, 2015). It accumulated metaanalytic evidence especially with its association with cardiovascular diseases (Kivimaki & Siegrist, 2016; van Vegchel, De Jonge, Bosma & Schaufeli, 2005). Experimental and naturalistic studies further supported the concept of failed reciprocity and its effect on health (Siegrist, 2016). The ERI has also been used effectively to predict psychological and behavioural outcomes including smoking and alcohol abuse (Dragano et al., 2017; Eddy, Wertheim, Kingsley & Wright, 2017). Its main advantage over the job demand-control-support model is the inclusion of personal factors in the form of overcommitment. Further, the ERI can be applied at the work situation and in important social roles for example volunteering (Siegrist, 2015). Additionally, it has been combined successfully with the control aspect of the JD-R, yielding better results compared to the models operating in isolation (Ostry et al., 2003). This is interesting since workplace factors do not occur in isolation. According to Siegrist (2015), the imbalance between effort and rewards is more common in workers with a lower socioeconomic status and he suggested that interventions at the individual, group or labour policy levels should target these workers. The ERI model was developed to establish negative health effects in developed and fast developing countries (Siegrist, 2016). Zimbabwe is a country which is not developing at a fast pace. However, the ERI provided invaluable insights into our understanding of psychosocial factors and ill health. The next section presents a discussion of the job demands-resources model.

2.3 The Job Demands-Resources Model

The job demands-resources model (JD-R) was developed in an attempt to explain the precursors of burnout (Demerouti et al., 2001). It was later revised to include work engagement and job performance, with burnout conceptualised as a unitary construct. Burnout is one of the chronic conditions that have been associated with certain aspects of work (Schaufeli & Bakker, 2004). Personal resources were subsequently added to the model because they interact with work characteristics to influence health and well-being (Schaufeli & Taris, 2014). The JD-R model provides a positive and a balanced approach to our understanding of the relationship between psychosocial factors and organisational outcomes, i.e. an equilibrium between the positive and negative aspects of job characteristics, complementing earlier models like the job demand-control model (Han, Yin, Wang & Bai, 2019; Schaufeli, Bakker & van Rhenen, 2009). It does not only focus on the negative effects on health but also considers situations when employees can be more engaged and motivated (Bakker & Demerouti, 2017).

The job demands-resources model acknowledges that every occupation could have its own risk factors that are particular to it that may be associated with negative health and organisational outcomes for example, burnout and work engagement. Notwithstanding the above, the first proposition of the model is that all work characteristics can be categorised into two groups, which are job demands and job resources (Bakker, Demerouti & Verbeke, 2004; van der Doef & Schelvis, 2019).

Job resources have been defined as “those physical, psychological, social or organisational aspects of a job that may reduce job demands and the associated physiological and psychological costs, are functional in achieving task goals and stimulating personal growth, learning and development” (p. 225), (Hakanen, Schaufeli & Ahola, 2008). The definition of job resources has been suggested to include positively valued aspects of the job.

For Llorens, Bakker, Schaufeli & Salanova (2006), job demands refer to “those aspects of a job that require sustained physical and/or psychological effort and are therefore associated with certain physiological and /or psychological costs” (p. 2). They are aspects of the work characteristics that may result in work-related stress, for example interpersonal conflict (Scanlan & Still, 2019). Job demands have been

distinguished into challenges and hindrances on the basis of the distinction proposed by Cavanaugh (2000) and Crawford et al. (2010). Hindrance demands do not support goal achievement but are actions that can distract the employee from the important task at hand, for example, role and interpersonal conflict (Cook, Brant & Woods, 2018). It is important to highlight that not all job demands have a negative effect on well-being, some can be motivating and challenging, offering potential for personal growth and rewards (Laethem et al., 2019; Schaufeli & Taris, 2014). However, most job demands are associated with ill health, which can be related to cognitive, emotional and physical well-being (Willis, Neil, Mellick & Wasley, 2019).

According to the second proposition of the JD-R model, the motivational and health impairment processes are two independent pathways through which work characteristics influence work engagement and burnout which in turn are associated with organisational outcomes like commitment, performance or negatively job dissatisfaction and ill health (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). The health impairment process proposes that when certain job demands are high and certain job resources are low, burnout will develop regardless of the occupation or type of job (Wolter et al., 2019). When job demands are high, workers exert more effort and energy in order to attain performance goals. Recovery can be achieved by resting or conducting simple tasks, if the worker fails to recover from this process adequately, a process of sustained activation is triggered which leads to exhaustion and eventually burnout (Scanlan & Still, 2019). The motivational processes can be understood by employing aspects of the effort-recovery, self-determination, and conservation of resources theories (Schaufeli, Bakker & van Rhenen, 2009).

Generally, the motivational and health impairment processes have gained empirical support even in different countries (Hakanen, Bakker & Schaufeli, 2006; Van Steenbergen, van der Ven, Peeters & Taris, 2018). The level of job resources predicts work engagement, which further influences organisational outcomes like commitment and innovativeness especially when job demands are high (Demerouti & Bakker, 2011). There is some evidence highlighting that high demands and low resources are related to burnout, with burnout acting as a mediator between job demands and ill health (Hakanen, Schaufeli & Ahola, 2008). Schaufeli and Taris (2014) observed that out of the 16 cross sectional studies testing the JD-R hypotheses, only four samples reported partial support for the mediating effect of

burnout or engagement and not full mediation. The support of the joint effects of demands and resources was not strong. Longitudinal support for the JD-R hypotheses was also found by Hakanen, Schaufeli and Ahola (2008) where job resources had an effect on engagement which predicted commitment whilst burnout predicted depression.

De Cooman et al. (2013) found support for the JD-R model in their study where need satisfaction was acting as a mediator between job demands, job resources and outcomes like work effort. They found that work-home interference was negatively related to the fulfilment of basic psychological needs as assumed by self-determination theory and consistent with the JD-R model. Work pressure was weakly but positively related to basic psychological needs and work effort. As hypothesised, job resources in the form of strategic impact and skills utilisation were related positively to fulfilment of psychological needs, which had a positive correlation with autonomous motivation, which in turn was positively related to work effort. In South Africa, de Beer et al. (2012) found that the relationship between job demands and ill health was mediated by burnout moderately whilst the association between job resources and commitment was mediated by work engagement.

Proposition 3 of the JD-R model purports that job resources can buffer the negative effects of job demands on health through replenishing energy and providing the ability to cope with high job demands (Breevart & Bakker, 2018). Previous research has supported the buffering hypothesis (Bakker & Demerouti, 2018; Hu et al., 2011; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). However, Schaufeli (2017) observed that support for the buffering or interaction hypothesis is still weak. Proposition 4 is referred as the boosting hypothesis where job resources are believed to have greater motivational power when job demands are high (Bakker & Albrecht, 2018). Some support was found for the boosting hypothesis with jobs conceptualized as active jobs, i.e. high demands and high job resources (Bakker, Hakanen, Demerouti & Xanthopoulou, 2007; Bakker & Sanz-Vergel, 2013).

The JD-R, JDCS and ERI models were criticized for not considering the individual in the relationship between job characteristics and health (Willis, Neil, Mellick & Wasley, 2019). However, the JD-R later incorporated personal characteristics into the model, which was referred as proposition 5 of the model

(Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). Personal resources, for example self-efficacy, are conceptualized as psychological characteristics that are associated with positive emotions at work and job performance. Personal resources have generally been associated with resiliency that refers to the ability to control and impact one's environment successfully (Schaufeli & Taris, 2014). They also work in a similar manner as job resources in terms of facilitating the achievement of work goals and inspiring personal growth and development. However, currently there is no consensus regarding their role in the JD-R model and research evidence has been inconsistent (Han, Yin, Wang & Bai, 2019). The sixth proposition of the model considers the positive relationship between motivation and job performance and a negative relationship between strain and job performance. This is related to work engagement which energises employees to carry out the task at hand and to put all their effort on the task (Bakker & Demerouti, 2017). This proposition has been supported in the literature (Taris, 2006). Further evidence will be discussed in the following section.

Schaufeli, Bakker and van Rhenen (2009) also found support for both the motivational and health impairment processes. In addition, their results proposed a positive gain spiral where work engagement predicted an increase in job resources which in turn resulted in more work engagement. Proposition 7 of the JD-R assumes that employees who are highly motivated may use job crafting behaviours to enhance job resources which will increase work engagement and motivation. Employees are not seen as passive and only reacting to the organisation and work conditions but play an active role in influencing their work conditions. This can be done either positively through a spiral of resources or negatively through a loss cycle where employees will increase work demands through negatively influencing their work environment because of stress (Bakker & Demerouti, 2018).

The job demands-resources model can be applied to different occupations since it does not limit itself to certain demands or resources but only provides a framework for grouping the two factors at work. The model can be applied in Human Resources Management to enhance organisational interventions in safeguarding the health of workers (Bakker, Demerouti & Verbeke (2004). Currently it has been utilised in thousands of organisations (Bakker & Demerouti, 2017). However, this flexibility has been associated with a lack of specificity and the fact that it does not clarify the

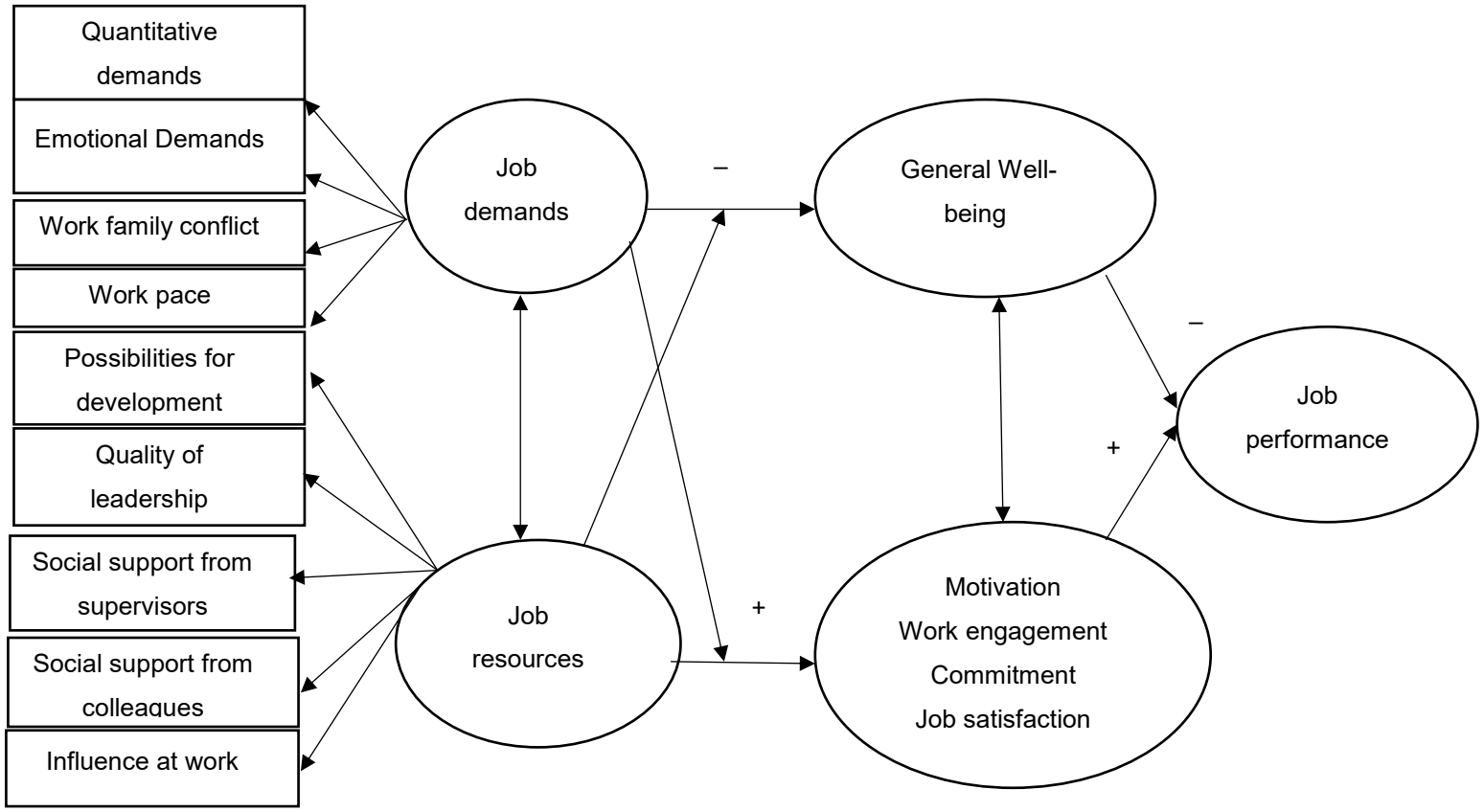
resources that are more important than others in their impact on individual and organisational health (Cooper-Thomas, Xu & Saks, 2018).

Notwithstanding the wide application of the JD-R theory, there is need for more research in developing countries, especially Africa, to confirm the validity of the model in these settings and consider how it can be applied to enhance the efforts of organisations in preventing and managing work-related ill health. The following section discusses the evidence in relation to some of the job demands-resources aspects and the study variables.

The job demands-resources model is shown in figure 2.1 below:

Figure 2.1

Job Demands-Resources Model With Study Variables



Adapted from Bakker and Demerouti (2007)

2.4 JD-R and Criteria

2.4.1 JD-R and Job Performance

The positive relationship between work engagement and job performance has been established (Yongxing, Du, Xie & Lei, 2017). One of the mechanisms that has been proposed is through the impact of job resources on job performance through the mediatory role of work engagement. Ismail, Iqbal and Nasr (2019) found that work engagement positively influenced job performance although through individual creativity. Further support was provided by Lazauskaite-Zabielske, Urbanaviciute and Balsiene (2018) who reported that job and personal resources were predictive of job performance through work engagement and that work engagement was moderately related to job performance. This is in line with proposition 6 of the JD-R theory where job resources influence work outcomes through work engagement based on the motivational hypothesis (Schaufeli, 2017). Moreover, Memon, Soomro and Kumar (2018) provided support for the positive relationship between work engagement, work practices and job performance in Pakistanian banks. Additionally, with regards to specific job resources and demands, Talukder, Vickers and Khan (2017) assessed the relationship between supervisor support, work life balance and job attitudes in the Australian financial sector and observed that supervisor support was related to work life balance which influenced other outcomes including job satisfaction, organisational commitment and job performance. Job demands have been shown to result in burnout which in turn affects job performance negatively. Indeed, Bakker, Van Emmerik and Van Riet (2008) found that exhaustion which is a component of burnout negatively influenced objective performance.

2.4.2 JD-R and General Well-Being

As explained earlier, job demands influence general well-being negatively through the health impairment process, which is accentuated by a lack of job resources (Giauque, Andersfuhren-Biget & Varone, 2018; Hupkes & Kodden, 2019). There is considerable evidence regarding this relationship, for example, job demands were associated with burnout whilst job resources were positively related to team relationships and negatively related to emotional exhaustion (Kimber & Gardner, 2016). Similarly, job resources were positively related with work engagement and job satisfaction whilst job demands were mainly related to stress mostly through work-family conflict (Mudrak et al., 2018). Further, Dicke et al. (2018) found that job

demands had a direct relationship with strain although self-efficacy moderated the relationship. Additionally, job demands including a high workload predicted an increase in depression and anxiety whilst job resources including social support from colleagues and positive leadership buffered this relationship (Santa Maria et al., 2017). Skaalvik and Skaavik (2018) reported that job demands including time pressure predicted a decrease in well-being in teachers whist job resources were moderately associated with better well-being. Main effects were found with colleague support and not with supervisor support. In this study job, resources neutralised the effects of stress and autonomy was a mediator in the relationship between job demands and well-being. Nielsen et al. (2017) investigated job resources at the levels of individual, group and superior and found a positive relationship with well-being and performance in a review between 2003 and 2015.

2.4.3 JD-R and Job Satisfaction

Job satisfaction is one of the most widely studied attitudinal variables, maybe because of its established effect with job performance (Rezaee, Khoshsima, Zare-Bahtas & Sarani, 2019). Researchers and practitioners have been interested in finding out how it is influenced by job demands and resources or their interactions, in order to enhance employee well-being and job performance. Most studies have found a positive relationship between job resources and job satisfaction and a negative relationship between job demands and job satisfaction in line with the propositions of the job demands–resources theory. For example, most call center workers may experience emotional dissonance since they are not supposed to express their emotions to customers therefore emotional dissonance is considered a job demand. An investigation into the relationship between emotional dissonance and job resources of job autonomy and supervisor support revealed that job resources were associated with an increase in job satisfaction whilst emotional dissonance was negatively related to job satisfaction (Zito et al., 2018). Previous research has also provided support for the positive relationship between specific job resources and job satisfaction and a negative relationship between job demands and job satisfaction (Jang et al., 2017; Jonasson, Lauring, Selmer & Trembath, 2017; McVicar, 2016). Podsakoff, Lepine and Lepine (2007), in their meta-analytic study also found that hindrance stressors were related negatively with criteria including job satisfaction and

commitment whilst challenge stressors were positively related with job satisfaction and organisational commitment.

2.4.4 JD-R and Commitment to the Workplace

Previous research has supported the motivational hypothesis as discussed above, where job resources influence work engagement, which then predicts criteria like commitment to the workplace. Other studies have focused on the effects of commitment to the workplace to organisational outcomes like job performance (Patiar & Wang, 2016). However, this study will focus on research testing the motivational hypothesis of the JD-R theory as it relates to commitment to the workplace. The popular study which provided support for this assertion was conducted by Hakanen, Schaufeli and Ahola (2008), who observed that job resources increased work engagement which inturn positively influenced organisational commitment. Work engagement was found to influence organisational commitment positively (Rurkkum & Bartlett, 2012). In addition, Lambert, Minor, Wells and Hogan (2015) found that job resources of administrative and supervisory support were negatively related to work stress but positively related to commitment and job satisfaction. Moreover, job resources in the form of organisational support and procedural justice had a positive relationship with affective commitment which was positively related to job performance. Additionally, Yang et al. (2019) reported a significant positive relationship between supervisor and co-worker support with organisational commitment among the variables they tested. Similarly, Hu, Schaufeli and Taris (2016) observed that social and task resources had a positive relationship with organisational commitment. Leadership has also been found to positively influence organisational commitment (Schaufeli, 2015). However, job demands have been found to negatively affect organisational commitment (Shim, 2018).

2.4.5 JD-R and Work Engagement

Work engagement is a central component of the job demands-resources theory as it acts as a mediator between job resources, work and individual outcomes. Job resources play a very important role in stirring up work engagement (Van Steenbergen, van der Ven, Peeters & Taris, 2018). Several studies have supported a positive relationship between job resources and work engagement and a negative relationship between job demands and work engagement (Bakker, Demerouti, de Boer & Schaufeli, 2001; Opie & Henn, 2013; van Mol et al., 2018). Job resources are

assumed to enhance work engagement especially when challenge job demands are high and workers have access to a lot of job resources to deal with the demands, i.e. the boosting hypothesis of the JD-R (Tadic, Bakker & Oerlemans, 2015). Others have found evidence of the mediatory role of work engagement on the relationship between job resources and commitment to the workplace (Santos, Chambel & Castanheira, 2016; Scrima, Lorito, Parry & Falgares, 2014) and also on the relationship between job resources and job performance (Bakker, & Bal, 2010; Bhatti, Mat & Juhari, 2018; Christian, Garza & Slaughter, 2011; Chung & Angeline, 2010).

The antecedents and outcomes of work engagement are woven in a complex relationship. Work engagement levels have been found to vary not only between employees but also within individual employees as supported by research on daily fluctuations of job demands, resources and work engagement. These variables can also change on a daily basis depending on the combination and type of demands and job resources available on a particular day although general levels can still be obtained (Bakker & Albrecht, 2018). A distinction of demands was associated with different effects on work engagement. Rai (2018) found that challenge demands were positively related with work engagement whilst hindrance demands were negatively related with work engagement. Daily challenge demands of workload and cognitive demands were positively associated with work engagement on days when transformational leadership was perceived to be high whilst daily hindrance demands were negatively related to work engagement on days when transformational leadership was perceived to be low (Breevaart & Bakker, 2017).

Moreover, it was suggested that employees are mostly engaged during the most demanding two hours on a task or after evenings of good rest (Bakker & Albrecht, 2018). Most of the studies suggest that work engagement increases when job resources are high rather than low as discussed above. However, work engagement has also been found to increase even in situations when employees are faced with high job demands but at the same time they have access to high job resources, these employees may be highly engaged but still suffering from burnout (Moeller et al., 2018). Personal resources were also found to influence work engagement positively (Karatepe, Ozturk & Kim, 2018).

The literature on the JD-R theory as it relates to commitment to the workplace, job performance, well-being and job satisfaction is still scare in developing countries especially in African countries like Zimbabwe. This calls for more research to inform our understanding of the nature, causes and effects of these organisational outcomes and individual health in developing countries. Every developing country is unique despite some common aspects that could be found between these countries. Accordingly, the next section discusses the context of the study and provides a summary of the socioeconomic environment in Zimbabwe and legislative and policy context.

2.5 The Case for Zimbabwe

2.5.1 Contextual Background

Despite the fact that Zimbabwe boasts of one of the highest literacy rate in Africa which exceeds 92% (Garwe & Thondhalana, 2018; Moyo & Salawu, 2019), jobs are difficult to come by (Hadebe, 2019; Luebker, 2008). There is a high unemployment rate estimated to be above 90% (Okada, 2019). Small to medium enterprises are covering the gap and providing employment but the quality of jobs may be poor (Gukurume, 2018). Workers are now confronted with job insecurity and the informal sector continues to grow as a result of the current economic challenges facing the country (Simba, Smith & Dube, 2018). The informal sector employs about 90% of the labour force in Zimbabwe, some of whom are graduates who cannot access formal employment (Mujeyi & Sadomba & 2019). The Zimbabwean economy was projected to have declined from 4.5% in 2013 to 3.1% in 2014 (Quarterly Economic Review, December 2014). The recent budgetary statement of January 2020 reported a decline of the economy from 3.4% in 2018 to - 6.5% in 2019 (Ncube, 2019). Economic growth had been driven by manufacturing, agricultural and mining sectors (Simba, Smith & Dube, 2018). However, about 4,610 companies closed shops in the manufacturing sector with about 55,443 workers losing their jobs (Monyau & Bandara, 2015).

The country has been facing financial difficulties since the hyper inflationary era (Chipunza, Samuel & Mariri, 2011; Kurebwa, 2011; Mwakiwa, Maparara, Tatsvarei & Muzamhindo, 2018). In March 2009, the country adopted a multi-currency system which saw an economic rebound with the economy growing at an average of 11% per

annum. Gross Domestic Product growth then decreased sharply from 10.6 % in 2012 to 4.5 % in 2013 (Monyau & Bandara, 2015). Inflation decreased from 2.9% year on year by the end of 2012 to – 0.3% in April 2014 (IMF, 2014). However, currently the inflation rate has gone up and the month on month inflation in June 2019 was 39.26% (ZIMSTATS, 2019). The country also suffers from a huge public debt, which was also affected by the hyper inflationary period of 2009 (Nyoni, 2018).

The traditional psychological contract of most workers was affected by the reduction of stable jobs with permanent contracts which has given rise to fixed-term job contracts and employment uncertainty (Quinlan, Mayhew & Bohle, 2001). This situation makes workers vulnerable to unsafe and unhealthy work situations (Houtman & Jettinghoff, 2007; Mudavanhu et al., 2013). Some workers become reluctant to raise issues related to their safety and health for fear of losing their jobs or being victimised (Katsuro et al., 2010). Unstable contracts and the associated concerns about the potential job losses invoke emotional distress especially for part time workers and others with fixed term contracts (Mckilay, 2019). Alternative job options are not easily available in instances where a worker might have preferred to change jobs because of poor working conditions that pose a risk to their safety and health. It is an employer's market. Precarious work is increasing (Mujeyi & Sadomba, 2018).

The High Court Judgement of 17 July 2015 made the situation worse by giving companies authority to terminate permanent contracts by just giving 3 months' notice (Labour Amendment Act, 2015). Previously it was difficult to terminate permanent employment in Zimbabwe. The High Court ruling made most workers more vulnerable and susceptible to abuse and occupational safety and health violations. It resulted in many workers losing their jobs.

A number of Zimbabwean workers are also faced with the burden of taking care of their extended families due to the socioeconomic situation (Katsuro et al, 2010). This exerts more pressure on them on top of the demands arising from their own jobs. The HIV/AIDS pandemic has also seen a rise in orphans, child headed homes and the elderly looking after children (Ndiweni & Manik, 2018). The life expectancy in Zimbabwe like other countries in Sub Saharan Africa is generally low, about 60-63 in 2016 which is better than the 34 that was reported in 2006 (Global Health

Observatory, 2016), maybe due to the HIV pandemic (Marmot, 2006; Negwaiya et al., 2013). Zimbabwe like many African countries faces challenges in infrastructure development including obsolete equipment for production and challenges with power (Mangoma, Chimbari & Dhlomo-Sahara, 2009).

2.5.2 Occupational Health and Safety Statistics in Zimbabwe

About 20,641 serious injuries were recorded and 401 workers died from the injuries between 2009 and 2013. The average frequency rate in 1 million hours of exposure time was 1.64 in relation to a standard of minus one. However, it was noted that the statistics on occupational diseases for that time were not adequate (Zimbabwe National OSH policy, 2014). An average of 10 971 occupational injuries per annum and 85 fatalities were reported from 2009 to 2014 resulting in a Lost Time Injury Frequency Rate of 1.79 over a period of 6 years (Mutetwa, Dozva & Mahembe, 2015). In 2012 alone, 4677 work-related injuries were reported on the Accident Prevention and Workers' compensation scheme with an incident rate of 5 per 1000 of the labour force registered with Zimbabwe National Social Authority (NSSA). There were 91 fatal injuries. The basic metal production sector had the highest risk of injury with an incident rate of 29 per 1000 of the insured workers. Males were the most affected in terms of incidence rates. Young workers below 15 and those in the 15-19 age groups were more exposed with occupational injury rates of 107 and 29 respectively. Finance, Insurance and Real Estate and Business services were among sectors with the lowest incidence rates (NSSA, Annual statistical report, 2012). In 2013, 5096 work-related injuries were reported with an incidence rate of 5.45 per 1000. There were 71 fatalities, which reflected a 21% decrease from 2012. 327 workers were admitted at a rehabilitation center. Between 2010 and 2017 total injuries reported were 38 511 with penalties amounting to ZWL$444 964.04. Fatalities decreased from 58 in 2016 to 46 in 2017. However, they increased to 76 in 2018 (NSSA, ON GUARD, 2019).

These statistics show that more work needs to be done to enhance the safety and health of workers in Zimbabwe. There is a need to have statistics for problems emanating from psychosocial issues as there are non-existent at the moment.

2.5.3 Legislative and Policy Framework in Zimbabwe

There is a comprehensive institutional framework that supports and guides the practice of occupational health and safety internationally. This includes the International Labour Organisation (ILO), the World Health Organisation (WHO), the International Social Security Association (ISSA), and regional institutions like the African Union (AU) and associations and professional bodies like the International Organisation of Employers (IOE), and the International Trade Union Confederation (Leka & Jain, 2016).

Resultantly, there are a number of guidelines, policies, tools and statutes that inform the practice of OSH in countries internationally (Leka et al., 2011; Widerszal-Bazyl, Zolnierczyk-Zreda & Jain, 2008). A number of international conventions that are legally binding have been proposed by the ILO and some ratified by member countries. The relevant conventions ratified by Zimbabwe are:

- C100 Equal Remuneration, 1951
- C111 Discrimination (Employment and Occupation), 1958
- C144 Tripartite Consultation, (International Labour Standards)1976
- C155 Occupational Safety and Health, 1981
- C161 Occupational Health Services, 1985
- C162 Asbestos, 1986
- C170 Chemicals, 1990
- C174 Prevention of Major Industrial Accidents, 1993
- C176 Safety and Health in Mines
- C187 Promotional Framework for Occupational Safety and Health

According to Leka and Jain (2016), some of the relevant instruments and guidance documents include the following:

- Bangkok Charter for Health Promotion in a Globalised World

- C159 Vocational Rehabilitation and Employment (Disabled Persons)
- C187 Promotional Framework for Occupational Safety and Health ILO, 2006
- Raising awareness of stress at work in developing countries: A modern hazard in a traditional working environment: advice to employers and worker representatives
- WHO Healthy workplaces framework – Healthy workplaces: A model for action for employers, workers, policymakers and practitioners
- Preventing stress at work: Conditions of work digest
- Violence at work
- Stress checkpoints
- ILO's OSH 2001 guidelines on Occupational Safety and Health Management Systems
- ILO's SOLVE program
- Raising awareness on psychological harassment at work

Interventions aimed at policy level are important as they can be targeted at policy and legislation development, stakeholder agreement on a common strategy, translation of best practice at national and stakeholder levels and promotion of social dialogue (Leka, Jain, Zwetsloot, & Cox, 2010).

The management of OSH in Zimbabwe rests with the Government through the tripartite, Ministry of Public Service, Labour and Social Welfare, National Social Security Authority of Zimbabwe (NSSA) and Zimbabwe Occupational Safety and Health Council (ZOCSHC), (Taderera, 2012). The ZOCSHC council is made up of representatives from significant government ministries, labour unions, and the Employer's Confederation of Zimbabwe (OSH Policy, 2014).

The practice of occupational safety and health in Zimbabwe is guided by Acts which include the following: the Public Health Act 15:09 of 1996, Labour Act Chapter

28:01, The Factories and Works Act, 14:08 of 1976 with a revised version of 1996, National Social Security Authority (Accident Prevention and Workers' Compensation Scheme) Notice No. 68 of 1990 commonly referred to as SI, 68 of 1990, the Pneumoconiosis Act and the Labour Relations (HIV and AIDS) regulations SI, 202 of 1998 (LEGOSH, 2013). The SI, 68 of 1990 seeks to promote the safety and health of workers and it includes aspects of accident prevention, workers' compensation and the associated duties of employers and workers (SI, 68:1990).

The Factories and Works Act, 14:08 is considered the main piece of legislation on safety and health in Zimbabwe (Taderera, 2012). It is complemented by regulations which include the Elevators and Escalators Regulations RGN 278 of 1976, registration and control of factories, RGN 262 of 1976 which involves the assessment of plans in meeting the set standards for physical aspects like ventilation and lighting. The general regulations involve processes to do with provision of first aid, medical examinations and provision of protective clothing. Organisations are also obliged to observe the machinery regulations SI, 302 of 1976 (LEGOSH, 2013).

The Environmental Management Act 20:27 aims to protect the rights of workers to work in an environment that is safe and does not pose any threats to their health. The Factories and Works Act, 14:08 of 1996 and the Labour Act chapter 28:01 are the few legislations that are applicable to all workers in Zimbabwe (Taderera, 2012). Some are occupation specific and not general laws like the Mining regulations, SI 109 of 1990 and 185 of 1995.

The Public Health Act 15:09 of 1996 provides for the mandate of the Minister of Health and Child Welfare. It compels institutions to notify the presence of infectious diseases, provides guidance on duties of employers in the prevention of infectious diseases and concerning persons who are suffering or suspected to be suffering from infectious and epidemic diseases. It also stipulates the powers of government when there is failure to report such cases and the associated penalties. The Public Health Act also offers the criteria for lighting, ventilation, sanitary, ablution facilities, cooking facilities, uncleanliness, prevention of insects and vermin, effluvia, disposal of rubbish, waste and keeping of animals. It prohibits smoking in public places including workplaces (Public Health Act, Chapter 15:09 of 1996). Organisations in Zimbabwe can choose to be certified by the National Occupational Safety Association (NOSA) or

be guided by the ILO-OHSAS 18001:2007 when implementing Occupational Safety and Health Systems (NSSA, ON Guard 2015). Organisations can also be certified on the new Standard for Occupational Health and Safety Management Systems, ISO 45001: 2018. The Government of Zimbabwe through the National Social Security Authority of Zimbabwe (NSSA) formulates and implements national interventions on OSH. NSSA has an Occupational Safety and Health Division within its organisational structure with departments responsible for inspecting workplaces, occupational health services, OSH promotions and training and another on research and development. The government also works with the ILO office in Zimbabwe on OSH management and governance (NSSA, On Guard, 2015).

2.5.4 Occupational Safety and Health National Policy of 2014

In compliance with the Occupational Health Services Convention of 1985 which provides for development of a national policy and country obligations, Zimbabwe published its reviewed OSH national policy which was signed by the Minister of Public Service, Health and Social Welfare in 2014 (OSH policy,2014). The Minister expressed the Government of Zimbabwe's commitment in his foreword through the policy's objective of "providing for occupational safety and health as a major component in the creation of sustainable business and therefore economic growth" (p.iii). He went on to state that "the Government, together with its social partners of employers' organisations and labour unions is building and maintaining a national preventative safety and health culture that increases awareness and training on hazard identification and risk assessment to make every task and occupation safe and worthwhile" (p.iii).

The Zimbabwe National OSH Policy, 2014 is a result of wide consultations of employers, workers, the self-employed and government. The original policy was adopted in 1998 and later reviewed in 2006. The National OSH policy is supposed to be reviewed after every 5 years. It covers amongst other issues, the rights of workers, operational policies and standards, accreditation of OSH professionals and OSH expectations in various economic factors. The major strength of this policy is that it now covers every worker except for the military services. This is a milestone in enhancing enforcement in protecting the safety and health of every worker in Zimbabwe.

There is also a proposal to have a harmonised occupational safety and health law since at the moment it is being implemented from different organisations with similar interests which include the Environmental Management Agency (EMA) making use of the Environmental Management Act 20:27. This will facilitate the enforcement of ensuring that workplaces are safe and healthy. In support, Section 65 of the Constitution of Zimbabwe also underscores the rights of workers to fair and safe labour practice (Constitution of Zimbabwe Amendment Act, No.20, 2013).

The country complies with international commitments on occupational safety and health and has ratified ILO conventions as discussed which includes: C155 of 1981 on Occupational Safety and Health, C161 of 1985 on Occupational Health Services and C187 of 2005 on Occupational Safety and Health promotion framework (Taderera, 2012). The country may benefit from further guidance since mental and behavioural health problems have now been included in the list of occupational diseases (ILO, 2010; Jerie, 2012).

2.5.5 OSH Policies and Psychosocial Factors in Zimbabwe

The OSH national policy recognises the importance of safeguarding the safety and health of all workers in Zimbabwe. Occupational health and occupational diseases are included in its definition of terms. The policy observes that “the major factors influencing occupational safety and health through their interaction are the worker, environment and equipment” (p.1).

There appears to be a disproportionate emphasis on ensuring that the physical working environment is conducive for the worker. The policy notes the highest literacy rate of Zimbabweans in Africa, which unfortunately has not assisted in “a good OSH culture and the national OSH performance across all sectors is far from being desirable” (p.4). The high literacy rate was mentioned because the belief is that education standards, training and understanding of OSH issues to some extent shape employer and worker attitudes. One of its objectives includes the provision of ergonomics, prevention of occupational accidents and emergency preparedness and response. Among its principles, it obliges every employer to register all workers for Workers’ Compensation Insurance despite the nature of the contract including seasonal and self-employed workers.

It also advices employers to provide occupational health services for treatment of occupational diseases and ensuring that affected workers are rehabilitated and compensated. They should facilitate as much as possible that "...no worker suffer diminished health, functional capacity, or life expectancy as a result of his work activities" (p. 9). This statement covers all aspects including psychosocial issues. The policy notes the importance of operational policies and standards to be along the lines of international standards for standardization at workplace and national levels. The hazard identification and risk assessment process stress the need to identify as much as practical all hazards related to any work and the associated risk of an accident or disease. This implies the inclusion of psychosocial factors although not explicitly.

The policy advises on areas to look out for in hazard identification and assessment. In terms of psychosocial hazards, it recognises the effects of fatigue, violence and harassment under the section of hazards associated with the Transport and Communication sector. Violence, harassment and stress are also expected in the Public Service whereas repetitive manual tasks, fatigue and stress are also common in the Retail and Service sectors. However, the issue of psychosocial hazards is not adequately addressed. It is important to note that the implementation of the revised policy is still in its infancy. On the OSH areas that were mentioned as deserving special attention and monitoring within the policy, psychosocial hazards were not mentioned in the mining, farming, forestry and manufacturing sectors.

SI 68 of 1990 specifies most diseases caused by physical hazards that can be compensated. Although it leaves room for diseases certified by a medical practitioner as having its aetiology from work-related risks, there is no mention of problems emanating from psychosocial factors like stress or depression. This situation has been observed in other developing countries (Atilola, 2012). Section 65 of the Constitution of Zimbabwe takes cognizance of the rights of workers to fair and safe labour practices. Currently, there is no legislation that incorporates psychosocial risks in Zimbabwe. At this stage, the reason for not adequately addressing psychosocial issues in policies and legislation is not clear. This will be explored further in semi-structured interviews with key stakeholders in the next stage of this research.

2.5.6 Psychosocial Environment in Zimbabwe

As alluded to earlier, research on the psychosocial environment and its effect on individual and organisational health is scarce in Zimbabwe. This is reflected by the few articles that have been published on the subject. This section reviews research conducted in Zimbabwe.

Oosthuizen, Visser and Mudzimu (2014), in their study of the short term insurance industry in Zimbabwe, found responsibility and role overload as some of the factors contributing to work-related stress. Insurance employees are exposed to clients' life events and accidents which constitute emotional demands. The nature of their jobs is inherently demanding especially with the economic situation where contributions are less than claims due to company closures. According to this study, this work situation has resulted in work-related stress manifesting itself through distrust among co-workers among other factors. Stressors from the physical environment were perceived to be low, possibly as a result of the nature of the duties which are mostly office based without any exposure to hazardous equipment and chemicals. However, Samet and Spengler (2003) found that the indoor environment can cause substantial health problems.

Mudzimu (2012) considered the relationship between globalisation, change, competition, work pressure and work-related stress on insurance employees in Zimbabwe that can interfere with home activities. They recommended that work-related stress should be managed through multi-methods informed by the organisational culture and the workers involved in order to prevent spill-over which contributes to negative work-home interference.

A few studies have been conducted on the informal sector in Zimbabwe. Loewenson (1998) found that common hazards faced by urban and rural informal sector workers consist of poor work organisation, poor hygiene, ergonomic hazards, and unsafe hand tools. Mortality rate was half that of the formal sector rate. They also found high incidences of musculoskeletal and respiratory diseases which were considered to be under detected in formal systems. The informal sector has always been left out in OSH interventions despite their contribution to economic development (Loewenson, 2001). This may be a result of the fact that they were not covered by any formal structures since most of them are not registered. Another barrier could be

that most of the informal sector operators are of no fixed aboard. They always move premises which makes it difficult to trace some of them (Luebker, 2008).

Mudavanhu et al. (2013) investigated the safety and environmental risks of the chemical industry within small to medium enterprises (SMEs) in Harare, Zimbabwe. The SME sector rose as a result of the economic challenges that the country was facing from around 2008. Currently, there is no legal framework to guide the operations of SMEs in Zimbabwe. They cited lack of government support and a comprehensive policy as hindrances to OSH initiatives in SMEs in Zimbabwe. Even though their research sample could be considered as low, they found out that most SMEs did not have an OSH policy, risk analysis strategy, did not keep accident registers maybe due to low accident rates of less complex processing methods, and had no staff welfare facilities. They also found that most premises were not conducive for chemical handling. Chemical safety without a policy cannot be guaranteed. With the quest to remain in business, OSH management in most SMEs is considered a secondary issue or a luxury. Mudavanhu et al. (2013) also found that only 21.4% of the SMEs in the chemical industry were registered and 38.8% were using a licence that was not for the intended chemical operations. However, 87.8% of the SMEs had fire prevention equipment.

Muzvidziwa (2012) found that burnout had a negative but moderate relationship with engagement, happiness and job satisfaction on bus drivers in Zimbabwe. The bus drivers were found to be happy, engaged and satisfied with their jobs despite the stressors. Stressors included tickets from the police, peak hour pressure and bad weather. Some of the job resources which might have buffered the effects of the stressors included socialising at work, a good working environment and supportive co-workers.

Several studies have been conducted in Zimbabwe on work-related stress in teaching (Bumhira, Musora & Nzonzo, 2017; Chireshe & Mapfumo, 2003; Ncube & Tshabalala, 2016; Nhundu, 1999). Mapfumo, Muzvidziwa and Chireshe (2014) found that teachers in four mainstream schools and three Special Needs Education Schools in Mutare, eastern Zimbabwe were stressed by perceived lack of support from government, large classes, amount of time spent on an individual pupil with special needs, heavy workload, and lack of resources. The teachers were coping with the

stressors by sharing their problems with colleagues, physical exercise and support from family and friends. System wide interventions that were suggested to manage stress included provision of more resources, reduction of class size and better remuneration.

Additionally, Masuku and Muchemwa (2015) assessed stress levels, their manifestations and the associated stressors among university lecturers and observed that most of them were stressed with some being exhausted. The stressors included a high workload, targets and long working hours. Bigirimana, Sibanda and Masengu (2016) found that unfavourable working conditions including leadership style, perceived organisational support, workload and opportunity, and support for research activities negatively influenced turnover for academic staff.

A high prevalence of occupational stress was also found among radiographers working in general radiology in Zimbabwe (Chingarande & Ndlovu, 2013). Stressors included inadequate compensation, pressure to complete tasks, inadequate vacation time and lack of recognition. Negwaiya et al. (2013) found that lack of protective clothing and fear of contracting HIV affected nurses at Bindura provincial hospital.

As noted above, most of the research conducted has focused mostly on the education sector with a few studies in other sectors. These studies have shed light on some factors that contribute to work-related stress but most of them have focused on very few variables. The researcher is not aware of any study that has tested the job demands-resources theory in Zimbabwe using several variables as demands and resources in the banking sector. Moreover, the researcher is not aware of any study that has tested interactions between job resources and job demands as they relate to general well-being, job performance, job satisfaction, commitment to the workplace and work engagement. Some previous research suggested interventions that were biased towards individual coping at the expense of prevention focused interventions. For example, Makoni and Mutanana (2016) recommended counselling, sport and recreation as coping strategies for work related stress. In order to close some of the research gaps, this study sought to answer the following questions and hypotheses.

2.6 Research Questions

1. What is the level of awareness and understanding of key stakeholders on the nature and impact of psychosocial factors on individual and organisational health?
2. What is the relationship between job demands and general well-being?
3. What is the relationship between job demands and work engagement?
4. What is the relationship between job demands and job satisfaction?
5. What is the relationship between job demands and commitment to the workplace?
6. What is the relationship between job demands and job performance?
7. What is the relationship between job resources and general well-being?
8. What is the relationship between job resources and work engagement?
9. What is the relationship between job resources and job satisfaction?
10. What is the relationship between job resources and commitment to the workplace?
11. What is the relationship between job resources and job performance?
12. Does the relationship between job demands and general well-being become weaker when job resources are high rather than low?
13. Does the relationship between job resources and organisational health outcomes (commitment to the workplace, job satisfaction, job performance and work engagement) become weaker when job demands are high rather than low?

2.7 Conclusion

This chapter presented the theoretical background for the current study by discussing three influential models of work-related stress, namely the job demand-control (support) model, the effort-reward imbalance model, and the job demands-resources model and associated research evidence. The earlier models provided guidance and motivated the job demands-resources model, which later became a theory to incorporate various job demands and resources to complement the other models. Although all the models can equally be applied to investigate the antecedents and outcomes of work-related stress, the JD-R model was preferred because of its flexibility and comprehensiveness, not limiting itself to specific demands and resources but acknowledging that each organisation or sector can face different demands and resources. The chapter also explored the Zimbabwean context in terms of occupational safety and health performance, the legislative and policy background, and relevant research conducted in the country. The socioeconomic background was briefly discussed as it impacts on organisations and their workers. The following chapter presents a discussion of the methodology that was adopted in this research and the rationale behind the selection of the methods used.

Chapter 3: Methodology

Psychologists are interested in gathering information in order to understand, describe, predict, explain and influence behaviour in ways that are beneficial to humanity. There are various ways of gathering information or collecting data that are at the disposal of the researcher. The choice of which particular method to use depends on various considerations which include the purpose of the enquiry, the nature of the research questions and ontological and epistemological positions of the researcher. In addition, theoretical assumptions can also influence the decision of the research (Creswell, 2003).

The well-being of workers has been very topical especially issues to do with emerging risks like psychosocial hazards as important antecedents of individual health and organisational performance. Despite the proliferation of research on these issues in developed countries, there is still lack of research in developing countries (Kortum & Leka, 2014). This research is an attempt to contribute in covering these gaps.

This chapter presents how research methods were selected and applied in an attempt to explore perceptions, understanding and investigate relationships between psychosocial risks with individual and organisational health. In addition, the reasons behind selection of the methods used are discussed. The chapter begins by presenting research questions, philosophical positions, the research design and the mixed methods approach, followed by the data collection strategies for both studies. Ethical considerations are then presented. In addition, detailed procedures for data analyses are discussed in chapter 4 (qualitative study) and chapter 5 (quantitative study).

3.1 Ontological and Epistemological Positions

There are various factors that influence the selection of research strategies which include ontology, epistemology, axiology which relate to the researcher's values (Creswell, 2003). This section outlines the philosophical positions of ontology and epistemology. Ontology is the part of philosophy that is concerned with the nature of existence and what reality is, what people can know of the world, what the real truth is whilst epistemology is what we believe to be the nature of knowledge, how we

find meaning in the world and how we get to know what we know (Else-Quest & Hyde, 2016; Lundh, 2018). These two concepts influence what we understand as knowledge, how we obtain that knowledge and what techniques and tools we can use. The most common epistemological positions are positivism, interpretivism and constructivism (Holtz & Odag, 2018).

Positivism has been associated with the quantitative paradigm and can be traced back to the work of Comte 1844-1957 who believed that truth about social life can be obtained from reasoning based on basic principles, in addition to assumptions that are based on theory on the premise of logical positivism (Babones, 2016). The other strand is empirical positivism which was associated with Popper (1957). Holtz and Odag (2018) support the opinion that Popper was not a positivist but an anti-positivist. However, both approaches put theory first in their enquiry and only vary on the extent of their claims to causality, with the Popperian approach having the modest claims (Babones, 2016). Positivism places more emphasis on objective evidence where the researcher is removed from the subject matter using methods which emulate those of the natural sciences (Al-Saadi, 2014; Hammersley, 2017). Moreover, Tuli (2010) observed that with the positivist paradigm, social aspects are viewed as natural science view their subjects and the purposes of research is scientific explanation based on empirical facts that exist which are removed from personal ideas or thoughts. The assumption is that there is a reality out there which is independent and waiting to be revealed and there is consideration of laws of cause and effect (Creswell, 2003). Their tools include questionnaires and experiments. In addition to observation methods, hypotheses that are derived from theories are tested using a deductive approach. There is a focus on measurements that enable statistical analyses (Queiros, Faria & Almeida, 2017).

During most of the 20th century, proponents of quantitative methods investigated things that were measurable and observable, this was inadequate in the eyes of other researchers who believed that research should also aim to understand the meaning of social phenomena and events and they considered other methods of obtaining knowledge especially from the viewpoint of the participant, giving prominence to the qualitative paradigm (Tuli, 2010). The theoretical structure for most qualitative research has been based on interpretivism and constructivism (Klenke, 2016; Kovacs et al., 2019). The perception of the world is portrayed as seen and interpreted by the

people who experience it through their social interactions, taking into account their subjective meanings, the focus is not on generalizing but to understand the phenomena of interest through firsthand experience and acknowledging that there are multiple truths (Creswell, 2003). Qualitative data is an outcome of interpretation (Denscombe, 2003).

The approach is inductive rather than deductive meaning that theory is derived from the data as compared to data testing the theory as in deductive approaches (Thomas, 2006). Inductive reasoning occurs when data are used to develop a theory where the researcher is open to whatever the data will bring out. It is a theory building process commencing with observations of specific occasions (Hyde, 2000). Induction is a logical argument utilising rules to reach a conclusion from given premises (Coolican, 2009). Interpretivism places importance to trustworthy and credibility rather than validity, reliability and objectivity which is characteristic of the positivists (Stewart, Gapp & Harwood, 2017). In addition, the researcher's perspectives and values may influence the results as the process is not really value free. Knowledge in this viewpoint can be understood on the basis of perceptions, beliefs and the realization that there are different ways of interpreting reality by different people where it is socially constructed (Al-Saadi, 2014). Interestingly, Babones (2016) argues that although interpretative approaches are associated with qualitative research they can also be applied to quantitative research.

3.2 Research Design

Many people use the terms research method and research methodology interchangeably. However, a research method is different from a research methodology. A research method is a strategy for implementing the research. It is how the research is conducted whereas research methodology "is the science and philosophy behind all research" (Adams, Khan & Raeside, 2014, p.5). According to Creswell (2003) a methodology is a strategy that connects the methods with the outcomes i.e. experimental research or ethnography and methods are the techniques and procedures to be used for example a questionnaire or an interview. It is a way of establishing how research can be done scientifically (Kothari, 2004).

The research design is informed by the research objectives and nature of the research questions (Kothari, 2004). The design chosen must satisfy the rigour that is expected in social science research (Kallio, Pietila, Johnson & Kangaeniemi, 2016). Some scholars suggested quality criteria for research which include reliability, validity and generalizability to an extent (Bryman, Becker & Sempik, 2008). This research attempted to obtain reliability and validity through ensuring methodological rigour, carefully selecting the sample for both studies to ensure relevance and employing relevant methods and analyses strategies. In addition, the quantitative study utilised measures that were comprehensively validated (Golafshani, 2003). The major characteristics of the research design are to state clearly what is to be discovered and determination of the best approach to achieve the purpose and the reasons for the research i.e. the planning stage of the research (Babbie, Mouton, Vorster & Prozesky, 2001). These authors suggested that all research regardless of the particular question follows a certain logic which they termed the ProDec framework which comprises of four steps. The steps are the research problem, research design, empirical evidence and conclusion. They differentiated between a research design and methodology wherein the design part focuses on the outcome and is concerned with what type of study and outcomes are needed to achieve the research aims whereas the methodology focuses on the process of the research and the type of procedures and tools that will be used in the research. Their definition of methodology is similar to what was described as a method by Creswell (2003) reflecting the interchangeable use of the words in the literature.

The research design of the current study was based on a consideration of various factors. The major decision was to select the design and method that could best answer the research questions. The focus of the first study was to establish perceptions and understanding and to some extent attitudes. After considering all the available methods, qualitative methods were found to be best suited to explore perceptions, understanding and knowledge amongst key stakeholders on psychosocial factors and their effects on individual and organisational health (Brannen, 1992; Yates, 2004).

The second objective of the study was to investigate the relationship between psychosocial factors and organisational and individual health in the banking sector. This information could be obtained through qualitative methods, but quantitative

methods would better facilitate the assessment of these relationships from a larger sample than what could be obtained from qualitative methods and also considering the time factor and the number of variables that were to be tested. There was also a need to determine the magnitude of exposure to various psychosocial hazards, therefore numerical data was deemed more relevant (Denscombe, 2003). In that regard, the research utilised a qualitative method in the first study followed by a quantitative study making it a sequential mixed method approach (Creswell, 2009). The following section discusses the mixed method approach.

3.2.1 Mixed Methods Approaches

Mixed methods can be traced back to the work of Campbell and Fiske 1959 who developed the multi trait-multi method matrix (Creswell & Plano Clark, 2007). Johnson, Onwuegbuzie and Turner (2007, p.123) defined mixed methods as “the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches, for example use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques for the broad purposes of breadth and depth of understanding and corroboration,”. They went further to differentiate between a mixed methods study where the mixing occurs in one study and a mixed methods program where the mixing occurs in a program of research which can occur across studies that are closely related. This definition implies that mixing of methods occurs in one single study. They considered mixed methods to be a pragmatic approach to knowledge which appreciates multiple views rather than one extreme method i.e. quantitative or qualitative. There is no universally acknowledged definition but mixed methods seem to mean some combination of qualitative and quantitative methods (Pool et al., 2010). In addition, Guetterman, Fetters & Creswell (2015) consider mixed methods research to involve both the collection and analysis of qualitative and quantitative data and its integration which takes advantage of the advantages of both methods and not rely on one particular method.

The current research involves two studies which are part of one project but not necessarily a single study since the two studies were answering different questions of the overall research project. However, Pool et al. (2010) offered a broad definition of mixed methods which also included different types of quantitative or qualitative methods to study the same phenomena or different aspects of the same phenomena.

Brannen (1992) views multiple research strategies as describing the utilization of different research methods to solve a research problem, researchers are urged to be more flexible and think through selecting the methods that are most relevant for their research objectives. Methods can be mixed through investigators, theories and data, methods can be within or between methods. Within methods use the same method at different occasions whereas between methods use different methods on the same topic or the major aspects of the study, there is need to go beyond the divide between quantitative and qualitative methodologies (Johnson & Onwuegbuzie, 2014).

The use of mixed methods has several advantages and disadvantages that have been reported in the literature. Hussein (2009) suggested that mixed methods are suitable especially if the subject is under studied as one of the several reasons they suggested behind the use of mixed methods. This is consistent with the current research as there is lack of research and information regarding psychosocial hazards in developing countries like Zimbabwe (Kortum, Leka & Cox, 2011). Proponents of mixed methods have suggested several reasons for their use which include the complexity of social and health research which cannot be comprehensively investigated using one method (Guetterman, Fetters & Creswell, 2015). Mixed methods enhance understanding of the research problems since one method, for example, qualitative approaches can be used to better understand or interpret the results of another method, i.e. quantitative methods (Creswell & Plano Clark, 2007). In the same vein, Pool et al. (2010) offered reasons for utilising mixed methods which include development and evaluation of research tools and procedures, examining different facets of the research question, broadening the research scope and triangulation of results for enhanced data accuracy. Quantitative and qualitative studies can complement each other yielding results that are better than a single method (Choy, 2014). Some of the disadvantages of mixed methods include the need for the researcher to be familiar with both methods and the time consuming process of conducting two research methods and analyzing both text and numeric data. From the discussion of triangulation by Hussein (2009), it seems its description is similar to what has been described as mixed methods raising questions of whether it is one and the same thing or part of the other. They considered triangulation to be a combination of qualitative and quantitative studies of the same phenomenon.

Bryman, Becker and Sempik (2008) suggested quality criteria for mixed methods which guided the implementation of the current research. They recommended that the methods should be relevant to the research questions and the need for procedures to be transparent. The current study ensured that the research questions were addressed using the most relevant methods, i.e. qualitative study for exploring perceptions and understanding and the quantitative study for exploring relationships as discussed. The procedures that were followed are presented in chapter 4 and chapter 5. In addition, they suggested that results of mixed methods should be integrated and not kept separate and the rationale for using mixed methods should be clearly specified. In compliance to the above criteria, the reasons for employing a mixed methods design have been articulated. In terms of integration, the study took a connection strategy which is discussed in the following sections.

As elucidated, the current study used a mixed method approach where qualitative and quantitative data were mixed in a complementary way (Yauch & Steudel, 2003). Interestingly, some scholars argued that mixed methods should not be used in a single study because of the different philosophical positions of the two methods but researchers may consider a complementary approach which occurs when the research problems are different or responding to different parts of the research problem rather than two approaches focusing on the same research problem (Sale, Lohfeld & Brazil, 2002).

In this study it was important to consider the perceptions and understanding of key stakeholders before establishing the relationship between psychosocial factors and health outcomes. As alluded to before, perceptions and level of understanding are better investigated through qualitative studies especially through interviews (Bryman, 2017). More so in the current situation where there was no previous literature to the researcher's knowledge which had been conducted in Zimbabwe especially on perceptions of key stakeholders to use as a reference. The research questions could not be answered comprehensively using one method. Therefore, we leveraged on the advantages of both quantitative and qualitative methods to enhance our understanding of the study variables and minimized the weaknesses inherent in each method as all methods have limitations (Turner, Cardinal & Burton, 2017). The advantages and disadvantages of both methods will be discussed under the section on data sources.

3.2.2 Developing the Mixed Method Design

Creswell and Plano Clark (2007) suggested factors that should be taken into account when designing a mixed methods study. That is timing, whether the mixed methods would be sequential or conducted simultaneously. One needs to think about the weighting which is concerned with the importance given to the different methods or whether they are given the same weighting, then mixing of the methods which may be done during data collection, analysis, at interpretation or at all stages. They went further to differentiate between integration, connection and theorizing. Connection is a situation where the data is kept distinct but with a connection say one study informs the other, whereas in integration the results are combined. In embedding there will be one main and one secondary study which plays a supportive role.

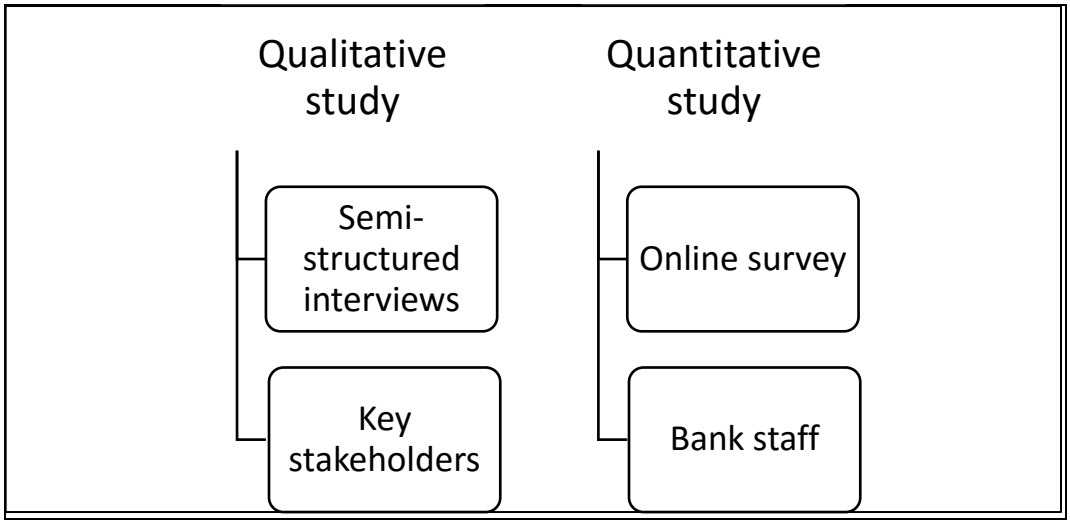
Both studies were guided by the job demands-resources model which is the "theorizing" aspect mentioned above. The JD–R has been validated in various countries and cultures (Schaufeli, 2017), but it was imperative to test its applicability in a developing country like Zimbabwe. It was considered to be more relevant and comprehensive for providing a framework to capture psychosocial hazards in Zimbabwe as compared to other models like the job demand-control-support model. This was mainly due to its flexibility where it can be applied to every work situation and it also accommodates different types of job demands and job resources (Breevaart & Bakker, 2018). As elucidated previously, quantitative studies and qualitative studies can complement each other although they emanate from philosophies that are significantly different, in that regard, it is important to determine whether to use mixed methods and reflect on how mixing will occur.

The current study has aspects of the "connection" described above since findings from the qualitative study informed the design of the second study and selection of study variables and relevant questions. The studies are linked in that the qualitative study informed the selection of the questions for study 2 and some variables to be focused on. This is an applied research therefore the results of the second study will need the cooperation and buy in of key stakeholders to address the issues and safeguard the health of workers in the banking sector of Zimbabwe, making the investigation of their perceptions crucial. In terms of weighting, both studies were assigned equal priorities as there were both important in their own right. As discussed, the mixed methods were sequential commencing with the qualitative

followed by the quantitative study. Figure 3-1 shows the visual presentation of the mixed method design adopted in the current study.

Figure 3.1

Mixed Methods Design



3.3 Data Sources

The initial study was based on a qualitative study and the second study was based on a quantitative study as explained above. The combination of the two methods resulted in a mixed methods design. The sources of data were key stakeholders in the qualitative study and bank staff in the quantitative study. This section describes the two sources of data and the reasons behind their choices.

3.3.1 Qualitative Sources

There are several qualitative methods that can be used to explore perceptions and understanding of psychosocial factors in Zimbabwe. These include surveys, interviews, assessment of texts and focus group discussions (Bryman, 2017). As discussed, qualitative sources are concerned with the point of view of the participant and the meanings they attach to things as they see them, “it is an attempt to see through the eyes of the person being studied” Yates (2008, p.157). They went on to suggest the objectives of research in qualitative studies which include, getting a deeper understanding and comprehensive description on an aspect of an individual or a group’s experience, exploring meaning and expressions of participants,

understanding of themselves and their experiences, exploring ambiguities and complexity in the social context.

Moreover, reliability and validity of qualitative studies are understood as trustworthiness and rigour, verification techniques are employed to assess issues like methodological coherence, sample relevance, concurrent data analysis and theory integration and development (Golafshant, 2003). Levitt et al. (2018) gave an account of qualitative research methods in their article on standards for reporting qualitative research. They noted that qualitative approaches analyse data which appears in the form of natural language like words and expressions of experience, analysis of data is through identifying patterns linked to occasions of a phenomenon where the patterns will result in an understanding of the whole phenomenon. New data updates the information and analyses in an iterative fashion. They went further to acknowledge that qualitative research provides rich, detailed and very contextualized data which considers open ended discovery as opposed to verification of hypotheses. Further, results may be transformed to numerical in a qualitative study or in mixed methodology. Qualitative methods aim to explore the aspects that are complex about the research question and provides different explanations or understandings of the participants (Creswell, 2009).

The qualitative study adopted the semi-structured interview as the only method of collecting data. The semi-structured interview was considered because of its advantages which will be discussed below. It is appropriate for investigating perceptions and understanding which is the thrust of the qualitative study and for the exploratory nature of the whole research (Coolican, 2009).

3.3.1.1 Semi-Structured Interviews.

Interviews can be classified according to their level of structure. According to McIntosh, Janice and Morse (2015), semi-structured interviews are used to obtain subjective responses from people about a specific situation or phenomenon that they have experienced. Another type of interview is the unstructured interview which can pursue various topics since it does not have any structure (Yates, 2008). Semi-structured interviews involve utilizing a pre-determined schedule which guides the flow of the interview. It varies from the structured interview especially with regards to its flexibility where in structured interviews the schedule is followed rigidly and

responses are limited, which allows for comparison of responses, and there is no flexibility to vary the way questions are asked (Queiros, Faria & Almeida, 2017).

The semi-structured interview is commonly used because of the merits associated with it. One of the major advantages that contributed to its use in this study is their ability to elicit information on participants' experiences, understanding, opinions and meaning, providing an opportunity to explore issues comprehensively (Longhurst, 2009). Another critical advantage is their flexibility, the researcher can probe and make follow up questions or rephrase to enhance understanding (Kallio, Pietila, Johnson & Kangasniemi, 2016). This was an important consideration since a similar study had not been done, it was imperative to leave room for clarifications and probing. Questions can be added as issues that were not anticipated can come up during the interview. Further, semi-structured interviews give room to change the order of the questions (Hopf, 2004). However, other researchers are of the view that the order of questions in semi-structured interviews remain the same and should not be varied (McIntosh, Janice & Morse, 2015).

As discussed, semi-structured interviews provide rich data where perceptions and understanding are the focus of study (Coolican, 2009). Respondents have the liberty to express themselves in their own words unlike in the survey and enables an exchange between the interviewer and interviewee in a reciprocal fashion (Kallio, Pietila, Johnson & Kangasniemi, 2016). However, some of the weaknesses of semi-structured interviews include the fact that they can be costly in terms of time (Adhabi & Anozie, 2017). The success of the interview depends on the skill and commitment of the interviewer (Kumar, 2011).

Semi-structured interviews in this study were conducted based on an interview schedule with 12 questions. The interview schedule was developed following guidelines as suggested by Creswell (2009). The questions were derived from a literature review and also from aspects of the job demands-resources theory. The interview schedule guided the questions that were addressed during the interview (Adams, Khan & Raesid, 2014). It also facilitated in increasing the trustworthiness of the interview method as the interview guide is one of the pre-requisites of using the semi-structured interview as suggested by Kallio, Pietila, Johnson and Kangasniemi (2016).

3.3.2 Quantitative Sources

Differences between quantitative and qualitative sources have been reported in the literature, for example, quantitative sources tend to use more participants and variables and have less reflexivity unlike in qualitative sources (Kanis, 2004). Reflexivity is when the researcher reflects on their own influence to the research process (Levitt et al., 2018). As alluded to before, the second study sought to investigate relationships between psychosocial factors, individual and organisational health in the banking sector of Zimbabwe. In order to establish these relationships a large number of participants were targeted. The researcher was interested in testing hypotheses regarding the relationship between psychosocial factors, individual and organisational health and to also investigate the extent or level of the study variables, for example, are workers in banks stressed, engaged, committed and what is their level of performance. An analysis of the available options was made and quantitative sources were considered to be more relevant for the research questions. According to McCusker and Gunaydin (2015, p.538), the features of quantitative studies are as follows:

- The researcher knows clearly what they are searching for
- They are recommended towards the end of the research project in mixed methods design
- The design of the whole study is made before data collection
- Numerical data is obtained from tools like questionnaires or equipment
- Data is in the form of numbers and statistics
- Quantitative data is efficient for testing hypotheses
- The researcher is objectively separated from the subject matter
- A disadvantage is that contextual information is not available

The quantitative study was based on an online survey which is discussed in the following section.

3.3.2.1 Online Survey.

A survey is a method that is widely used and involves asking participants questions on a subject area of interest which can relate to behaviour, thoughts and feelings with objectives which include describing and identifying characteristics (Buchanan & Hvizdak, 2009). In this case questions were on psychosocial factors and their relationship with health. Online surveys have various advantages which also

contributed to their selection in this study. An online survey was considered because of various factors which include the ability to reach a large number of participants within a short space of time making them less costly and they can facilitate anonymity since there is less face to face interaction (Kumar, 2011).

Evans and Mathur (2005) identified the following advantages and disadvantages of the online survey: The use of online surveys can facilitate accessing responses from participants who are located in different parts of the country at a lower cost. They are flexible and allow the use of different formats, online surveys can be based on email with an embedded survey or a link to the survey can be provided. Data collection time is greatly minimized since the researcher does not have to physically distribute the survey. Online surveys offer convenience, participants can complete at a time of their choice and with some surveys they get an option to start the survey and complete at a later stage. Another big advantage is their ability to facilitate data entry and analysis faster than other survey methods like the telephone survey or paper and pencil survey. The administrative costs of distributing and collecting questionnaires are eliminated.

The potential weaknesses include the fact that an online survey email can be regarded as spam and deleted at the level of the server. The sample may not be representative since it is limited to participants who have access to a computer and who can use internet. In Zimbabwe some lower level staff may not have computers at work. Others may not have the skills to complete the online questionnaire and lack experience with online protocols. Connectivity can also be a problem where some staff may not have access to the internet. Wi-fi may only be a benefit of certain levels of staff although in developed countries it may be available to all. Dial up connections have been reported to be slow if these are used. Online surveys do not give the participant room to ask questions if anything is unclear, the researcher cannot probe or ask follow up questions since there is no human interaction and the researcher's subjectivity is greatly minimised. This implies that the instructions must be very clear. Moreover, Buchanan and Hvizdak (2009) observed that online surveys are easy to use and cost effective amongst other merits but they bring about complexity which calls for rethinking with regards to ethical issues which includes privacy, ownership, public versus private places, data storage and anonymity. The analysis strategies for both studies are discussed in the relevant chapters.

3.4 Ethical Considerations

Ethics play an integral role in our career as psychologists either in research or in practice (Lewis & Zibarras, 2013). Ethical approval for both studies was granted by the Ethics subcommittee, Faculty of Medicine and Health Sciences, School of Medicine, reference numbers 203 and 247 for the qualitative and quantitative studies respectively. Moreover, the thesis adhered to the ethical principles included in the Zimbabwe Psychological Association ethics procedures, the British Psychological Society's Code of Ethics and Conduct (2009), Code of Human Research Ethics (2010) and Ethics Guidelines for Internet-mediated Research (2013). For the quantitative study, the Central Bank of Zimbabwe gave approval to approach individual banks for the purpose of this research. It was made clear that the aim of the study was purely for academic purposes. Some of the key ethical issues that were complied with are discussed below: These follow guidelines of the four key principles of ethics, which are respect, competence, responsibility and integrity (BPS, 2009).

3.4.1 Confidentiality

Anonymity and confidentiality were strictly observed at all times reducing the risk of breach. Any information that could identify a participant or link them to their organisation was removed. Questions were only limited to relevant demographic information and study variables. Participants were advised that confidentiality and anonymity would be observed before they took part in the study.

3.4.2 Voluntary Participation

Voluntary participation is important in line with the ethical principle of respect for individuals. The information that was sent to potential participants emphasized the voluntary nature of taking part in the study. Moreover, participants were informed and acknowledged that they could withdraw from the study at any moment without providing any explanation. All participants signed a consent form before taking part in the studies. There *was* no reward or inducement associated with participation. For the qualitative study permission was sought if the interview could be audio recorded and participants gave their consent in writing.

3.4.3 Data Protection

Data were stored and managed according to the guidance of the Data Protection Act of 1998, the current Data Protection Act of 2018 and the Ethics

guidelines for Internet-mediated Research (2013), throughout the research from data collection up to writing and archiving. The researcher had sole access to the research data and the online password was never shared. Emails with the link to the questionnaire were sent from the Human Resources department to only those employees with organisations who had consented to take part in the study. Upon completion, the data was kept under encryption according to the University of Nottingham's storage policy. Confidentiality will be observed up to the disposal stage of a maximum of seven years. This is consistent with the principle of responsibility where we uphold our responsibility to participants and the general public and strive to maximise research benefits but at the same time avoiding any harm which may be associated with the breach of anonymity and confidentiality through poor management of data.

3.4.4 Integrity

The researcher was honest and transparent about the purpose of the research as discussed earlier and clarified any areas that were not clear to the organisations. This is important as integrity is a crucial ethical principle in research. The participant information pack that was sent out prior to participation contained all relevant information about the research and had contact details of relevant people who could be communicated with about the research.

3.5 Research Process–Reflections

Work related stress can be associated with negative connotations by the person who is experiencing it or by other people including gate keepers in organisations. The implication is that organisations may not want to take part in a study that is investigating work-related stress issues. In addition, psychosocial factors may be misunderstood as they are applied differently depending on the context, for example when people refer to psychosocial support regarding HIV and AIDS. In order to address that potential problem, the research topic was amended to refer to work organisation and well-being rather than using the terms psychosocial factors and work-related stress during the research process. This was meant to bring about a positive dimension to the research since proper management of the work environment has a positive relationship with well-being and organisational health and to avoid any

misinterpretations. However, nothing was changed in terms of instruments and there was no effect on the outcomes.

Both studies were conducted at a time when Zimbabwe was undergoing some economic challenges. The qualitative study was conducted between end of 2016 to early 2017 when some organisations were failing to pay their workers or reducing salaries. This may have influenced the frequency of responses regarding the challenges that workers were facing but this may not have affected the overall results as the focus was mainly on job demands and job resources that were emanating from the workplace, although macroeconomic factors play a role. The quantitative study was also conducted when the economy was not yet at its best, however, there is no reason to think that this could have affected responses significantly because of the nature of questions that were being asked which were very specific.

Data collection for the quantitative study took longer than expected which resulted in a revision of the study timetable. The survey ran from 8 December 2017 to 31 March 2018. The later stages of data collection coincided with a period when some banks were conducting their performance management assessments and few had time to complete the questionnaire which contributed to the obtained sample size. Banking staff are typically busy and obtaining participants took time. The fact that the researcher works for a central bank could have made other banks to feel uncomfortable to participate or in another way may have made some banks to participate and be perceived as cooperative. It was also possible that some participants might be tempted to respond in a socially desirable manner. However, the researcher emphasized that this was purely academic work and stressed that the results would not be availed to the Reserve Bank of Zimbabwe. Participants were reminded that taking part was voluntary and they could withdraw their participation at any point. The responses could have been true as participants who took part showed interest and took their time to complete the questionnaire with a number of them requesting for a summary of the findings.

Another possible reason which might have affected the completion rate of the questionnaire was the length of the questionnaire which had 75 questions including demographic questions, 19 responses were excluded due to incomplete responses. However, efforts were made to reduce the number of questions for example,

considering a single item measure for job satisfaction and selecting only relevant scales identified from the qualitative study from the COPSOQ II questionnaire.

As a bank official who might have experienced some of the issues that were being investigated, for example, when participants mentioned some stressors that are common in the banking sector and other issues like work life conflict and career stagnation, the researcher acknowledged this fact and acted consciously in an impartial manner during data collection, analysis and reporting. The researcher resisted the temptation to probe or ask leading questions but left the participants to respond without any influence except when there was need for clarification. The researcher also ensured that facial expressions were neutral. The interview schedule also assisted as only questions that were on the interview schedule were asked. The survey method also assisted in reducing any potential subjectivity. The researcher acted as a professional who is gathering information rather than taking the role of a bank official. These two roles were consciously separated. Lastly, in addition to current knowledge, relevant courses were attended by the researcher to satisfy the ethical principle of competence and continuous professional development

3.6 Conclusion

This chapter addressed the pertinent issues regarding philosophical positions that influence the choice of any methodology. Having adopted a mixed method design which was relevant for answering the research questions the research borrows from both positivism and constructivism/interpretivism and views these as distinct but complementary approaches. The advantages and disadvantages of both methods were outlined. Qualitative methods in the form of semi-structured interviews assisted on exploring perceptions and understanding of key stakeholders on psychosocial issues as they relate to individual and organisational health. Quantitative methods, in the form of an online survey enabled the investigation of relationships between psychosocial factors i.e. job demands and job resources with general well-being and organisational health criteria and also considering their interactions. The research took into consideration that rigorous data collection and analysis determines the quality and trustworthiness of any research findings (Kallio, Pietila, Johnson & Kangasniemi, 2016). The following two chapters discusses the qualitative and quantitative studies respectively in more detail.

Chapter 4: Work organisation, well-being and organisational health in Zimbabwe: An exploration into the perceptions, awareness and understanding of key stakeholders.

This chapter presents findings of the first study, which sought to explore the level of awareness of key stakeholders on the relationship between psychosocial risks and organisational and individual health**.** As discussed in Chapter 2, the world of work has faced many changes which pose new occupational health and safety risks in addition to traditional ones and most of these are related to psychosocial factors (Pillinger, 2016). These changes have an impact on working conditions and may influence how work is designed and organised, and ultimately on work performance (Bergh, Hinna, Leka & Zwetsloot, 2017). The economic environment has also undergone transformations, some brought about by deregulation of markets through globalization, which also affect workers and their organisations (Valente, Lopes, Pastor-Valero & Menezes, 2016). The negative health outcomes emanating from work characteristics have been associated with undesirable organisational outcomes like poor performance, absenteeism, and negative work attitudes like job dissatisfaction (Banerjee & Mehta, 2016).

Some research on work-related stress in developing countries has been reported in the literature. For example, Emmanuel and Collins (2016) found that most bank employees from branches of a commercial bank in Ghana were moderately to highly stressed with the highest stress levels found in females. This research was looking at the moderating effect of gender, taking into consideration other roles that women take outside work in most African countries. Work stress was found to be negatively associated with job satisfaction in the public banking sector of Columbia district of Sri Lanka. Although they did not use the term psychosocial risks, some of the identified stressors were workload issues, introduction of new products and technologies (Arunika, 2015). In Zimbabwe, Makoni and Mutanana (2016) found a negative relationship between stress and performance supporting the impact of stress on organisational health. They observed that it might seem employers and workers are not aware of stress management techniques, however, it focused on individual-level approaches like counselling, exercise and sport which are reactive.

Notwithstanding the benefits of these approaches there is need to instill a preventative culture in our workplaces. Bhatti et al. (2016) found a negative but significant relationship between job stress and organisational commitment in Pakistan, supporting previous research on the impact of psychosocial risks on organisational health outcomes.

Little but growing research has been conducted in developing countries but the evidence is not conclusive to provide an informed status for decision making and even for reporting. The lack of substantive research in this area in developing countries has been identified by several authors including Silva and Barreto (2012), Kortum and Leka (2014) and Emmanuel and Collins (2017). Despite the fact that psychosocial risks are now well known occupational health hazards in developed countries very little has been done to shed light on our understanding of the impact of psychosocial work factors on health in developing countries, especially in African countries (Asumeng, Acqua-Coleman & Dadzie, 2015; Kyaw-Myint et al., 2017). It is clear that more focus should be put on examining and addressing the key emerging issues of work organisation and work patterns (Pillinger, 2016). There is need to have a coordinated research agenda for psychosocial risk management in Africa and developing countries at large, but for anything to be prioritised or any policy to be implemented one may argue that there is need for awareness on the nature of the problem if interventions are employed to manage the situation. In the light of the above, this research aims to contribute to theory on the relationship between psychosocial factors and occupational health in developing countries like Zimbabwe. In addition, information on the perceptions of key stakeholders concerning psychosocial risks in African countries in Zimbabwe is limited, this research also aims to cover that gap in knowledge.

Prevention and management of psychosocial risks has been reported to be given less priority if at all in developing countries even as early as 2004 (Nuwayid, 2004). This could be attributed to lack of awareness or to other pressing needs in developing countries which include socioeconomic factors, for example, Amazue and Onyisi (2016) reported challenges including power supply issues, water shortages and basic equipment. In Zimbabwe, the socioeconomic environment has been considered to be a challenge, due to a high unemployment rate (Mazikana, Peku, Sifile & Mudziso, 2019). Furthermore, Zhou, Oktedalen, Chisango and Stray-

Pedersen (2016) reported that Coronary heart disease was one of the leading cause of death in Zimbabwe and anticipated that there would be a rise in non-communicable diseases.

4.1 Research Aims

Key stakeholders play a critical role in psychosocial risk management through their contribution to policy formulation and implementation (Iavicoli et al., 2011). Key stakeholders in this study included policy makers, experts and regulators as discussed under “participants”. Research has found that key stakeholders including experts have different views regarding safety and health including psychosocial risks management which consequently influence the type and nature of interventions that are implemented (Jain, Leka & Zwetsloot, 2018). In addition, Iavicoli et al. (2011) in their study which assessed knowledge levels among European stakeholders on OSH legislation focusing on psychosocial risks, noted that there seems to be wide gaps between the perceptions of experts and the general populace on the nature of psychosocial risks and their importance which potentially impact on decision making, policy formulation and implementation of preventive measures. Further, the role of key stakeholders is broad and even includes an assessment of risks and benefits that are associated with ethical choices (Iavicoli, Valenti, Gagliardi & Rantanen, 2018). They are the ones who can determine whether psychosocial risks will be managed at both international, national and organisational levels. Within this context, it was imperative to commence by establishing key stakeholders’ perceptions and awareness of psychosocial factors and their impact on health. Their level of understanding can highlight the opportunities and barriers that need to be attended to for the benefit of workers and society at large.

The objectives of this research were to determine the level of awareness and understanding of key stakeholders on the nature and impact of psychosocial factors on individual and organisational health (in terms of health and well-being and organisational factors like job performance, job satisfaction, commitment and work engagement and to determine the key challenges in relation to working conditions and resources in Zimbabwe. The research also sought to identify current interventions in place for preventing and managing adverse psychosocial factors and their effects in Zimbabwe. Opportunities and barriers for preventing and managing adverse

psychosocial issues were explored and recommendations based on priorities for action were proposed.

4.2 Method

This section presents information about the research design, selection criteria of participants and how they were contacted, semi-structured interviews, and data analysis.

The research utilised a qualitative methodology. Semi-structured interviews were conducted with key stakeholders in order to explore their perceptions, awareness and understanding of the nature and impact of psychosocial factors on individual and organisational health. Semi-structured interviews were selected because of their ability to elicit information on participants' experiences, understanding, opinions and meaning. They have the advantage that they provide an opportunity to explore issues comprehensively (Longhurst, 2009). They are flexible in that the researcher can probe and make follow up questions or rephrase to enhance understanding. They provide rich data where perceptions and understanding are the focus of study (Coolican, 2009; Potter, O' Keeffe, Leka & Dollard, 2019). The research questions were developed based on the literature guided by issues that still need to be explored and understood.

4.2.1 Participants

Key stakeholders were identified through publicly available information from relevant organisations which included relevant ministries, employer organisations, trade unions, and social security organisations. Key stakeholders were also drawn from relevant professions including psychologists, human resource practitioners, industrial nurses, occupational doctors and medical doctors. Selection criteria included working in the above key organisations and professions. These organisations and professions were considered to provide insight into the perceptions of key stakeholders who were expected to have some understanding of working conditions, work organisation and their relationship with health outcomes.

The sample consisted of 13 key stakeholders selected on the basis of purposive sampling since there were considered to be relevant for the research questions. Sample size is influenced by factors that include the research objective and the

spread of views of interest. According to Rowley (2012), 12 is a good number when conducting semi-structured interviews. Guest et al. (2006) also concluded that 12 is an adequate sample for research utilizing interviews in his study of two African countries where 97% of important themes were realized within 12 interviews using the saturation principle. The key stakeholders represented different professions and backgrounds. Table 4.1 shows the sample characteristics.

Table 4.1:

Sample Characteristics

ID Number	Gender	Position	Organisation / Profession
1	Male	Representative	Ministry of Public Service, Labour and Social Welfare
2	Male	Representative	Ministry of Health and Child Care
3	Male	Representative	Ministry of Health and Child Care
4	Female	Representative	Regulator
5	Male	Representative	Regulator
6	Male	Representative	Trade Union
7	Male	Representative	Banking sector
8	Male	Representative	Employers' Association
9	Male	Representative	Human Resources Expert
10	Female	Representative	Psychologist
11	Male	Representative	Occupational Safety and Health Expert
12	Male	Representative	Occupational Safety and Health Practitioner
13	Male	Representative	Occupational Physician

4.2.2 Procedure

An invitation letter and participant information sheet were sent via email to key stakeholders before the interviews. They contained information on the purpose of the study, the voluntary nature of participation, why the participants were being chosen to take part and how the obtained information would be managed according to the Data Protection Act of 1998. Participants were given time to consider the research and decide whether they can participate. A total of 17 emails were sent to potential participants and four were not able to participate. Interviews were conducted face to face at a venue that was convenient to the participants. Interviews lasted for approximately 30 minutes to an hour.

As discussed in Chapter 3, ethical approval for this research was granted by the University of Nottingham, Division of Psychiatry & Applied Psychology Research Ethics Sub-Committee, Ethics reference number 203. The research was also guided by ethical principles of the British Psychological Society (BPS, 2009), and the Zimbabwe Psychological Association, Code of Human Research Ethics (2010) and the Data Protection Act of 1998. The Data Protection Act of 2018 came into effect after data had been collected. Anonymity and confidentiality were strictly observed at all times. Any information that could identify a participant was removed. Participants were advised and acknowledged that they could withdraw from the study at any time (until data transcription). All participants signed a consent form before the interviews commenced. Participants were asked for permission to audio record the interview and they consented in writing. Recording ensured that all information was captured and minimized misinterpretations as the recording can be replayed, it also assisted during analysis (Yateem, 2012). After the interviews, participants were debriefed and reminded about the research purpose, they were thanked for taking the time to participate and given an opportunity to obtain a summary of the research findings if they were interested.

4.2.2.1 Interview Schedule.

The literature review on psychosocial factors in developing countries guided the development of the interview schedule of 12 questions focusing on areas that required further investigation and knowledge. Considering the major aim of the study to determine the awareness and understanding of psychosocial risks by key stakeholders, a question on awareness of psychosocial risks and their impact on

health and productivity was included. The questions also covered key stakeholders' views on the working environment in terms of changes and positive developments that have taken place in the country, the impact of challenges in the work environment on organisations for example, on issues like performance, commitment, job satisfaction and work engagement and on the relationship of the work environment with well-being. The questions also sought to establish the major psychosocial risks that workers are facing and interventions that are in place to address these issues at organisational and national levels. Given the central role that legislation and policies play in driving action on prevention, promotion and management of occupational health, key stakeholders were also asked if they are aware of any policies, guidelines or legislation (national or international) that is available for preventing and managing psychosocial risks and promoting well-being associated with work. Opportunities and priorities for managing psychosocial risks were explored. Sample questions were "Have there been any major changes in the work environment"? What have been some key challenges or any positive developments"? and "What is being done by organisations to address problems caused by work, i.e. job performance, well-being"? The consent form, participant information and interview schedule are attached in appendix 1.

4.2.2.2 Data Analysis.

Thematic analysis was conducted and was informed by the step-by-step approach as proposed by Braun and Clarke (2006) while also applying flexibility in the process to fit the data. There are various methods for analysing interviews which include Interpretative phenomenology analysis (IPA), grounded theory and discourse analysis (Braun & Clarke, 2012). However, the researcher considered thematic analysis because it was more relevant for the research questions which sought to establish understanding and perceptions of psychosocial factors and their relationship with health, based on what participants said (Terry, Hayfield, Clarke & Braun, 2017). Moreover, thematic analysis would be consistent with the mixed methodology and policy focus adopted in this research (Braun & Clarke, 2012). The aim was not to develop theory as is the case in a proper grounded theory analysis although other researchers applying grounded theory end at the descriptive stage and do not reach the theory building phase. Discourse analysis requires an understanding of

perspectives on language to be able to conduct it effectively and the researcher did not consider it to be appropriate for the qualitative study (Braun & Clarke, 2012).

In addition, thematic analysis is very flexible and can be applied to different questions. Furthermore, it can facilitate interpretation of different parts of the research topic (Cox & Van Gorp, 2018). It is independent from theoretical assumptions and can be used with various theories unlike IPA which is more relevant for phenomenological approaches (Braun & Clarke, 2006). It is not tied to one particular theory and does not prescribe other methodological decisions like sample size and data collection method. However, the researcher made sure that the sample size was large enough to identify patterns as recommended by Braun, Clarke and Weate (2016). This does not imply that it does not consider theory but can be applied to different theoretical frameworks (Braune & Clarke, 2019).Thematic analysis helps to establish what is common in the way that key stakeholders talk about stress, stressors and their effects, and to understand these common aspects and their importance to the research questions (Braun & Clarke, 2012).

Thematic analysis can be conducted in different forms. Researchers can apply inductive, deductive or abductive approaches. This research considered an abductive or complementary approach, combining both inductive and deductive approaches during the different phases of the analysis, for example, inductive analysis during the initial stages and deductive analysis during the final stages in order to provide a comprehensive picture, given the specific nature of the questions (Graneheim, Lindgren & Lundman, 2017). The researcher was interested in finding out themes that emerged from the data, which might not have been anticipated, in addition to the responses to specific research questions but making sure that the research questions did not automatically develop into themes as warned by (Braun & Clarke, 2006). The job demands-resources theory was also used to guide the analysis. It helped to organise certain themes and enhance their interpretation (Braun, Clarke & Weate, 2016). This would not be consistent with grounded theory which is based on an inductive approach. The theoretical sampling in grounded theory would require a determination of further data that needed to be collected informed by the analysis, since data collection and analysis are done simultaneously (Charmaz, 2003). The researcher was working within a defined time frame which contributed to thematic

analysis being more practical. Grounded theory is also relevant to questions seeking to understand how participants construct meaning rather than claiming knowledge. Another merit of thematic analysis is that it is accessible compared to other methods (Nowell, Norris, White & Moules, 2017). It is easy to understand, which was an advantage considering that the researcher had limited experience in analysing qualitative data. Furthermore, thematic analysis is systematic and brings rigour to the analytic process. Thematic analysis can be conducted at the semantic or surface level of data or at the latent level where interpretations are deeper and looks at the assumptions and underlying ideas behind what is mentioned by participants (Clarke & Braun, 2014; Vaismoradi & Snelgrove, 2019).

Some researchers have provided guidance on how to conduct thematic analysis, for example Boyatzis (1998). The six steps suggested by Braun and Clarke (2006) were preferred because they are systematic. They provide just a guide and gives the researcher the flexibility to carry out the analysis in a way that works for them (Braun, Clarke & Hayfield, 2019). They are not to be followed rigidly in a linear fashion but one can move back and forth depending on what they are looking for. Braun and Clarke (2006) provides a comprehensive guide that is easy to apply. In addition, they give examples of the mistakes that should be avoided when conducting thematic analysis, for instance just taking the research questions as themes without any analysis.

However, their third step was criticized for not explaining how themes should actually be developed but this was addressed in later versions where a detailed explanation of theme development was offered (Clarke & Braun, 2014). Boyatzis (1998) provides a useful account of thematic analysis and guidance on how to conduct it with the possibility of combining with quantitative methods for example verifying themes using statistical analyses. However, the six steps by Braun and Clarke (2006) were found to be more accessible and relevant for the focus of the research. Moreover, its qualitative philosophical thrust was consistent with the research aims as compared to Boyatzis (1998) positivist aspects (Braun, Clarke & Hayfield, 2019). The first phases are similar to most qualitative approaches for example familiarization applies to all qualitative research and coding is similar even to that applied in grounded theory (Clarke & Braun, 2014).

The analysis was both data and theoretically driven based on key research questions and themes that were emerging from the data (Twining, Heller, Nussbaum & Tsai, 2017).

The first step was familiarisation with the data initially through listening to audio recordings, verbatim transcription, reading and re-reading of transcripts and highlighting points of interest, patterns and ideas. This was followed by summarising the content of sections of the transcripts and developing initial codes in NVivo 11 and applying it to the data using smaller phrases or labels. These were categorised in step three according to logical themes or nodes in NVivo 11. The codes were classified under broader themes based on their meaning and relationships. The broader themes were described under subthemes, some codes were classified under broader themes and others under subthemes. The nodes or themes were reviewed and revised in step four and the transcripts were recoded according to these themes. Some themes were discarded because there was not enough data to support them. Step five involved refining the themes and naming them accordingly. The analysis considered prevalence of the themes but was flexible in the approach taking into consideration that a theme can be significant even if few participants mentioned it (Javadi & Zarea, 2016). An independent researcher verified the themes based on the transcripts.

The analysis of the interview transcripts revealed the following six major themes: Awareness of psychosocial risks, Socioeconomic impact, Legal and policy framework, Priorities, Opportunities, and Barriers to implementing practices that enhance prevention and management of psychosocial risks. The data were identified using numbers for the various representatives as presented in Table 4.1. The main themes were categorised under subthemes in order to enhance understanding of the themes through organisation of similar issues under one theme. They also assisted in defining the themes. The major themes and their subthemes are shown in Table 4.2.

Table 4.2

Thematic Grid for Key Stakeholder Semi-Structured Interviews

No	Main theme	Subtheme	Description
1	Awareness	Understanding of psychosocial issues and their impact on well-being	Level of knowledge and understanding of psychosocial factors and their relationship with individual health, work-related stress and negative behaviours
		Understanding of psychosocial issues and their relationship with organisational health	Knowledge and understanding of psychosocial factors and their impact on organisational health in terms of negative impact on business. i.e. sickness absenteeism, poor performance and labour relations issues including awareness of the benefits of managing and preventing psychosocial risks for both business and workers
2	Socioeconomic impact	Salaries	Delays in payment of salaries, salary cuts and their impact on workers' well-being
		Unemployment	High unemployment rate, and its effect on workers' and employers' attitudes and behaviour with regards to working conditions and desperation to keep jobs
		Informal sector	The unregulated workforce and their exclusion from OSH interventions
3	Legal and policy framework	Legislative assessment and review	Availability and assessment of legislation in terms of its comprehensiveness with regards to management of psychosocial issues
		Policies and guidelines	Policies related to OSH, psychosocial risks, guidelines and their evaluation in terms of impact on safeguarding the health of workers

4	Opportunities	Supportive structures	Availability of structures that can enhance the management of psychosocial risks in the country
		Knowledge of psychosocial issues	The level of appreciation of the positive effects of prevention and management of psychosocial risk factors and the negative impact of lack of psychosocial risk management which can help to build a business case
		Interventions	Current interventions at national and organisational level to promote safety and health
5	Barriers	Lack of research	Lack of domestic research and statistics to enhance awareness and inform decision making
		Prioritisation	Lack of prioritisation of psychosocial factors due to competing basic needs
		Inadequate resources	Lack of funding for occupational safety and health issues including psychosocial factors and lack of expertise in psychosocial risk management. It includes cost cutting by organisations and its effect on staffing, and OSH, e.g. availability of protective clothing and equipment.
		Psychosocial perception and culture	Key stakeholders' perception of psychosocial factors, and their effect on prevention and management of psychosocial risks (for example perceiving them as complex and as a luxury)

6	Priorities	Priorities at national level	Issues requiring urgent attention at national level
		Priorities at organisation al level	Issues requiring urgent attention at organisation level

4.3 Findings

This section provides the interview results based on the major themes and subthemes. Selected quotes were identified to support the themes. Headings were derived from the main and subthemes. The findings are based on participants' own opinions and not necessarily of the organisations they represent.

4.3.1 Awareness

Awareness was highlighted with subthemes of understanding of psychosocial issues and their relationship with well-being and organisational health. These two subthemes capture the impact of psychosocial risks on individual and organisational health. Organisational health refers to an organisation's capability to achieve its objectives based on a work environment that aims to enhance performance and facilitate the well-being of workers (Alman, 2010). Although organisational health has been understood and applied differently, according to Xenidis and Theocharous (2014, p.565.), "a healthy organisation has been defined as one where all processes are performed efficiently, while an ill organisation is one where some of the processes malfunction or even fail". For our purpose of this study, the reasons of organisational failure are found in psychosocial risks, which affect workers' well-being.

4.3.1.1 Understanding of Psychosocial Issues and Their Impact on well-being.

The level of awareness and understanding of the impact of psychosocial issues on health was expressed by participants through providing examples of specific psychosocial factors and their potential effect on individual and health outcomes. They also commented on whether they thought other key stakeholders have the awareness and appreciation of the relationship of psychosocial factors with health outcomes. All participants agreed that psychosocial factors have an impact on well-being, and they exhibited general understanding of the issues in varying degrees. A few referred to the term "psychosocial factors" during the interviews whilst most of

them understood them as the effect of the work environment on well-being or the effect of the challenges that workers are facing on well-being. The majority of participants were of the view that key stakeholders are aware of their impact on health. The following quote from an occupational safety and health expert is an example:

If it is on psychosocial factors, yes the awareness is there, we are quite live to these problems that's why currently one of the major projects which we are running with in the health sector...is on psychosocial factors and how they affect employees in that sector…It's quite an issue at the moment, one of the major issues (5).

Several key stakeholders commented that there is awareness amongst relevant people but other factors come into play which include funding issues. In that respect, a representative from one ministry explained:

"I think the people are aware and it's never put as a priority. The professional and political relationship" (2).

Most key stakeholders considered the operating environment to be a major factor contributing to stress in workers. In this regard, one policy maker commented on the relationship between the environment and stress:

The broader issue is stress for most members, other symptoms may come later but people are stressed, so the major issue related to the organisational environment is stress. It is manifesting in various ways, some have backache, some blood pressure, some perennial headaches and some complain they just feel dizzy at work and the main cause has been demands for targets. I have heard some few people even opting to leave employment because of targets.. (7).

The majority of participants explained manifestations of stress in terms of physical symptoms which include hypertension, lack of concentration, headaches and backache. Some of the problems have been related to work design issues of targets, and the operating environment in general. A few stakeholders commented on behavioural manifestations, for example some workers becoming rough, irritable and others engaging in risky behaviours. Most participants commented that there are too many targets that workers have to meet. In addition, other psychosocial factors like

loss of control and long working hours were also articulated by them. Another regulator also concurred that targets are affecting workers in the following quote.

That is what is happening in Zimbabwe these days… So we have long hours generally regulated, but most employers are doing that the other way, they will put a lot of work and you end up putting in extra hours to finish because of targets , so people are having those challenges, long hours, loss of control... and they tend to affect the psyche definitely…. (4).

A few stakeholders from the regulator and workers' representatives identified some psychosocial hazards that are common in the banking sector, which included repetitive work, targets, and physical hazards, for example, exposure to dust from soiled notes. They considered psychosocial factors to be most problematic in this sector despite the popular perception that the banking sector is not affected by most hazards. One representative from a trade union stated that:

People say the environment is ok but if you stand for 8 hours you can suffer from arthritis, air condition and commercial radiation which has its own health effects, even the soiled notes that are handled using fingers, dust when counting money, it's so stressful…Most challenges are psychosocial, e.g. teller 1 for 15 years, one becomes fed up doing monotonous repetitive work…. (6).

They explained that a person exposed to the above conditions will suffer stress, ill health and can become irritating. They suggested emotional intelligence to cope with the stressors. The above participant was of the view that the financial sector is exposed to all hazards, biological, ergonomic, chemical and physical hazards although this was not supported by examples of the actual hazards that they are exposed to.

A few participants observed the lack of worker involvement in decisions that affect their work, which is also a potential stressor. In that regard, a worker representative observed:

….Because of the environment, organisations are changing rapidly. You wake up today, they have closed this, tomorrow other operations have been moved outside the country. But as all that is happening workers are not being consulted, so there is

this high level of anxiety amongst workers. if you go in a banking sector and pretend to be selling a product and say you will pay me later, you will hear people saying, you can no longer be certain at this company, so that high level of anxiety is another cause leading to stress ….(7).

From the above quotes, it can be seen that the psychosocial factors that were identified as potential stressors for workers included issues relating to work content like targets and repetitive work and work context issues of career progression, remuneration issues, job insecurity, equipment, long hours, lack of protective clothing and worker involvement.

In contrast to earlier observations, a few participants seemed to believe that key stakeholders are not aware of the actual impact of psychosocial factors on health. Some of them commented that the level of knowledge is not adequate. This was more pronounced from participants with a psychology background and a representative from the regulator. One of the reasons for the lack of appreciation was attributed to the fact that the effects have not been quantified. A small number of participants from this group further suggested that the proportion of key stakeholders who are really aware is insignificant. The following quotes are examples:

It's very difficult to generalize, not a significant proportion of people are aware. … The other key challenge is raising awareness and knowledge levels around those issues on our own general problems, people must just be aware, when you talk to someone who is already aware of the hazards within their own working environment it helps a lot and I don't think we have such heightened awareness (9).

There are some, they are a few who do but some don't but I think if things are quantified like I said, it may assist them to appreciate it well, it will make them see, so it's an initiative that needs to be done largely because people… don't really appreciate (10).

However, most key stakeholders consistently perceived that there is awareness amongst relevant people.

Ah yeah, of course I think you know that, if you don't know it's convenient for you not to know. I think we don't want to say that aspects like advocacy and

continued promotion of health at work, not to say that we cannot do more. We can still do more to get the right influences but to posture that there is ignorance… I don't think so (1).

The above participant was explaining that key stakeholders are aware, if they are not knowledgeable then it is deliberate but there is still need for continued advocacy and promotion of health at work.

4.3.1.2 Understanding of Psychosocial Issues and Their Relationship with Organisational Health.

Most key stakeholders demonstrated some appreciation of the relationship between certain psychosocial risks factors and some organisational health aspects. They frequently mentioned organisational factors, which included increased absenteeism and related costs like unproductive time, low morale, a reduction in commitment, low motivation and the subsequent impact on job performance. In addition, poor quality of work and an increase in injuries emanating from workers being absent minded were articulated. One representative of a trade union summarised the negative effects and stated:

Because the environment is stressful….there is increased absenteeism, sick leaves, not that people just want to go home but people are getting blood pressure, and other stress-related sicknesses. Also, people who used to be high performers going down in terms of performance and it affects productivity. People are no longer engaged and attached to their organisation, they are there for sustenance and not in spirit, so you can't discount unnecessary losses or abuse of resources...so there is clearly a relationship with reduced performance. Morale is at its lowest level" (7).

The above quote shows a clear understanding of the impact of psychosocial factors on organisational health aspects like absenteeism, reduction in performance and the negative impact on work attitudes including commitment and work engagement. Organisational losses were also articulated for example, abuse of resources by workers.

Most participants agreed that psychosocial issues affect work attitudes like commitment and performance negatively. In that regard, one expert with a Human Resources background commented:

There is a very direct relationship between the environment and problems of commitment… It could be by level of understanding of issues, like National Employment Council level. Their role is to fight for improvement of the welfare of their constituency, now the environment is so bad for employees, it is understandable that it is the environment and not the company but they continue to fight and stil threaten to go on strike, There is mistrust now between management and staff. So it affects commitment and performance because you experience some industrial relations challenges. People just deliberately do as little as possible because they feel underpaid and undervalued, They actually say we can't focus. (9).

The above quote also touches on issues of trust and relationships between managerial and non-managerial staff, which is a significant issue in any employment relationship. Mistrust between managerial and non-managerial staff can lead to problems of commitment by non-managerial staff, which in turn affect performance negatively. In addition, industrial relations challenges that have been articulated above are associated with poor performance. The effect of the "difficult" operating environment was raised where workers have to deal with pressures that come with it. Another participant with a medical background supported the impact of a negative relationship between management and non-managerial staff and the subsequent lack of trust especially concerning issues of salaries and benefits as highlighted in the quote below:

There is an invisible gap between workers and management, they don't trust each other. For them to come and talk to workers over issues to build the company, they don't want to, .. maybe they are scared that we may end up asking about our outstanding salaries, and when we will be paid, they don't want to be asked because they are also under pressure with clients that are not paying, he also has pressure from shareholders…

A few participants acknowledged that both employers and employees could be stressed. The above quote also notes that some employers are also under pressure from clients who are failing to pay them.

4.3.2 Legal and Policy Framework

4.3.2.1 Legislative Assessment and Review.

The second main theme, legal and policy framework was defined by the subthemes of legislative assessment and review, and policies and guidelines. An analysis of the availability of legislation and its adequacy in providing for the management of psychosocial risks and work-related stress was made. Almost all interviewees acknowledged that there is no legislation nor policy on work-related stress or psychosocial issues in general. Very few participants were not aware of the availability of any policies but did not think there is anything pertaining to psychosocial issues. This gap was clearly expressed by one expert from the regulator as follows:

It's a huge gap now,.. we do not have specific or explicit legislation which address issues of stress and well-being but in the various pieces of legislation here and there it's implied… you have to dig it out. It doesn't have clarity, and that's why the initiative to come up with a new occupational safety and health law.. The issue is tackled from international instruments which Zimbabwe ratified, to some extent, although we have not domesticated the convention…The International Labour Organisation expects us to do something about it, for example, convention 161, 166 and even 155 you find aspects of psychosocial factors, and we promote good practice but we do not have legislation, the new National policy has tried to look at that (5).

However, there seemed to be consensus amongst most participants that some of the psychosocial issues are implied in the Labour Act chapter 28:01 which provides mainly for the rights of workers. The provision of working hours in the Labour Act was noted by some participants. A few participants also acknowledged the availability of legislation about non-discrimination of HIV AIDS at the workplace and the provisions of sexual harassment in the Labour Act. Very few participants highlighted that psychosocial factors could be resolved through disciplinary procedures as provided for by the Labour Act. In that regard, a representative from one ministry commented:

I know that our legal framework of the Labour Act allows a process of democracy and grievance handling within the workplace, where should such issues arise, machinery exists through workers' committees, for workers to seek redress. So they will pursue according to the Labour Act through the grievance procedure. At least

there exists a framework, legally, for such issues to find resolution. If it's sexual harassment the Act expresses itself, for other work-related issues that need attention we have workers' councils... for a specific policy I wouldn't say there is, I am not aware (1).

Several participants commented on the old state of the existing occupational safety and health legislation, in need of modernisation. In that regard, one Occupational Health and Safety expert stated that:

Our legislation has been very sluggish on being updated and modernized. We are still using 1976 laws, mainly British, whereas those people whom we copied those laws from have since moved on,...we have not had a modern occupational safety and health law for a long time, but the structure of industry and employment has since changed, that needs new ways to address problems from a legislative point of view, so our law, because it's lagging behind, has also affected the well-being of employees (5).

On the other hand, a few stakeholders especially from the regulatory side, acknowledged the fact that the legislation is currently being reviewed.

4.3.2.2 Policies and Guidelines.

This subtheme relates to policies and guidelines related to occupational safety and health and their evaluation in terms of impact on safeguarding the health of workers. Just as there is lack of legislation on work-related stress, key stakeholders also noted the absence of policies specifically for work-related stress in Zimbabwe. However, the main policy that was identified by most participants was the national occupational safety and health policy of 2014. The OSH policy was considered to provide an opportunity for the development of a framework for managing and implementing occupational safety and health in Zimbabwe. As an illustration, one occupational safety and health practitioner commented:

"..there is a policy framework …It encourages a framework to be developed and it's actually a guide to say what framework should be there and so forth" (11).

With regards to the availability of a specific policy on work-related stress, the same participant stated:

Not that I am aware of… we are lagging behind in terms of legislation framework so we end up using best practice and it's a catch up game and obviously, we are still fortunate that there are no pressure groups that are lobbying, otherwise we would be in trouble (11).

Although a few participants acknowledged the attempt of the occupational safety and health policy to include psychosocial issues, most participants agreed that the coverage was inadequate even though very few participants actually used the term "psychosocial". They felt that the policy does not give sufficient information to facilitate the identification of psychosocial risks and their management. This was explained by one human resources expert who commented on the existence of policies relating to psychosocial factors at work:

No I am not aware, but on non-communicable diseases I'm aware at a national level... The OSH policy has certain expectations, but on stress there is something at least, it's not adequate to give proper guidelines but there is some attempt, so we sometimes use those documents to enact our own policies..I think also the Ministry of Health, otherwise I don't think there is a comprehensive document talking about stress… everything is so indirect… even the Labour Act tries to prevent workplace stress by defining things that you must and must not do but nothing on stress ,even statutory instruments and codes of conduct have very little on stress although what they talk about is trying to manage sources of stress. For example, an abusive boss would get a penalty based on the code of conduct (9).

On the contrary, one key stakeholder commented that the occupational safety and health policy is focused more on physical health without giving due consideration to other factors which are psychosocial.

I think locally we have our Occupational Health and Safety Act but it's a policy that has taken a narrow view of looking at physical health. In there, are policies on non-communicable diseases like pneumoconiosis in the mining sector. They have done a lot in terms of Tuberculosis, HIV & AIDS also through national policies. We are all to blame, employers, trade unions were slow to respond… here it was not usual to hear someone saying I'm stressed (7).

As highlighted from most quotes, most participants acknowledged the effort that was made regarding policies on non-communicable diseases as explained under legislative review. The need for guidelines was emphasised by a few participants. The ILO conventions that Zimbabwe ratified were cited as instruments that can be used to enforce compliance. Some participants were of the view that psychological aspects of work and work-related stress are implied but not explicit in current legislation and policies, especially in the Labour Act chapter 28:09. Key stakeholders recognized the absence of policies and legislation on work-related stress and psychosocial factors. A few key stakeholders noted the work that was done on the Decent Work agenda.

4.3.3 Priorities

The third main theme of priorities was classified under national and organisational levels.

4.3.3.1 Priorities at National Level.

Participants identified issues that they considered to require urgent action at national level. Most participants considered training to be a priority and recognised the importance of providing training on occupational safety and health. In that respect, one key stakeholder with an occupational medicine background identified the following priorities that were considered to require attention including training:

" Inclusion of risk management principles in occupational safety and health frameworks, training on occupational hazards identification and risk assessment and financial commitment for occupational safety and health" (13).

The above quote identifies training and development as a priority together with other issues, which include financial commitment for OSH and the inclusion of risk management principles in occupational safety and health management. A few participants also considered the need for training in relation to their jobs in addition to occupational safety and health training in order to keep abreast with changes that organisations are faced with.

Several participants observed the lack of statistics on the nature and impact of psychosocial risks on health and organisational outcomes. This could be attributed to inadequate research on the same. In relation to the dearth of statistics on

psychosocial risks, a participant from the regulatory authority recommended the following as priorities for action:

The top priorities should be to identify health-related problems arising from work. failure to identify these problems is a major fail. Secondly, we need to monitor these health-related problems. Whether they are in the form of illness or disease, we need to have a programme to monitor them. Thirdly, we need to appreciate the extent, the risk factors leading to illness, what is the magnitude' (5).

4.3.3.2 Priorities at Organisational Level.

Participants noted issues that require urgent attention at the organisational level. Most key stakeholders perceived matters of remuneration and funding for occupational safety and health to be of concern. Moreover, lack of funding also affects the provision of equipment. In that respect, one key stakeholder with a medical background summarised the priorities and stated:

"Employ adequate people informed by internal organisational standards in terms of, for example, working hours of specific work. Lack of funding affects employment, remuneration and a good working environment that is satisfying, and provision of equipment and tools" (2).

4.3.4 Opportunities

Participants identified various opportunities that can be explored to manage and prevent psychosocial risks. The theme of opportunities was divided into subthemes of interventions, knowledge of psychosocial issues, and supportive structures. The current interventions that are in place to manage and prevent psychosocial risks were classified according to interventions at national and organisational levels. At national level, the main interventions that were identified included the regulatory efforts of enhanced inspections, the legislative review of the Occupational Safety and Health Act and promotional work which includes conferences and campaigns. Participants also acknowledged efforts made by government through ratification of relevant conventions and dialogue at tripartite level on occupational safety and health issues.

4.3.4.1 National Interventions.

The legislative review was seen as an opportunity to address psychosocial issues especially from the regulators' point of view:

'I know we are working on a draft occupational safety and health bill that can also unlock opportunities to reflect on such issues and legislate where appropriate" (1).

The current labour law reforms were also seen as an opportunity by a human resources expert and a representative from one Ministry.Several participants noted the absence of guidelines to inform implementation of psychosocial risk management. As mentioned previously, the occupational safety and health legislation is outdated. To address these shortcomings, a policy maker identified opportunities to come up with guidelines and specific instruments on managing work-related stress and to take advantage of the current review of the occupational safety and health legislation and reported:

We don't have a convention yet and a guideline, so maybe that is the next stage… but it was on realising that generally workers in the world are stressed because of how work is organised right now, precarious jobs, long working hours. It's not unique to us only but we don't have anything …The opportunity comes even from how we are doing our legislation because urban legislation opens up for other areas that we have never looked at before in terms of regulations. It also relates to guidelines, we can still do guidelines, so there is a lot that we can do for the well-being of workers (4).

Another regulator realized an opportunity at the point when investors come into the country to start their businesses or to collaborate, to make it a requirement to comply with prevailing occupational safety and health provisions in Zimbabwe. In addition, one occupational safety and health practitioner suggested that compliance with occupational safety and health provisions should be made a condition before providing funding or extending loans to companies. The regulator explained:

A big opportunity, right at the point where we have people investing in this country, we need to grab that opportunity and make it a requirement… One of the opportunities is the ease of doing business which government embarked on, there is a desk to deal with social security issues and occupational safety and health, which is being taken advantage of to make sure that potential investors understand the OSH arrangements and requirements in this country at that stage, so that as they move on with investment, at least they have an expectation of what is required. So that's an opportunity which we are also exploiting (5).

4.3.4.2 Organisational Interventions.

At an organisational level, participants identified interventions that include coming up with occupational safety and health policies and wellness programmes. Most participants acknowledged the effort being made by organisations in coming up with wellness programmes. The responses from key stakeholders suggest that the wellness programs are mostly based on a physical health perspective. It appears that very few companies if any include mental health and psychosocial factors in these programmes. A representative from a trade union made the following observation on the increase of wellness programmes by companies:

"On a positive note there has been an increase in people putting safety as a priority, coming up with policies and wellness programmes. Almost 60–70% have such policies on HIV, safety and wellness, it is now like a priority" (6)

Interestingly, some participants felt that the wellness programmes that are being conducted are not comprehensive. In that regard, a key stakeholder with a medical background commented:

"They are trying to introduce quasi wellness programmes. They also try to comply with certain statutory obligations e.g. National Social Security Authority (NSSA), Environmental Management Agency (EMA)" (13).

Some organisations are taking social responsibility and the welfare of workers seriously especially with regards to managing HIV and AIDS and breast feeding for the benefit of their female workers. These are mainly big organisations. In that respect, one key stakeholder stated:

Other organisations like one mine has a hospital which initiates people on antiretroviral drugs and provides drugs to the local community, if you are related to someone who works there, you can get treatment for free….One cement company. had to renovate a place for breast feeding and put a fridge, so the child can be brought to work for breast feeding. Pregnant workers are given a breast pump. Some companies are taking those things seriously…. if you go in industries you find women now have different work suits (8).

Trade unions and policy makers were urged to include occupational safety and health issues in their discussions with employers, the platforms where they meet present another opportunity to discuss psychosocial issues. Tripartite discussions are important fora for addressing matters of concern to workers especially in relation to occupational safety and health, in addition to the usual deliberations on conditions of service. A representative from one Ministry stated:

Over and above those issues why not also talk about the person they represent… Our workers' representatives could do more to include occupational safety and health because they go to the actual worker. There is need to re-orient the approach….. they are not doing it, and also not only the workers themselves, but those in the policy making apparatus, we tend to forget some of those things, I think it's important… (1).

4.3.4.3 Knowledge of Psychosocial Issues.

Knowledge of psychosocial issues is an opportunity that can be leveraged to raise awareness of the impact of psychosocial factors on organisational and individual health. When key stakeholders are aware of the benefits of managing psychosocial risks and the business and health costs associated with not managing and preventing their effects, they are bound to act. In that regard, a participant from a trade union explained:

Opportunities are coming but from a negative perspective. On the national discourse about productivity, people should not look at workers as machines, they should realise that you cannot address productivity without looking at workers as human beings and look at their physical, psychological, spiritual and mental health as factors to address productivity. The discussion on productivity is an opportunity to bring about those issues. The only challenge is that it is not being opened to many stakeholders like academics, like yourself and others to give input, people are focusing on productivity as number of units produced (7).

The appreciation of the negative impact of lack of well-being presents an opportunity for investigating the causes, for example, behind absenteeism and hopefully devise ways for prevention. This is highlighted in the following quote from the same participant above:

Second, the realization of the high levels of absenteeism, sick leave, business is now seeing and witnessing, so the manifestation of these issues is an opportunity for people to sit down and say what the cause is. Whether people are going to look at the cause or continue addressing the symptoms, is something that we may need to address, I think internationally as well the issues, especially work-life balance is gaining momentum and it's being discussed at international level like International Labour Organisation and it's also an issue that everyone is talking about (7).

The key stakeholders displayed understanding of psychosocial risks and undertook to bring these matters to their discussions. They identified other factors that can affect productivity which include spiritual, physical, and mental health. This presents an opportunity for raising awareness especially coming from a trade union representative. They also noted that discussions on factors that influence work performance should include experts and academics who can provide technical expertise on the matter.

As the saying goes that prevention is better than cure, the importance and cost saving nature of prevention and being proactive as opposed to being reactive was noted by a few participants. In that regard, one participant explained:

You may end up spending more in trying to intervene as compared to how little you might use in being proactive and preventing. There are lots of interventions and programmes that organisations can take, without even going out of their way to improve their business, like team building activities. Then interventions from mental health professionals or related professions, maybe they started as part of the awareness to appreciate the burden of lack of well-being on the already distressed economy that you may actually end up spending more (10).

4.3.4.4 Supportive Structures.

A few participants saw an opportunity to utilise the current frameworks and structures that are in place like inspections, promotions, legislation and employment councils to manage psychosocial risks. In that respect, one key stakeholder indicated:

The opportunities are there to use the current mainframe that we have always had to make a difference, like NSSA inspections and promotions. We also have employment councils, I hope that's an area that you should also explore, employment

councils even various sectors that can address the sectorial issues which happen in there, those are frameworks that are in place (1).

Few key stakeholders acknowledged Government's support through its efforts in spearheading national programmes and ratification of conventions as highlighted in the following quote:

Maybe something of positive note is that government is supportive of occupational safety and health, despite the challenges which industry is facing in terms of resources.This is reflected by how it participates in a number of national programmes, how at international level it ratified some important OSH conventions, some of these touch on work organisation issues, like convention 161. Ratification is quite a significant process from a national point of view. It's a demonstration of government's commitment on those matters. …When our economy improves, these processes which government has already taken should enhance work organisation, work arrangements, service and health environment (5).

4.3.5 Socioeconomic Impact

Socioeconomic impact was categorised under the subthemes of unemployment, informal sector, and salaries. Participants also discussed other socioeconomic factors that were described under the general theme of socioeconomic impact.

4.3.5.1 General Socioeconomic Factors.

All participants noted the prevailing challenging economic environment. A common observation that was frequently discussed by most participants is related to financial problems where workers borrow or fail to pay their obligations. This affects their concentration at work as their minds are preoccupied with these financial pressures. A few participants pointed to the need for a change in interventions where the mind of the worker is considered as indicated by one expert who is an occupational safety and health practitioner:

We call them socioeconomic pressures, they are devastating in that workers have to borrow and their mind is not at work, thinking how am I going to pay Mr. John, how is my kid going to school, these things take away the mind from work and you have an absent minded worker who is overwhelmed by these pressures. These are things you cannot touch, they are complex, they change daily. You can't predict the

person when they come to work, obviously it means systems alone cannot solve them. We now need to engage, introduce a new dimension to occupational safety and health, where we are now dealing with the mind (11).

Very few participants described the working environment in a positive light like an interviewee from one ministry with a medical background, although issues of remuneration came up. He commented:

"*It is a good working environment in my organisation, there are defined structures and appointments. Issues of remuneration, compared to other countries it is very low. On the professional side, the people are educated*" *(2).*

4.3.5.2 Salaries.

Most participants frequently raised concern about non-payment or late payment of salaries and the associated impact on work attitudes like commitment and well-being. Few key stakeholders commented that salaries are low. This is reflected in the following quotations.

I want to add one challenge, I know that in one institution, people do their work but it takes a couple of months for people to get paid. That demoralizes, people then don't really apply themselves because you don't know whether your efforts are going to be rewarded or not, Quite a number of organisations are lagging behind in paying employees and it's a great challenge because one of the reasons why we go to work is to get paid, so there is high turnover, where there is low turnover people are just flowing curriculum vitaes around waiting for hopefully greener pasture, so that definitely affects commitment and quality of work (10).

Some organisations introduced salary cuts and forced leave in an attempt to manage costs. Workers were told to stay at home at certain times, the impact on quality of work was brought up. In that regard, one key stakeholder in the manufacturing sector reported:

You get time off that you have not planned for and salaries are delayed. It affects us a lot when it's late like that. You are told to go on time off on Wednesday, where do you go, you have no money, and social responsibilities, children's school fees and so on. It affects the quality of work since one can feel the company is not

providing for our welfare. We have a problem with salaries because salaries were cut at some point by 30% and to reach that 30%, we have days that we must be away or work short working hours, forced off, let's say about 5 days may be equated to 30% of your salary (12).

The same participant further explained that cardiovascular problems such as high blood pressure are also being caused by the financial situation that workers find themselves in and stated:

We have seen an increase in injuries and diseases, like BP, counselling cases have also increased….. BP is being caused by those things, you borrow, you don't have bus fare, you borrow from another person, the person will ask for their money plus you don't know when you will be getting paid. We don't have dates now, the person is bothering you for their money, the child has been sent back home from school, the wife is phoning that if you don't bring money you will find all your things outside (12).

Interestingly, one key stakeholder linked the issue of salaries to the productivity level of an organisation whilst discussing the challenges that workers are facing and commented:

Not being paid on time, powers of workers being taken away, if a company is not producing you cannot bargain for better conditions. Workers understand but they hang on because of past contributions of pension, there is no employment alternative so stick to the devil you know (3).

However, salaries were not cited as a major issue in the banking sector except for a few instances where the salaries were considered to be low.This is highlighted in the following quote from a trade union representative:

So another major important issue is income, low income is also stressing workers ... In most cases employers are no longer taking part in staff development but they demand you to have certain skills. The issue of salaries in the sector, we have heard a few instances where salaries would not be paid completely, I think we have heard three or four, with some of them which eventually folded. But those operating at

least we are getting the salaries, but because of the amount and the mismatch with the living standards and cost of living, some workers are over borrowed… (7).

4.3.5.3 Unemployment.

Participants also noted the high unemployment rate, unavailability of jobs and their effect on workers and employers' attitude and behaviour with regards to working conditions and desperation to keep jobs. There was high frequency and consistency in the observation that workers are vulnerable and are tolerating suboptimal conditions in order to put food on the table. The following quotes are examples:

All those issues affect you as an individual, if you know you are going underground in a mine, I am supposed to wear a mask, goggles and it's not there. It's a situation to say if I don't do it, the next person will jump in and do it without even gloves. So you are in a situation where you have to look after the family and sacrificing your health, you are not willing to report because you are trying to protect your job, that can have a negative impact and because of the general environment where there are no jobs, people end up being taken advantage of because you just have to work, besides maybe being underpaid, the major working conditions (8).

The above key stakeholder described the desperate situation that workers find themselves in and the lack of alternative employment. Unemployment has also caused insecurity in workers, workers fear they can lose their jobs at any time, they tend to accept suboptimal working conditions because they need to take care of their families. This is highlighted in the following quote by one expert:

I think insecurity as well because the employer knows that jobs are scarce, they have little respect for their employees and as employees you also don't ask for what you deserve, you just bow to what is available, they short change themselves just to keep a job. You are told you will go, we will hire other people very fast so there is insecurity (10).

4.3.5.4 Informal Sector.

The informal sector in Zimbabwe has been growing fast. A key stakeholder from one ministry commented on the growing informal sector and stated:

"No industry, what is left is a huge informal sector and very little in terms of employment, people are working but are not employed" (3).

Most participants raised the issue of the unregulated informal sector where no one is overseeing their health and safety. The quotations below express concern from most participants.

Conditions of work, it's a challenged environment, access to employment, state of the labour market, it's informalised, broadly it's challenged especially because of informality, no regulation, no access of state intervention, workers have to be content because of their vulnerability... They have to be content with suboptimal levels (1).

Another employer representative also concurred on the existence of the informal sector and some of the challenges that they face because of lack of protection:

Informality is also a problem, most of the work is in informal economy jobs, you don't have written contracts and you don't have access to benefits, basic safety equipment, clothing and no one inspects that because they will only go to formal companies, they won't go to informal companies and ask if they have work suits. So all these policy changes that we are recommending only affect the formal sector so probably we have to do something for them which is different from what we are doing (8).

4.3.6 Barriers

Participants identified barriers to the prevention and management of psychosocial risks. Barriers were categorised according to four subthemes of prioritisation, lack of research, inadequate resources and psychosocial perception and culture. These barriers support earlier research on the need to address factors that are outside the workplace that affect embracing the notion of psychosocial risk management, some have termed them distal causes (Kortum & Leka, 2014).

4.3.6.1 Prioritisation.

Most participants observed that psychosocial issues are not given the necessary priority due to other competing needs including the need for company viability. The reasons are mainly related to the socioeconomic environment, which was discussed

at length in previous sections, which presents one of the major barriers. In that respect, one key stakeholder explained:

The second aspect is even if they are aware it's not a priority, the economic environment, the issue of targets, the issue of sustaining an organisation in this current environment has made people to put to death something that is not a priority at the moment (7).

In addition, few key stakeholders explained that psychosocial factors are viewed as a luxury in light of other pressing needs. The following quote from a psychologist is an example.

Besides what we have said, ignorance, then competing needs, right now we are talking about lack of employment opportunities, people to now think of investing because there are a lot of other pressures… other demands, the dollar is scarce and people are cutting salaries, will they even think of using money for training? (10).

Moreover, another key stakeholder who works for a ministry shed light on how psychosocial factors are viewed and, like the above participant, commented on how addressing them now can be considered as a "luxury". However, they were still of the opinion that key stakeholders are aware of their impact.

Our negotiators in those platforms, I'm not saying stress issues are not concrete but they have primary fights awaiting to be resolved. When we are still talking about maternity leave, those hard core basic rights, we appear to be in a luxury to start talking about stress, what do we do with the stress if the person has it. So for us to discuss, I think those are higher order aspirations at this stage. I think it's a low burner but the issue is what to do about it, can we bargain for occupational health and safety issues when we cannot bargain for wages, when wages are not paid on time. This is why I said they are higher order kind of aspirations, they are not priorities at this stage (1).

Interestingly, as the discussion went on, the position shifted and the same participant acknowledged that psychosocial factors are not receiving the attention that they deserve.

On reflection you find that the subject area is not receiving the importance that it should be receiving because we are talking about the health of the worker, we may concentrate on other traditional hard core aspects of workers and forget about the person (1).

4.3.6.2 Lack of Research.

Key stakeholders also noted the lack of research and guidelines with regards to managing psychosocial risks in Zimbabwe as another barrier. This is highlighted in the following quote from a representative from the regulatory authority:

Lack of knowledge, there has been lack of academic work, especially research on the link between the work environment, well-being and performance of organisations. So it's not regarded as a priority. We need statistics, sectorial statistics, for example absenteeism, how many hours have been lost, fatalities, we record accidents so all related statistics. That's the very first port of call. We need statistics to get an informed view of what is happening. Secondly, wellness programmes, the wellness of workers need to be brought on the national agenda and that can be done through research. We need research (5).

Research was also considered to be a tool to bring psychosocial issues on the national agenda. In addition, wellness issues were suggested to be put on the national agenda and to be an issue to be tabled at Board levels. This should be supported by research, as currently there is paucity of research in this area. Most participants thought statistics could help to convince key stakeholders of the need to manage psychosocial risks. In that respect, one policy maker stated:

There is a challenge and the other thing… we are not a research community. We don't even have baselines, so all these things I talk about… but I don't have any figures. We need evidence to show to people and convince them that this is how it should be like. This is the state in which we are and this is the way that we are supposed to be going, so there is a challenge, there is need to conscientise that people will make decisions even at enterprise level (4).

4.3.6.3 Psychosocial Perception and Culture.

As mentioned above, most participants thought that organisations and some key stakeholders perceive occupational safety and health management as a cost and not an investment. In that respect, one participant commented:

We don't appreciate OSH as investment, we emphasise the cost aspect. I don't know who is responsible for advocacy on that issue, maybe the National Social Security Authority. We will get there, with the appreciation that the workplace could be a source of these health issues, we would save our pockets. The first challenge is, obviously for facilities to be in place that's a cost, although you would want to call it an investment the issue of safety etc., it remains a cost to employers. I am not confident that OSH issues can receive priority in this environment, where cost cutting is the order of the day. Whether or not the employer understands but it's a cost in the first place. The environmental challenge can be quite pervasive to these issues (1).

A representative from an employers' association observed that stress issues were discussed in "passing" implying that they are not perceived as important or urgent. This is highlighted in the following quote:

For us I am not sure it's things that always get discussed, but I don't think there is a framework, people discuss when they talk of motivation and stress management and things like that. When we have these meetings, it's things that are discussed in passing, you are talking of motivation, reduction of stress, but I don't think there is any framework" (8).

A few participants considered the operationalisation and measurement of psychosocial issues to be complex. In addition, they were of the view that some people are not aware of the existence of stress. This could be attributed to the influence of culture where people are not expected to complain about work especially in an environment where most people are looking for jobs. The following quote from another employers' representative is an example:

To control something, you must be able to measure it that is why sometimes you can't put some of those things, whatever you don't have information on, it becomes very difficult to implement the policy when you don't know that's one reason. It's difficult to implement the policies, it's one of the biggest obstacles, how to

operationalise these policies. Anything to do with stress, burnout, how and what do you measure, how do you objectively measure it and set standards for ideal levels of stress. Also not appreciating that these exists, because in our traditional culture normally work is not supposed to be fun, you are told to wake up and go to work. The workplace is not for playing just like a jail sentence is not meant to be enjoyed (8).

A participant with a psychological background added:

"Another challenge is that wellness is intangible, it is very difficult to quantify so people don't really invest in it because they cannot evaluate and quantify neither the needs nor the benefits, so it is seen as a luxury" (10).

One expert in occupational medicine explained the prevailing occupational safety and health culture as follows:

"*Major problem is culture, lack of a culture that embraces occupational safety and health generally, knowledge management issues, skills deficiency*" *(13).*

4.3.6.4 Inadequate Resources.

Most of the comments above are related to the socioeconomic impact theme where financial challenges have been noted as hindrances to the implementation of good practices in occupational safety and health. As alluded to, several participants perceived equipment and tools used by workers to be inadequate or outdated which poses a risk to their safety and health.

4.3.6.5 Occupational Safety and Health Funding

Participants consistently pointed out to the lack of funding for occupational safety and health as explained previously. A representative from an employers' organisation explained:

There is also an issue of funding, a lot of policy changes in Zimbabwe happen because there is funding for them, like HIV policy happened because there is funding for it, without funding you can't do anything even if you know it has to be done.I am not sure about funding for stress related issues, what normally happens in the policy initiatives that I know, if there is a funder willing to fund, e.g. climate change, even if you don't want it, it happens (8).

In addition, another occupational safety and health expert stated:

"*The honest truth is that whilst the will power might be there, the commitment is moderate due to obvious reasons, financial implications, it's not resourced correctly" (11).*

Moreover, most participants were of the opinion that some companies are failing to afford to provide for the safety and health of workers. In that regard, one representative from a trade union explained:

"We have not been doing well in terms of safety, health and well-being because of the desperate situation we find ourselves in, lack of foreign direct investment" (6).

4.3.6.6 Inadequate Skills.

Very few participants thought occupational safety and health experts are inadequate, this was re-emphasised in the following quote by a key stakeholder with a background in occupational medicine when discussing key challenges:

"Inadequacy of occupational safety and health experts in Zimbabwe. Fragmented OSH legal framework, a gross lack of occupational hygiene services and experts. Lack of enlightenment, lack of expertise, infancy level of OSH in the country" (13).

Another key stakeholder from an employers' association questioned whether stress issues are covered during inspections and whether the capacity to inspect stress issues is available in the following quote:

Do they check on stress levels when they do their inspections? So there is lack of capacity to inspect, they probably don't even know how to check. They don't have definitions as well, there is a lack of inclusion of stress issues in the national policy (8).

4.4 Discussion

This study sought to explore the perceptions of key stakeholders regarding the nature and effect of psychosocial factors on organisational and individual health based on 13 semi structured interviews. There has been very little research on perceptions of key stakeholders with regards to psychosocial risk management in

developing countries and the present study is the first in Zimbabwe according to the researcher's knowledge. A similar study was conducted with experts from different countries by Kortum, Leka and Cox (2010). However, this present study is unique in that its main focus is on key stakeholders who contribute to Occupational Safety and Health and Labour policies in Zimbabwe, i.e. worker representatives, employer representatives, regulators, representatives from relevant ministries and professions.

The main themes that were identified through thematic analysis included awareness, socioeconomic impact, legal and policy framework, opportunities, priorities and barriers.

4.4.1 Awareness

According to the findings, most participants perceived that key stakeholders are aware of the impact that work can cause on individual health and understand the subsequent impact on ill health and organisational performance. It is encouraging to note that most key stakeholders are generally aware of the negative effects of psychosocial risks although the level of understanding varies among stakeholders based on responses they gave to the research questions. Some key stakeholders were able to identify and articulate the relationship of specific psychosocial hazards like repetitive work, lack of involvement, and targets with individual and organisational health using the relevant terminology without being probed. A few used the term psychosocial hazards to refer to the stressors that workers are exposed to and went further to relate them to work-related stress. However, in contrast, others noted the general pressures including the economic challenges that workers are exposed to and how these might affect well-being. Similarly, Tang, Leka, Hunt & MacLennan (2011), in their review of significant legislation related to psychosocial factors and the perceptions of key stakeholders on implementation of the same, noted that key stakeholders had different responses reflecting different knowledge levels of the implementation organisations. This could be attributed to their level of exposure, for example, those who are involved in inspections were reported to be more knowledgeable. Some of them are exposed to international organisations like the International Labour Organisation (ILO) where psychosocial issues are discussed as part of their jobs. In this study a similar observation was noted where the regulators and experts with a psychological or medical background displayed a deeper

understanding in relation to others even though they all expressed some level of awareness.

Consistent with the literature, psychosocial hazards were articulated in terms of factors which included work-home conflict (Can, Hendy & Camlibel, 2017), poor or inadequate equipment (Kollmann, Stockmann & Kensbock, 2019), working hours (Kivimaki & Kawachi, 2015), targets, job insecurity, (Shoss, Jiang & Probst, 2018), job content issues of monotonous and repetitive work (Rolander et al., 2019). Organisational health effects were explained mostly in terms of sickness absenteeism, negative work attitudes like low morale, motivation, commitment, job dissatisfaction, mistrust between management and non-managerial workers, all of which have been found to have a negative impact on performance (ILO, 2016). The organisational costs of psychosocial risks are well documented in the literature. For example, Smit, de Beer and Pienaar (2015) found that job insecurity was associated with job dissatisfaction in a mining environment in South Africa. Ugwu, Enwereuzor, Fimber and Ugwu (2017) found that pressure of work can result in burnout which is related to counterproductive work behaviours in nurses. Further, Sewwandi and Perere (2016) found that job stress was positively related to turnover intentions in machine operators in Sri Lanka. Ill health effects that were frequently raised by participants included stress symptoms of burnout, backache, hypertension, and headache. This is consistent with symptoms of work-related stress reported by Mabiza, Iaeng, Conduah and Mbohwa (2017), which included headache, high blood pressure and heart disease. In Zimbabwe, Wadesango and Gunyanga (2016) in their review of the literature on the basis of secondary data on stress management by school headmasters, found physiological effects of stress which included blood pressure, diabetes, ulcers, dizziness, heart disease and headaches with consequences including anxiety, fatigue, boredom, irritability, depression and low self-esteem in the education sector. They recommended role clarity for head teachers as one way to alleviate stress. Several studies have associated the experience of stress with cardiovascular disease in healthy workers (Li, Loerbroks, Bosma & Angerer, 2016).

Generally, as described above some key stakeholders were able to articulate examples of psychosocial risks and their potential effects that were in line with commonly cited psychosocial risks and their effects in the literature. Further, Kortum

and Leka (2014) found that the level of knowledge of developing country experts could not be differentiated from that of experts from developed countries. Very few stakeholders were of the opinion that the level of understanding is limited and needs to be enhanced and that the number of key stakeholders that are knowledgeable is not adequate. Mabiza, Iaeng, Conduah and Mbohwa (2017), in their study of the South African banking sector also commented that senior management in the banking sector might not appreciate the effect of stress on workers' performance. From this perspective, one can assume that the lack of enhanced understanding especially of the benefits of managing psychosocial risks to improve organisational productivity and more importantly to alleviate their dire effects on health, may explain why psychosocial risk management remains neglected. However, as discussed, most participants did not believe that key stakeholders lack knowledge.

4.4.2 Legal and Policy Framework

The availability of a legal framework for psychosocial risk management may reflect the seriousness of a nation with regards to management of psychosocial factors. It also facilitates enforcement. Almost all participants agreed that there is no legislation nor policy which provides for the management of psychosocial factors or work-related stress in Zimbabwe, although some participants were of the opinion that the provision for managing work-related stress and psychosocial factors is implied in current legislation and touched upon in the OSH policy of 2014. The Labour Act chapter 28:01 was considered to assist in some aspects, for example regulation of working hours, but some participants commented on the implicit nature of provisions that are related to stress. Similarly, some researchers have reported on the lack of specificity and clarity of the legal provisions for psychosocial risks (Leka, Jain, Iavicoli & Di Tecco, 2015).

A few stakeholders mentioned that if psychosocial issues arise and affect staff they can be resolved through existing frameworks of disciplinary procedures and structures like workers' councils. This approach is reactionary, there is need for proactive preventative measures for managing psychosocial risks and safeguarding the health of workers and supportive legislative instruments. Psychosocial factors have been termed emerging risks. However, Leka and Iavicoli (2017) acknowledged that issues to do with work organisation, design and management have been in existence ever since people started to work. From another perspective one can argue

that most developing countries are still struggling with the so called traditional hazards i.e. physical, chemical and biological hazards (Kumar, Karthick, Bhuvaneswari & Nandinhi, 2017), and are facing challenges of work related accidents, injuries and diseases (Rahim, Ng, Biggs & Boots, 2014; Sieberhagen, Rothman & Pienaar, 2009). These challenges could have diverted attention from psychosocial hazards.

Several participants commented on the old state of the current Occupational Safety and Health legislation. This could possibly explain the non-existence of legislation regarding psychosocial issues if we consider them as emerging risks. However, a few participants noted that the current OSH legislation is under review and hopefully psychosocial factors will be included. In the same vein, a review of current laws and regulations in six Caribbean countries highlighted that some of the Occupational Safety and Health laws are out of date or limited to a specific industry (Akpinar- Elci et.al., 2017). They also found that there is very little documentation on exposure and risks including psychosocial hazards. Similarly, Tang, Leka, Hunt and Maclennan (2011), noted that legislation in Hong Kong had inadequate information on psychosocial issues.

A few participants suggested that moral persuasion can be more effective compared to complying with legislation. This could be an option to explore in the absence of legislation but calls for extensive awareness campaigns. Voluntary measures by organisations to manage psychosocial risks based on the Corporate Social Responsibility (CSR) framework have been recommended as a useful tool in areas where the capacity and practice of managing psychosocial risks has been lacking as is the case for Zimbabwe. The approach facilitates dialogue between stakeholders in the management of psychosocial risks. It involves the voluntary incorporation of environmental and societal considerations into the business strategy and operations in addition to the legal obligations of managing OSH as a good and ethical business practice (Jain, Leka & Zwetsloot, 2011).

4.4.3 Priorities

Participants identified issues that they considered to require urgent action. This included training in general and specific training on Occupational Safety and Health. This is consistent with some research in Southern Africa, for example, inadequate training was considered to be one of the stressors by Mabiza, Iaeng, Conduah and

Mbohwa (2017). Moreover, Sanyang et al. (2017) conducted a needs assessment on environmental and occupational health in the West African region and found that occupational health was among the top training priorities whilst work-related stress was one of the occupational health priorities in that region. Identification of health challenges emanating from work, monitoring and understanding the extent of the associated risks was also considered to be a high priority. This is critical because shedding light on the actual occupational health challenges that are being experienced in Zimbabwe and the nature and extent of the problem will help to increase awareness and make a case for prevention and management of psychosocial risks. Similarly, Sadhra, Beach, Aw and Sheick-Ahmed (2018) identified research on occupational health problems for specific groups and industries as a top priority in their study, which was investigating occupational research priorities in Malaysia. It is important to note that priorities vary between developing and developed countries because of the socioeconomic stage of particular countries. They also vary within various developing countries. The above researchers also found that psychosocial and musculoskeletal problems were considered less important in contrast to most developed countries. Moreover, Kortum, Leka and Cox (2010) found priorities which included injury and accident prevention, psychosocial risks, work-related stress and violence and harassment at work respectively. Kortum, Leka and Cox (2011) found that experts from all regions considered psychosocial risks to be important to address, Americas with 88%, South east Asia 86 %, Europeans 70% whilst Africans 32%.

4.4.4 Socioeconomic Impact.

Most key stakeholders commented on the socioeconomic challenges that the country is facing. Most participants noted that workers are in a situation where they have to borrow and they lose concentration at work thinking about how they can pay their debts, they felt that the economic situation of the country is affecting the well-being of workers as they are affected psychologically, the effect even extends to relationships at home for some workers which are not spared because of financial issues. Social and economic factors influence the health of workers and performance through their effect on issues like workplace protection (Dollard & Neser, 2013).

Most participants raised concern about non-payment, late payment and low salaries. However, salaries were not considered to be an issue in the banking sector.

The problems with salaries have been associated with negative work attitudes like commitment and was reported to have affected the well-being of workers and turnover intentions. Mouza and Souchamvali (2016) found that teachers on lower salaries experienced more stress resulting from reduced salary and benefits. Desouky and Allan (2017) also found similar results where primary school teachers with lower salaries experienced higher levels of occupational stress in Egypt. This is consistent with the propositions of the effort-reward imbalance theory, which explains that if the effort that is put by an employee is not matched by rewards it may result in work related stress. Recently Alvarado and Bretones (2018) observed an imbalance between the effort put by teachers and their rewards, which was associated with stress. Issues of pay can also influence turnover (Sewwandi & Perere, 2016).

Related to economic performance is the high unemployment rate. Workers were perceived to be vulnerable and tolerating sub-optimal conditions in order to remain in employment. Even if workers have the intention to quit their jobs very few have alternative employment opportunities. Unemployment has caused feelings of uncertainty and insecurity in workers. Job insecurity has been associated with high levels of job stress in the literature (Probst & Jiang, 2017). A few participants opened up and explained that people are not expected to complain about work especially in an environment where most people are looking for jobs. A person is considered to be lucky if they have a job. Other researchers have reported the increase of high unemployment rates in developing countries (Okon & Osesie, 2017). Unemployment was considered a form of chronic stressor, which can negatively affect health even though individual characteristics may influence the actual experience of stress (Sumner & Gallagher, 2016).

Most participants expressed concern with the ballooning of the informal sector. This is consistent with previous research in developing countries (Monteith & Giesbert, 2017; Peter-Cookey & Janyam, 2017). The informal sector is not regulated and is not covered by inspections on Occupational Safety and Health, leaving workers in that sector vulnerable and susceptible to various hazards. In Zimbabwe, the increase in the informal sector can be attributed to factors, which include high unemployment rate and retrenchments that organisations face (Jerie, 2017). The informal sector is a significant group of workers, which contributes to economic

development. There is need for a deliberate intervention to penetrate the informal sector and safeguard their health.

4.4.5 Opportunities

There are various opportunities that can be explored to drive the psychosocial risk management agenda in Zimbabwe. At national level the main interventions that were identified included increased inspections by the regulator, the current review of the Occupational Safety and Health legislation and promotional work by the regulatory authority.

The current review of the OSH legislation presents an opportunity to include psychosocial risks and to come up with guidelines and tools for managing psychosocial risks at work. At the moment there are no guidelines, nor policy on psychosocial risks to enable implementation and enforcement. Most key stakeholders acknowledged the support of government through ratification of relevant conventions, which shows its commitment towards Occupational Safety and Health. Key stakeholders identified dialogue at tripartite levels on Occupational Safety and Health issues as another key opportunity that can be utilised to manage psychosocial risks and raise awareness. Some experts have considered social dialogue as a type of "soft law" which can be effectively used to manage psychosocial risks in the form of consultations, negotiations and discussions (Ertel et al., 2010). In addition, a few participants saw an opportunity to make use of the current frameworks and structures that are in place like inspections, promotions, legislation and employment councils to enforce. When policies have been put in place, another opportunity that was identified comes at the point when investors come into the country and before being registered, they need to be appraised of the OSH requirements of the country and requested to comply if they want to do business in Zimbabwe.

It is good that companies are coming up with OSH policies and wellness programs, although OSH policies are a compliance issue. Companies need to be advised on how to include psychosocial risks in their policies to make them comprehensive and cover all risks. Knowledge of psychosocial issues is an opportunity that can be leveraged to raise awareness of their impact on organisational and individual health. As alluded to above, most key stakeholders are aware that exposure to psychosocial hazards may cause ill health in terms of work-related

stress, burnout, depression and other related diseases, which include cardiovascular diseases. They are also aware that there will be an increase in sickness absenteeism, negative work attitudes and poor job performance. This knowledge is a weapon to use to advocate for the management and prevention of psychosocial risks. Industrial psychologists and other related professions could also play an active role in raising awareness.

4.4.6 Barriers

There are certain factors that have been found to hinder psychosocial risk management in developing countries. Consistent with key research in developing countries, most participants agreed that psychosocial factors are not prioritised in most developing countries especially African countries like Zimbabwe (Javaid et al., 2017). This may be due to competing needs, which include payment of salaries, need for organisational viability, unemployment, general poverty and challenges of communicable diseases (Sorensen et al., 2017).

As discussed above, the lack of research on the relationship between psychosocial factors and health in developing countries has been reported in the literature. This study was a response to try and cover the gap in knowledge and to shed light on the perceptions of key stakeholders on the same. Similarly, key stakeholders also noted the lack of research and guidelines with regards to managing psychosocial risks in Zimbabwe. Some key stakeholders related the scarcity of research to the lack of prioritisation since there is lack of adequate local evidence of their negative impact to make a business and moral case to manage psychosocial risks. The need for general and sectorial statistics was noted. Statistics were considered as a tool to convince relevant people of the need to manage psychosocial risks. Moreover, Kortum, Leka and Cox (2011) observed that the lack of awareness and research on psychosocial risks and work-related stress in developing countries hinders action on managing the same. In addition, research clarifies challenges regarding psychosocial issues and enhancements to policy and practices especially from stakeholder perspectives (Potter, O' Keeffe, Leka & Dollard, 2019). Research will contribute to relevant information that will facilitate decision-making (EU-OSHA, 2012).

The way psychosocial factors are perceived may determine the action or lack of action with regard to their management and prioritisation (Iavicoli et al., 2011). Culture also plays an important role as it influences what behaviour is expressed or reported to others at the workplace. Some key stakeholders explained that psychosocial factors are perceived as complex and difficult to measure and quantify therefore they are seen as a luxury. Similarly, Kyaw-Mynt et al. (2017) reported that psychosocial risks are perceived to be complex and difficult to manage. Participants also highlighted that Occupational Safety and Health interventions are viewed as a cost and not an investment.

Further, inadequate resources and the resultant lack of OSH funding hinders the implementation of Occupational Safety and Health interventions. This has forced most organisations to embark on cost cutting measures in order to remain afloat. For most companies, this has affected Occupational Safety and Health investment whilst in some organisations training and development has also been affected. Some companies are failing to provide the necessary equipment for work and some of the available equipment is obsolete. Inadequate equipment is one of the psychosocial hazards that can result in work-related stress (Dumitrascu-Baldau & Dumitrascu, 2017). Several researchers have reported on the effects of obsolete equipment in some developing countries (Amponsah-Taiwah, 2016; Okon & Osesie, 2017). The issues of financial resources were found to be one of the common barriers to psychosocial risk management in addition to lack of knowledge and tools to manage psychosocial risks effectively (Irastorza, Milczarek & Cockburn, 2016).

However, with regards to psychosocial risk management some of the interventions may not require money to implement but knowledge. There is need to raise awareness to relevant organisations of experts who can assist in psychosocial risk management, for example occupational psychologists have knowledge on work organisation, management and design issues that can prevent work-related stress but a few key stakeholders were not aware of these resources. One key stakeholder enquired if Safety and Health inspectors cover psychosocial hazards in their inspections. This could be explained by the fact that they are not covered in legislation and by the fact that they may not have adequate capacity and guidelines to inspect psychosocial risks. Similarly, earlier research identified lack of technical knowledge, support and guidelines coupled with lack of resources to be major barriers

to the management of psychosocial risks in Europe. This relates to knowledge on planning, assessment of risks, policy, procedures, implementation and evaluation and determination of resources in terms of time, money and people (EU-OSHA, 2012).

EU-OSHA (2012) also found another barrier regarding the sensitive nature of psychosocial risks, which can be related to the cultural issues raised by some participants in this study where it is unusual to hear someone saying I am stressed by work. By contrast, the complexity of legislation was not considered to be a barrier in the current study because there is no legislation regarding psychosocial risks. However, legal complexity was considered to be a barrier in Europe (Irastorza, Milczarek & Cockburn, 2016).

4.5 Conclusion

Key stakeholders are central to policy formulation, implementation and monitoring. The major findings from the semi-structured interviews indicate that key stakeholders are aware of the relationship between psychosocial factors, well-being and organisational health although the depth of knowledge levels varies between key stakeholders. They were able to explain organisational costs and manifestations of work-related stress. Key stakeholders agreed that there is no legislation pertaining to work-related stress or psychosocial issues in general but acknowledged that some issues like overtime, sexual harassment and working hours are implied in the Labour Act. They acknowledged that the OSH policy of 2014 has certain provisions, which are not adequate. Priorities were identified at national and organisational levels, which included training, inclusion of risk management principles in OSH, financial commitment and identification of health issues emanating from work through research. Key stakeholders also identified opportunities that can be explored which included the Occupational Safety and Health legislative review with potential to develop guidelines, promotional work and enhanced inspections by the regulator, ratification of relevant conventions by government and supportive structures that are already in place. Trade unions were encouraged to include psychosocial issues in their tripartite discussions. Knowledge of psychosocial issues was considered to present another opportunity that can be taken advantage of especially on the impact of not managing psychosocial risks. The socioeconomic impact on occupational safety and health performance was discussed extensively touching on its influence on

unemployment, the increase in the informal sector, which is not regulated, and remuneration challenges. Key stakeholders also identified barriers of lack of prioritisation, lack of relevant research to provide information on the current status for decision making. Other barriers included psychosocial perception and culture, where psychosocial issues are perceived as complex in terms of measurement and management, some workers being uncomfortable letting other people know they are stressed as they may be perceived as weak and emphasising the cost rather than benefits of managing Occupational Safety and Health. Inadequate resources were identified as a critical barrier as mentioned earlier.

The psychosocial hazards that were identified by key stakeholders informed the basis of the research questions, which are explored in detail in the following chapter, which sought to establish the specific relationships between psychosocial hazards and individual and organisational health. The implications of the current study are discussed in Chapter 6, which connects the two studies.

Chapter 5: Work-related Stress and Organisational Health in the Zimbabwean Banking Sector, a Job Demands-Resources Perspective

Chapter 4 presented results of the qualitative study which sought to determine the perceptions and understanding of key stakeholders with respect to psychosocial risks and their relationship with individual and organisational health. Some of the insights gathered from key stakeholders informed the focus of the current quantitative study

The stressors identified guided the selection of antecedents of well-being and organisational health variables in the form of job demands and job resources and outcome variables like job commitment, job satisfaction, work engagement and job performance. For example, participants mentioned that as a result of various factors, which include unemployment, some workers remain working at their jobs because there are no alternative options to change jobs. They continue to stay despite poor working conditions, a high work pace to meet targets and poor leadership. They remain with the job but they are no longer committed or engaged. This may affect performance in complex ways, it can affect job performance, as we know that poor working conditions have a negative impact on job performance (Baloch et al., 2017; Yee, 2018). In another view, job performance may remain high in the presence of poor working conditions because the employee does not want to lose that job as unemployment is high and jobs are scarce (Mutambara, Makanyanga & Mudhovosi, 2018; Nyoni & Bonga, 2018). These issues were then explored further in the quantitative study presented in this chapter using a sample from the banking sector in Zimbabwe.

As discussed in chapter 4, key stakeholders were drawn from relevant government ministries, the regulatory authority, employer representatives, worker representatives and relevant professions like psychologists, human resources, and occupational health experts. These experts gave their opinion on their understanding of psychosocial hazards and their relationship with individual and organisational health from a national perspective. Some of the identified hazards were considered relevant to be explored further in the quantitative study as explained above. Key

stakeholders noted the negative relationship of some of these factors on work attitudes like commitment, job satisfaction and work engagement, which contributed to them being included as outcome variables.

There was also consensus that workers are stressed in Zimbabwe which resulted in general well-being being included as a measure of stress, and consistent with the research topic. Organisations are expected to report all occupational safety and health issues to the regulator as a matter of compliance. This provides them with some knowledge of the major issues affecting workers, for example, several participants mentioned the issue of targets. Most of the key stakeholders sit on the board of the Zimbabwe Occupational Safety and Health Council, i.e. Ministry of Labour, the regulator, worker and employer representatives, and some of the OSH experts (Taderera, 2012). This qualifies them to articulate even on the psychosocial issues that could be found in banks. For example, key stakeholders who are not currently working in the banking sector mentioned the hazards that were identified in banks like career stagnation, monotonous and repetitive work. Some have conducted research in the banking sector by virtue of their jobs for example, working for the regulatory body, and being a worker representative at national level.

In addition, it is important to note that the variables that were included in this study were also derived from those considered important from the review of the literature on the banking sector as explained below, the qualitative study provided guidance on potential psychosocial hazards that are common in the Zimbabwean workforce which could equally affect banking employees.

This chapter will discuss the theoretical model that was employed, the relevant methodology in brief as most of it has been discussed in chapter 3, preliminary assessments of fitness of the data and measures, and results, especially considering that most tools have not been used and reported in Zimbabwe to provide guidance regarding normative data.

5.1 Theoretical Model

As discussed in previous chapters of this thesis, several models have been postulated to try and explain the relationship between the psychosocial work environment and individual and organisational health. These include the effort-reward imbalance model (Siegrist, 1996; Siegrist, Siegrist & Weber, 1986), the job-demand-control model (JDC) (Karasek, 1979), the demand-control-support model (DCS-M) (Johnson & Hall, 1998) and the job demands-resources model (JD-R) (Demerouti, Bakker, Nachreiner & Schaufeli, 2001).

The job demands-resources model was chosen to guide both the qualitative and quantitative studies in this research because of its flexibility; it can be applied to a variety of settings, organisations and occupations (Berthelsen, Hakanen & Westerlund, 2018). As a result of its empirical evidence that has accumulated over the years, it developed into the job demands-resources theory (Bakker & Demerouti, 2018). Work characteristics are usefully divided into two broad categories of job demands and job resources, which facilitates application (Schaufeli, 2018). Although the JDC, JDCS and the ERI models contributed to the development of the JD-R and provided invaluable insights into the relationship between job characteristics and health, some limitations were noted regarding their restricted focus on job demands and job resources variables (Bakker & Demerouti, 2017). The JD-R was deemed relevant over the aforementioned models because it offers a more parsimonious but comprehensive framework that goes beyond the specific variables of control, autonomy, work load, unfairness and support but includes all possible job demands and job resources that may be found in organisations. It provides the opportunity to select the most relevant factors of a specific context, in this case the banking sector (Boyd et al., 2011).

5.2 Study Variables

The job demands variables included in this study were quantitative demands, emotional demands, work pace and work family conflict. These demands are more likely to be relevant in the banking sector, considering the current environment that banks are operating in globally (Asumeng, 2015). For example, they face a lot of competition from both domestic and foreign based banks. The pace of work has increased in an effort to meet targets, which has been associated with an increase in

stress levels in bank employees (Goswami, 2015). Patronea et al. (2016) highlighted that a fast-paced work environment is associated with ill health, especially the development of gastrointestinal problems in a sample of Romanian bank employees; they further observed that the banking sector offers a context for the onset of distress. The targets that were mentioned by participants in the qualitative study also prompted the researcher to think of relevant job demands that may be important. Given these insights, the researcher considered work pace and quantitative demands to be some of the job demands to be investigated in Zimbabwe as they are related to general well-being and organisational health factors (ILO, 2016).

New products and services are being introduced and technological advancements are inevitable in banks (Ali & Miralam, 2019; Sarangi, 2012) for example, e-banking (Sharma, Singh, Kishore & Sharma 2014). These changes may be associated with job demands, which when excessive, may lead to work-related stress (Bashir & Ramay, 2010). Technological advancements have mixed benefits of simplifying the work and at the same time may be associated with poor well-being (Guest, 2017).

There are potential issues to do with work family conflict as the career in banking has become boundaryless (Kumar & Rain, 2014), some people work long hours or carry work home either physically or mentally (Brannen, 2005). Brannen (2005) advised that this should not be generalized only based on the case studies that they conducted but more research is needed to understand issues of work family conflict and their impact on health. Moreover, people working in an environment with high unemployment may force themselves to work more hours in order to keep their job (Fernandez-Crehuet, Gimenez-Nadal & Recio, 2016). An increase in working hours has been associated with work family conflict in South Africa (Hlatywayo, Zingwe, Mhlanga & Mpofu, 2014). Mughal et al. (2010) investigated demands in the banking sector of Pakistan which included task demands, role demands, organisational leadership and interpersonal demands, also looking at the effect on work life balance. They noted that stress at work might lead to problems in the social domain.

Other researchers have investigated the factors that influence work family conflict in banks (Kengatharan, 2016; Sharjeel, Siddiqui & Khwaja, 2016). For

example, Balogun and Afolabi (2018) found that more women in Nigerian banks were prone to work family conflict than women in other service industries. Work engagement is central to the motivational hypothesis of the JD-R and as such, it has been of interest to several researchers (Bakker & Albrecht, 2018). However, there have been mixed results regarding the relationship between work engagement and work family conflict, for example, Balogun and Afolabi (2018) found a positive relationship, whilst Opie and Henn (2013) found a negative relationship. Based on the literature, we know that job resources are more likely to be positively related to work engagement and that work engagement has a positive influence on workers in terms of work attitudes and behavior (Geldenhuys, Laba & Venter, 2014). Yet Chernyak-hai and Tziner (2016) were of the opinion that work engagement can negatively affect workers through work family conflict. They thought that workers who are highly engaged are more likely to be susceptible to work family conflict as they may devote more time and effort to the work role at the expense of their family. In contrast, Sonnetag, Mojza, Demerouti and Bakker (2012) suggested that engaged workers are more likely to engage in leisure activities including sport and psychologically detach themselves from work in order to recuperate resulting in engaged workers having better health. These mixed results present a need to investigate further these relationships as they ultimately relate to the health of workers and the success of organisations. Therefore, work family conflict was considered to be another important antecedent of individual and organisational health to be investigated in the current study.

The nature of banking work may pose emotional demands to bank employees as they interact with clients daily (Soo & Ali, 2017). Emotional demands have been suggested to result in workers experiencing ill feelings about their work, which can potentially affect work outcomes negatively. Specifically, emotional demands were found to be negatively related to work engagement in six banks in Pakistan (Ahmed et al., 2017). Demands of an emotional nature may also be important in Zimbabwe where banks are experiencing a liquidity crisis manifesting through cash shortages (Rushwaya & Mutambara, 2018; Nyoni & Banga, 2017). Long queues are common in banks (Rufasha et al., 2018), and some customers will be demanding for their money from bank tellers who cannot help the situation. Considering results from the

qualitative study and insights from the literature, emotional demands were also included in the study.

The job resources that were chosen for the current study were quality of leadership, social support from supervisors, social support from colleagues, possibilities for development and influence at work. These variables were also selected based on the responses of key stakeholders from the qualitative study and are consistent with the extant literature as antecedents of general well-being, job satisfaction, commitment to the workplace, job performance and work engagement. The role of social support on well-being has been extensively reported. Malik (2011) found stressors in public and private banks in Quetta City, which included lack of support from senior managers and role overload. In the same study, they acknowledged that possibilities for development have an important buffering role on stress and additionally, stress is potentially related to job dissatisfaction. Provision of social support was one of the factors that influenced job satisfaction positively in Pakistanian bank employees (Shaukat, Senin & Ahmed, 2012).

The role of leadership in organisational and individual success has been recognized especially regarding the role of transformational leadership. Bushra, Ahmad and Naveed (2011) found that transformational leadership positively influence job satisfaction and organisational commitment and noted the role of social support as a key aspect of transformational leadership. The current study extends social support from both superiors and colleagues and in addition, investigates quality of leadership as they relate to organisational and individual health. Social support from colleagues may make work pressures more manageable and enhance performance (Xanthopoulou, Demerouti, Bakker & Schaufeli, 2008). Influence at work is also an important job resource, which has been found to be negatively related to cognitive stress symptoms (Albertsen et al., 2010).

Job satisfaction has been extensively studied, especially regarding its relationship with job performance (Judge & Bono, 2001). However, as Belias, Koustelios, Sdrolias and Aspiridis (2015) correctly observed, several factors interact in a complex manner to influence job satisfaction. In their recent study of banks in Greece, they noted that the financial crisis negatively affected banks and among other issues, that workload had increased and was more likely to be associated with stress.

Although they found that workers were generally satisfied with their jobs, they still called for a deliberate consideration of increasing job satisfaction to enhance general well-being and productivity.

Indeed, Ogbar (2008) found that bank employees between the ages of 21 and 35 were less committed in the Nigerian banking sector. They called for more empirical research on commitment in Africa as there are limited empirical studies on the same. In that regard, we sought to contribute to the literature and enhance our understanding of how to improve organisational health factors by investigating the relationship between job demands, job resources and job satisfaction and job commitment as outcome variables.

As discussed earlier, the literature has supported the relationship between job demands and job resources with general well-being or strain (Lo Presti Nonnis, 2014; Topcic, Baum, Kabst, 2016), with job satisfaction (McVicar, 2016), with commitment (Boyd et al., 2011; Moideenkutty, Blau, Kumar & Nalakath, 2001), with work engagement (Bakker & Demerouti, 2008) and with job performance (Wang, Lu & Siu, 2015). These are some of the important variables that have been shown to influence organisational and individual health in the banking sector (Bhatti, Mat & Juhari, 2018).

The JD-R model considers work engagement to be one of the motivational vehicle through which job resources influence work outcomes positively (Bakker & Demerouti, 2017). Moreover, consistent with the motivational hypothesis of the JD-R, several studies have found some support for the mediatory role of work engagement and outcome variables, especially commitment (Hakanen, Bakker & Schaufeli, 2006; Santos, Chambel & Castanheira, 2016) and job performance (Bakker & Bal, 2010; Bhatti, Mat & Juhari, 2018).

Additionally, proposition three of the JD-R specifies that job resources may buffer the negative effects of job demands on strain (Bakker &. Demerouti, 2017), i.e. job resources and job demands interact to predict worker well-being (Rainey & Bakker, 2015). However, Schaufeli (2017) observed that the evidence regarding interactions between job demands and job resources with health and engagement is still weak. Furthermore, he indicated that high job resources and low job demands influences burnout but may not influence work engagement since reducing certain job

demands may remove the challenge in work, which can also facilitate work engagement. There is still need to investigate and appreciate these relationships and contribute to the empirical evidence regarding the interactions of job resources and demands with outcomes hence the investigation of interactions of job demands and job resources in the current research.

Based on these earlier studies, directional hypotheses were formulated and are indicated in the following section.

5.3 Study Hypotheses

Based on the available evidence, the current study tested the following hypotheses:

1. Job demands are negatively related to general well-being.
2. Job demands are negatively related to work engagement.
3. Job demands are negatively related to job satisfaction.
4. Job demands are negatively related to commitment to the workplace.
5. Job demands are negatively related to job performance.
6. Job resources are positively related to general well-being.
7. Job resources are positively related to work engagement.
8. Job resources are positively related to job satisfaction.
9. Job resources are positively related to commitment to the workplace
10. Job resources are positively related to job performance.
11. The relationship between job demands and general well-being will be weaker when job resources are high rather than low.
12. The relationship between job resources and organisational health outcomes (commitment to the workplace, job satisfaction, job performance and work engagement) will be weaker when job demands are high rather than low.

The above hypotheses were all testing elements of the job demands-resources theory. As explained earlier, job demands and job resources initiates two independent processes, a health impairment and a motivational process. Job demands have been considered to be more important for health problems and their different indicators whilst job resources were reported to be more relevant for motivation and work engagement, which positively influence work outcomes (Schaufeli, 2017). Job demands negatively influence work outcomes through burnout (Lesener, Gusy & Wolter, 2019). In that regard, hypotheses 1 to 4 were testing the health impairment process whilst hypotheses 6 to 9 were testing the motivational process of proposition two of the job demands-resources theory. Hypotheses 5 and 10 were testing proposition 6 of the JD-R theory, which postulates that motivation has a positive influence on job performance whilst work related strain has a negative influence on job performance (Bakker & Demerouti, 2017). Hypotheses 11 and 12 were testing the third proposition that has been termed the buffering or interaction hypothesis as explained in the above section (Breevart & Bakker, 2018).

5.4 Analytical Model

The job demands (work pace, quantitative demands, emotional demands and work family conflict) that were found to be relevant from the qualitative study acted as predictors in the analytical model. Social support from colleagues, social support from supervisors, influence at work, possibilities for development and leadership quality were tested as job resources and entered into the analytical model as predictor variables. As elucidated, there was consensus among key stakeholders that the work environment and general socioeconomic environment of the country is impacting negatively on the health of workers, and they perceived that workers are stressed. Consequently, general well-being was included as an outcome variable. Poor working conditions were associated with poor work attitudes during semi-structured interviews, resulting in the addition of job satisfaction, commitment to the workplace and work engagement as outcome variables. From the interviews, it was suggested that workers might continue to go to work for financial reasons even though they may not be committed or engaged. These work attitudes all have an impact on job performance, which is a critical factor for organisations (Cropanzano, Byrne & Rupp, 2003). In that regard, job performance was introduced into the model and tested as another outcome variable. Based on the buffering hypothesis of the JD-R

(Xanthopoulou et al., 2007), all interactions between job demands and job resources were added to the model and tested in relation to the outcome variables. The researcher found it important to investigate some of these complex relationships in a Zimbabwean banking sample in order to enhance our understanding of the same and to inform future interventions.

5.5 Methodology

5.5.1 Participants

The target participants were all workers employed in the banking sector in Zimbabwe. A sample of 259 bank staff was drawn from five participating banks in Zimbabwe after removing incomplete responses. The inclusion criteria was working in the banking sector, meaning that every employee of the participating banks had a chance of being recruited in the study. As a result, participants occupied varying positions in the banks. The majority were males (60%). Other demographic details are discussed in the demographics section.

5.5.2 Sampling strategy

The banks were selected with the aim of getting representation from both international and local banks since these can have different cultures or even different performance levels (Goromonzi, 2016). Initially ten banks were contacted but only five were able to participate. There are 13 commercial banks in Zimbabwe (RBZ, 2019). The five banks were fairly representative comprising of both local and international banks. The initial strategy was to use random selection of participants. Due to the timing of the study in the banking sector and the challenges that banks were facing at the time, a convenience sampling strategy was then considered. The online survey was sent to about 729 potential participants. Those banking staff who were interested in taking part in the study and gave their consent participated in the study. A sample of 145 employees was considered to be a minimum for this study. This was derived from a power analysis, which was based on a medium effect size, and power of 80%, guided by the number of predictors for hierarchical multiple regression analysis in the current study (Green, 1991). Moreover, Field (2013) suggested that a medium effect could be obtained for up to 20 predictors with a sample size of 200. Therefore, the

sample of 259 bank staff that was obtained was deemed sufficient for analysis. The response rate was 35.53%.

5.5.3 Data Collection Procedure

Data were collected by way of an online questionnaire. Initially, a letter was sent to the Human Resources Manager of the identified banks explaining the research purpose, ethical considerations and seeking permission to conduct the study in their organisation. After authority was granted, the Human Resources Manager sent an email to all employees from each Division of the participating bank with a participant information sheet attached to it and a link to the anonymous questionnaire, which was available online. Every employee had an equal chance of participating in the study. However, participation was on a voluntary basis. The Bristol online surveys platform (BOS) was utilised in this study as it met the essential ethical requirements of security, it has a facility for encryption and is compliant with privacy standards in the United Kingdom. Participants gave consent to take part in the online survey before participation. The researcher stressed that participants are free to withdraw from the study at any point and observed anonymity and confidentiality at all times. After completion, participants read a debriefing note where the researcher thanked the participants and informed them of the opportunity to receive a summary of the research findings. The information was stored within the BOS system which was only accessible to the researcher. As discussed in Chapter 3, The Faculty of Medicine and Health Sciences, School of Medicine, Division of Psychiatry and Applied Psychology Ethics Subcommittee granted ethical approval for this research (Ethics reference number 247). The research was also guided by ethical principles of the British Psychological Society (BPS, 2009), the Zimbabwe Psychological Association, Code of Human Research Ethics (2010), Ethics Guidelines for Internet-mediated Research (2013), as well as the Data Protection Act (2018).

5.5.4 Measures

5.5.4.1 Job Demands, Job Resources, and Commitment to the Workplace.

The Copenhagen Psychosocial questionnaire (COPSOQ11, Kristensen et al., 2005), is a standardised and internationally recognized tool that was used to assess aspects of work organisation, design and management, i.e. a. job demands, b. job resources, and c. commitment to the workplace. The World Health Organisation and the International Labour Organisation recognise it as a risk assessment tool for

psychosocial risks (Berthelsen, Hakanen & Westerlund (2018). The questionnaire has three different lengths, the long, medium and short versions (Liang et al., 2018). The medium version and the short versions are both relevant for workplace assessments (Moncada et al., 2014). However, the medium version was considered for this thesis because it is the most frequently used and therefore its validation may be more comprehensive (Pejtersen, Bjorner & Hasle, 2010). The COPSOQ questionnaire has been used internationally and its psychometric properties have been found to be satisfactory across nations (Cotrim et al., 2017; Rahman, Abdul-Mumin & Naing, 2017). More importantly, it has already been validated in some parts of Africa where the psychometric properties of its different scales were supported.

In Ghana, for example, Amponsah-Tawiah et al. (2013) supported the factor structure of the COPSOQ and reported a reliability of α = .74 for support and security and α =.72 for work demands and control. It has also been validated in Nigeria (Bamgbose, (2014). In South Africa, Volmink, (2014) reported reliability coefficients of α = .61 for quantitative demands, α = .68 for work pace, α = .52 for emotional demands, α = .71 for work family conflict, α = .31 for possibilities for development, whilst α = .65 for commitment to the workplace, α = .54 for influence at work, α =. 85 for quality of leadership, α =. 70 for social support from colleagues and α = .82 for social support from supervisors. Coopmans (2010) utilised the COPSOQ variables of behavioural, somatic and cognitive stress in South Africa and reported Cronbach alphas of α =. 56, α = .65 and α = .87 respectively.

Job demands included quantitative demands, work pace, emotional demands and work family conflict. Job resources included possibilities for development, social support from supervisors, social support from colleagues, influence at work, and quality of leadership. The majority of questions of the COPSOQ II have five response alternatives, *always, often, sometimes, seldom, never, hardly ever* or from "t*o a very large extent*" to "*to a very small extent".* The scoring is from 0-100. In terms of job demands, an example item for quantitative demands is *"Do you get behind with your work?",* for work pace, *"Do you have to work very fast?",* for emotional demands, "*Do you get emotionally involved in your work?",* and for work family conflict, "*Do you feel that your work takes so much of your time that it has a negative effect on your private life?".* In terms of job resources*,* an example item for possibilities for development is "*Do you have the possibility of learning new things through your work?",* for influence

at work, "*Can you influence the amount of work assigned to you?",* for social support from colleagues, *"How often do you get help and support from your colleagues?",* for social support from supervisors*, "How often is your nearest superior willing to listen to your problems at work?",* and for quality of leadership, *"To what extent would you say that your immediate superior is good at solving conflicts?".* Furthermore, an example item for commitment to the workplace is, *"Do you feel that your place of work is of great importance to you?".* The reliability Cronbach alphas are shown in Table 5.4.

5.5.4.2 General Well-Being.

The General Well-Being Questionnaire (GWBQ) (Cox, Thirlaway, Gotts & Cox, 1983) was used to measure general well-being, which has been used as an indicator of symptoms of work-related stress. Cox et al. (2006) reported a reliability of .86 for the worn-out scale which was used in this study. Responses range from *"neve*r" to *"all the time*" on a 5-point likert scale ranging from 0-4. An example of the items is, *"Over the last six months, how often have you become easily annoyed or irritated?".* Items are scored by summing them up. The Cronbach alpha for the general well-being questionnaire was .92 (see Table 5.4).

5.5.4.3 Work Engagement.

Work engagement was assessed using the Utrecht Work Engagement Scale (UWES-9) (Schaufeli, Bakker & Salanova, 2006). The psychometric properties of the UWES-9 were found to be acceptable in Zimbabwe (Masvaure, Ruggunnan & Maharaj, 2014). An example of the items is*, "When I get up in the morning, I feel like going to work"*. Response options were from never (0) to always (6). The scale is made up of three parts, which measure dedication, absorption and vigour. A reliability of .90 was reported for a sample of bus drivers in Zimbabwe (Buitendach, Bobat, Muzvidziwa & Kanengoni, 2016), while in the current study it was .89 (see Table 5.4). De Bruin and Henn (2013) reported that the reliability of the UWES-9 in 10 different countries ranged from .85 to .92.

5.5.4.4 Job Performance.

Job performance was measured using a 3-item scale that has been reported to have good psychometric properties in previous studies (Bal & de Lange, 2015). An example of the items is *"How would you rate your performance as an individual employee?".* Responses were provided on a 5-point Likert scale ranging from very

poor (1) to excellent (5). The Cronbach alpha for job performance was 0.73 (see Table 5.4).

5.5.4.5 Job Satisfaction.

Job satisfaction was measured using a single item, *"How satisfied are you with your job?".* A single-item measure was considered in order to shorten the questionnaire since it had many variables. Previous research has supported the validity of this single-item measure of job satisfaction (see Allisey, Noblet, Lamontagne & Houdmont, 2014). Responses ranged from 1 "not at all satisfied" to 5 extremely satisfied.

5.5.5 Data Analysis

Analysis was carried out in two phases. The initial phase involved determining the fitness of the variables for inferential testing of the hypotheses. It included an analysis of descriptive statistics and reliability assessments. Although the COPSOQ questionnaire has been used in Africa, very few studies have reported its factorial validity. We did not find any published studies that have used the COPSOQ in Zimbabwe, therefore both principal component analysis and confirmatory factor analysis were performed in order to validate its structure in a Zimbabwean context. Confirmatory factor analysis was conducted using AMOS version 24. The second phase of the analysis model involved hypothesis testing using multiple hierarchical regression in order to establish the relationship between the variables. Data entry and analyses were conducted using the IBM SPSS statistical package, version 24. Moderation analyses were performed through the PROCESS macro for SPSS version 3 (Hayes, 2013).

Preliminary analysis and propositions of the theoretical model were tested through descriptive statistics, correlations and multiple regression respectively following suggestions from Field (2005). Moderation analyses were performed following the recommendations of Hayes (2017). For the initial analyses, data were screened for missing values, checks of normality were conducted to determine fitness for hypothesis testing using multiple regression. Tests were made to check for outliers, multicollinearity and sample adequacy. In the following section, the factor structures of the measures are explored.

5.6 Principal Component Analysis

Principal component analysis is a data reduction method which is different from factor analysis where the assumption is that observed variables are influenced by factors but in principal component analysis it is the opposite. Principal components are linear combinations of observed variables, which accounts for total variance unlike in factor analysis where the common variance is explained (Albright & Park, 2009). Principal component analysis with varimax rotation was used to determine the structure and internal consistency of the 37 items of the Copenhagen Psychosocial Questionnaire (COPSOQ II), medium scale for professionals (Pejtersen, Kristensen, Borg & Bjorner, 2010) that was used in this research, which included items for commitment to the workplace. Principal component analysis was also performed for measures of the other dependent variables of job performance; 3-item measure (Bal & de Lange, 2015), general well-being; and 12 items of the worn-out scale of the General Well-Being Questionnaire (GWBQ), (Cox, Thirlaway, Gotts & Cox, 1983). The Utrecht Work Engagement Scale UWES-9 (9 items) has been used in Zimbabwe before but the factor structure was not reported therefore a principal component analysis was also conducted on it. Job satisfaction was measured by one item therefore, factor analysis was not conducted.

5.6.1 Sample Adequacy

The Kaiser Meyer-Olkin (KMO) statistic was used to determine sample adequacy. According to Kaiser (1974), the KMO statistic must be above the minimum of .5. In this sample, the KMO value for general well-being items was KMO =. 927. and for the COPSOQ II items it was .814. For job performance, KMO = .654, and for work engagement KMO = .880. Most values were between the ranges of .8 and .9. which were considered as “great”, and above 9 “marvelous”, except for the job performance scale according to the classification of Hutcheson & Sofronion (1999), so we can be comfortable that principal component analysis findings were relevant for this study.

The Bartlett’s test of sphericity was significant (x^2,3 = 162.44, p <.001) for the job performance items, general well-being items (x^2, 66 = 1540.49, p < .001), work engagement items (x^2, 36 = 1219.81, p < .001) and COPSOQ II items (x^2, 528 = 2985.82, p < .001). This confirms that there were some associations between the items of all measures.

The number of components to be retained were decided using the Kaiser criterion of considering eigenvalues above one for rotation (Yong & Pearce, 2013). In that regard, the principal component analysis revealed eight components with all items loading only on one component. The scree plot was also checked to determine the number of components and it started to level off after eight components. Therefore, eight components were retained as they were closer to the anticipated components based on the literature since the COPSOQ is a widely used tool which has been validated in various countries. The eight components in combination explained 63.2% of variance.

The rotated component matrix revealed that all items of quality of leadership and social support from supervisors loaded on component 1. The items that make up the two scales both touch on some aspect of quality of leadership and we decided to utilize them as originally intended after considering the results from the confirmatory factor analysis, which was also performed. As expected, items of work family conflict loaded on component 2, and possibilities for development items on component 3. Influence at work items loaded on component 4 whilst quantitative demands items loaded on component 5. Emotional demands items loaded on component 6 whilst work pace items loaded on component 7. Further, social support from colleagues' items loaded on component 8.

As anticipated, only one component was extracted for the general well-being items. All items loaded on that component with high loadings above 0.6. and explaining 53.82% of variance. In addition, only one component was extracted for the job performance items, explaining 64.84% of variance. Unexpectedly, two factors were extracted for the work engagement scale and explained 67.80 % of variance. It failed to produce the expected three components. All three vigour items loaded on component 1 but dedication item 2 and 3 and absorption item 1 and 2 loaded on component 2. The remaining items loaded on component 2. Given these results, the work engagement scale was used as a total scale in this study. Moreover, de Bruin and Henn (2013) recommended that the UWES-9 should be used as a total score because its discriminant validity of the three factors has been questioned in Southern Africa despite its popularity. Schaufeli, Bakker and Salanova (2006) also recommended use of the total score of the three dimensions. Table 5.1 presents components after rotation and variance for the COPSOQ II scales.

Table 5.1

Principal Components of the COPSOQ11 Scales

Item	1	2	3	4	5	6	7	8
	QL-SS	WFC	DVT	Influence	QD	ED	Work pace	CS
leadership 2	.792							
leadership 3	.772							
leadership 1	.752							
leadership 4	.742							
Social support from supervisor 2	.733							
Social support from supervisor 3	.721							
Social support from supervisor 1	.687							
Work family conflict 3		.849						
Work family conflict 2		.835						
Work family conflict 1		.810						
Work family conflict 4		.695						
Possibilities for development 2			.790					
Possibilities for development 3			.775					
Possibilities for development 4			.758					
Possibilities for development 1			.455					
Influence				.784				
Influence 1				.734				
Influence 2				.684				
Influence 3				.625				

Quantitative demands 3					.792			
Quantitative demands 1					.689			
Quantitative demands 2					.623			
Quantitative demands 4					.594			
Emotional demands 4						.721		
Emotional demands 3						.713		
Emotional demands 1						.623		
Emotional demands 2						.577		
Work pace 2							.748	
Work pace 1							.676	
Work pace 3							.651	
Social support from colleagues 1								.684
Social support from colleagues 2								.657
Social support from colleagues 3								.508
Variance explained as a cumulative%	13.951	23.153	30.684	38.146	45.159	51.692	57.630	63.197

Note: QL-SS - Quality of leadership and supervisor support, ED- emotional demands, QD- Quantitative demands, CS- social support from colleagues, DVT- possibilities for development, WFC- Work family conflict.

5.7 Confirmatory Factor Analysis

Exploratory factor analysis is a dimension reduction technique that has been considered to be more appropriate during the initial stages of scale development (Hurley et al., 1997). Confirmatory factor analysis is relevant when there is some theoretical knowledge regarding the scales and the researcher is aware of the proposed pattern of item loadings of specific factors and the aim is to test whether the data fits well with what is already known theoretically. Exploratory factor analysis is driven by data whilst confirmatory factor analysis is driven by theory (Li, 2016). In that regard, confirmatory factor analysis was considered to be more relevant than

exploratory factor analysis in validating the structure of the COPSOQ II scale, also complementing results from principal component analysis. According to Kline (1993), confirmatory factor analysis is more superior since it tests hypotheses and establishes relationships between the variables that were observed. It can also assess the unidimensionality of the items as well as its reliability and validity (Awang, 2015). The COPSOQ scale has been validated in different countries but we saw it as good practice to establish if the robust structure also holds in Zimbabwe before carrying out hypothesis testing (Hurley et al., 1997).

Confirmatory factor analysis has an advantage of producing several model fit indices. It was suggested that making the decision for determining model fit based on the chi square only is inadequate as it is susceptible to sample size effects. It is also sensitive to violations of assumptions of the distribution of the sample. In that regard, other goodness of fit indices like the Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) were considered, the TLI can be construed similarly as the CFI although its values are not limited to the range of fit 0-1. The Comparative Fit Index assesses the fit of a model specified by the researcher against a restricted baseline model with covariances limited to zero to show that there is no relationship among the proposed variables (Albright & Park, 2009). Values of the TLI and CFI that are above .90 have been suggested to show acceptable model fit (Awang, 2015; King & Bernardo, 2015; Shadfar & Malekmohammadi, 2013). Values close to or above .95 are considered to be a good fit whilst a value of .06 or less for the RMSEA shows good model fit (Albright & Park, 2009). The model adopted was that each of the scales was assumed to be measuring one factor. Values of the TLI and CFI that are below .90 present a need to respecify the model (Shadfar & Malekmohammadi, 2013).

Confirmatory factor analysis was conducted using AMOS version 24. The results showed that the model indicated an acceptable fit of the data (RMSEA = 0.045, $p < 0.05$; CFI = 0.902; TLI = 0.918). The RMSEA results indicated good model fit whilst the CFI and TLI showed acceptable model fit. Table 5.2 summarises the variables and scales used in this research.

Table 5.2

Summary of Variables and Scales

Variable name	Scale	Complete scale items	# of items used
Age	COPSOQ II	1	1
Gender	COPSOQ II	1	1
Educational Qualifications	Item included on questionnaire	1	1
Tenure	Item included on questionnaire	1	1
Quantitative demands	COPSOQ II	4	4
Emotional demands	COPSOQ II	4	4
Work pace	COPSOQ II	3	3
Work family conflict	COPSOQ II	4	4
Possibilities for development	COPSOQ II	4	4
Influence at work	COPSOQ II	4	4
Social support from colleagues	COPSOQ II	3	3
Social support from supervisors	COPSOQ II	3	3
Quality of leadership	COPSOQ II	4	4
Work engagement	UWES-9	9	9
General well-being	General Well-being Questionnaire (GWBQ)	28	12
Commitment to the workplace	COPSOQ II	4	4
Job satisfaction	1 item job satisfaction measure (Allisey, Noblet, Lamontagne & Houdmont, 2014)	1	1
Job performance	Job performance scale (Bal & de Lange, 2015)	3	3

5.8 Results

5.8.1 Demographic Information

The sample comprised of 259 bank employees from five banks in Zimbabwe. Demographic variables were collected for gender, age, department, position and tenure. Most participants were male. The gender distribution of the sample was 154 males, 60%, with 3 missing responses. 13% of respondents were aged 30 or below, 41.7% were between the age ranges of 30-39 whilst 36% were aged between 40 and 49. Only 8% were between 50 and 59 years. 20% of participants had qualifications up to a higher national diploma, 41% had undergraduate degrees whilst 37% had masters degrees and 1.5% had doctoral degrees. Most participants had an undergraduate degree. The results support the generally high literacy levels in the country (Garwe & Thondhlana, 2019; Marumbwa, 2014). Most respondents had been with their employing organisation for 11 or more years. Table 5.3 shows a summary of the demographic characteristics of the sample.

Table 5.3

Sample Demographic Characteristics

Variable	Frequency	Percentage
Gender	102	39.4
Female	154	59.5
Male	3	1.2
Missing		
Age		
Under 30	34	13.1
30-39	108	41.7
40-49	94	36.6
50-59	21	8.1
Missing	2	.8
Educational qualifications		
Advanced level	3	1.2
Professional certificate	16	6.2
National diploma	20	7.7
Higher national Diploma	13	5.0
Undergraduate degree	106	40.9
Master's degree	96	37.1
Phd	4	1.5
Missing	1	.4
Tenure		
0-5	64	24.7
6-10	47	18.1
11-15	104	40.2
16-20	26	10.0
21-25	11	4.2
26-30	5	1.9
Above 30	2	.8

5.8.2 Testing for Assumptions

Descriptive statistics were performed to explore the data and assess its fitness for the proposed inferential analyses of the study variables. As mentioned above, the preliminary analyses included testing for outliers, missing data, reliability and normality.

5.8.2.1 Missing Data.

The data were checked for missing values. There were no major missing data that could affect the analyses.

5.8.2.2 Outliers.

Outliers have been found to bias parameters, these were checked by using box plots and Cook's distance statistical method (Cook, 1977). Cook's distance is one of the procedures reported for identifying outliers (Kannan & Manoj, 2015). The boxplots revealed few cases of outliers for the work engagement, job performance, job satisfaction and social support from colleagues scales. These cases were further checked visually to determine the reason for them being highlighted as outliers. Responses were found to be consistent with the overall response pattern for the scales therefore no action was taken about them. An analysis of the Cook's distance index did not reveal any cases with values close to one suggesting that outliers were not an issue in this study (Cousineau & Chartier, 2010).

5.8.2.3 Normality.

The study variables were also tested on whether they satisfied the assumptions of parametric tests since the study model was going to be assessed using multiple regression. Normality was assessed using histograms and the Kolmogorov-Sminoff (K-S) test for normality. The dependent variables deviated from normal according to the K-S test except for the work engagement scale. According to Field (2013), the K-S test is presented by *D* and is reported together with the degrees of freedom. The K-S test for work engagement was, *D* (256) = 0.044, *p* >. 05, the K-S test for general well-being was*, D* (259) = 0.062, *p* <*.* 01, for job performance it was, *D* (256) = 0.204, *p* < 001. The K-S test for job satisfaction was, *D* (257) = 0.230, *p* < 001, and for commitment to the workplace it was, *D* (259) = 0.126, *p* < 001. The data was not transformed because the sample was fairly large and the central limit theorem was applied where a sample mean that is non-normal will eventually approach normality

as the sample size increases (Kwak & Kim, 2017). Others have considered a sample above 160 to be large enough in this regard (Field, 2013; Santos, Leather & Dunn, 2009).

5.8.2.4 Heteroscedasticity.

Heteroscedasticity has been found to pose problems for multiple regression (Lumley, Diehr, Emerson & Chen, 2002). It can be defined as the change that occurs in the variance of the independent variables whilst homoscedasticity means that the variances do not differ but remain the same (Knaub, 2007). Heteroscedasticity and linearity were analyzed using scatterplots of zpred vs zresid which plots standardized residuals against standardized predicted values. Independency was tested using the Durbin-Watson test and most variables were close to the recommended value of two. The range was between 1.78 to 2.26, implying that independence may not have been a problem in the current study according to the recommended ranges of 1.5 - 2.5 (Moreno-Jimenez et al., 2009).

5.8.2.5 Multicollinearity.

Multicollinearity occurs when variables are highly correlated with each other. The correlation matrix in table 5.4 shows that there were no correlation coefficients above .7 for all measures except for relationships between job satisfaction and commitment to the workplace and for quality of leadership and social support from supervisors. However, all scores were below the recommended 0.8 (Dormann et al., 2013; Gie, Yong & Pearce, 2013). In addition, it was also measured using the Variance Inflation Factor (VIF). VIF measures were below the maximum of 10, values ranged between 1.01 to 2.66 whilst tolerance levels ranged from .38 to .98. Therefore, we can assume that multicollinearity was not a problem in this study, as suggested by (Pallant, 2011).

5.8.2.6 Descriptive Statistics.

Descriptive statistics were analysed to test for reliability of the scales, means and standard deviations. The importance of reliability for scales can never be over emphasized. A test should maintain its internal consistency when applied in different settings or times. It should produce similar results when two people who have the same values on the construct are tested (Field, 2006). Table 5.4 represents descriptive statistics of the study variables (means, standard deviations and Cronbach alphas).

Table 5.4

Means, Standard Deviations and Cronbach's Alpha of Variables

Variables	No of items	Means	Standard Deviation	Cronbach's alpha
Quantitative demands	4	40.77	19.44	0.73
Emotional demands	4	48.77	20.53	0.69
Work pace	3	65.64	19.05	0.65
Work family conflict	4	47.97	27.23	0.87
Possibilities for development	4	69.55	21.86	0.78
Influence	4	41.74	21.23	0.72
Quality of leadership	4	57.17	23.65	0.85
Social support from supervisors	3	67.13	22.99	0.82
Social support from colleagues	3	65.03	19.11	0.65
Commitment	4	65.40	20.23	0.69
Job satisfaction	1	3.32	.89	
Job performance	3	12.84	1.73	0.73
Work engagement	9	5.09	.99	0.88
General well-being	12	28.00	7.98	0.92

As shown in Table 5.4, all measures had acceptable reliabilities ranging from .65 to .92. General well-being had the highest Cronbach's alpha of α = .92, work pace and social support from colleagues scales had the lowest Cronbach's alphas of α = .65. A study conducted in South Africa reported α = .68 for work pace and α = .82 for supervisory support (Volmink, 2014). It has been reported that reliability coefficients above .70 are acceptable (Field, 2006; Schaufeli & Bakker, 2006). Emotional demands and commitment to the workplace both had Cronbach alphas of α = .69. An analysis of the items for the scales with scores below .70 revealed that deleting any of the items would not improve the reliability of the scales except for emotional demands item 2, *"Do you have to relate to other people's problems as part of your work?".* However, this item was not removed as the reliability was acceptable. The internal consistency of the scales was relatively good.

5.8.3 Correlations

Before carrying out the inferential testing of hypotheses it was important to run correlations in order to determine the relationships between the variables and to establish if multicollinearity could be an issue (Field, 2005). Correlations between all variables were tested using Pearson's correlation coefficient in SPSS 24. As expected, all job resources variables (possibilities for development, influence at work, quality of leadership, social support from supervisors and social support from colleagues) had positive significant relationships with work engagement. As shown in Table 5.5, possibilities for development was strongly related to work engagement and the rest of the variables had moderate relationships based on classifications suggested by (Field, 2013).

Job resources were significantly and positively related to job satisfaction, with quality of leadership and social support from supervisors having the strongest relationships. In addition, the relationship between job resources and general well-being was significant and negative. This is because high scores of general well-being depict poor health, so as job resources increase general well-being scores decrease. All job resources variables had positive and significant relationships with job performance, with possibilities for development having the strongest relationship. In addition, job resources were positively and significantly related with commitment to the workplace.

As anticipated, job demands variables (quantitative demands, emotional demands, and work family conflict) had negative relationships with work engagement. However, work pace showed a positive but non-significant relationship with work engagement. In addition, emotional demands had a negative, non-significant relationship with work engagement. Consistent with the predictions of the job demands-resources model, job demands were negatively and significantly related to job satisfaction with the exception of work pace which had a negative but non-significant relationship with job satisfaction. As expected, job demands had a positive relationship with poor general well-being. Work family conflict had the strongest relationship followed by quantitative demands whilst work pace had the weakest relationship with well-being.

Job demands variables were significantly and negatively related to job performance except for work pace which had a positive but non-significant relationship with job performance. Moreover, job demands were significantly negatively associated with commitment to the workplace with the exception of work family conflict, which had a negative but non-significant relationship with commitment to the workplace. This result was not expected. The direction of the relationships of the variables are consistent with the JD-R propositions that job resources have a positive relationship with outcomes which include work engagement, commitment to the workplace and job performance (Bakker & Demerouti, 2017).

Table 5.5*:*

Bivariate Correlations Between all Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Well-being	_												
2. Emotional demands	.370**	_											
3. Influence	-.141*	.139*	_										
4. Quantitative demands	.433**	.436**	-.152*	_									
5. Work pace	.141*	.402**	.060	.324**	_								
6. Possibilities for development	-.177**	.035	.385**	-.098	.131*	_							
7. Social support from colleagues	-338**	-.111	.207**	-.264**	.030	-.261**	_						
8. Social support from supervisors	-.301**	-.138*	.233**	-.278**	-.021	.333**	.614**	_					
9. Quality of leadership	-.229**	-.097	.286**	-.286**	.014	.513**	.490**	.712**	_				
10. Work family conflict	.555**	.466**	-.006	.501**	.342**	-.036	-.224**	-.178**	-.194**	_			
11. Job performance	-.261**	-.138*	.159*	-.188**	.093	.130*	.136*	.167**	.156*	-.194*	_		
12. Work engagement	-.438**	-.059	.353**	-.306**	.061	.520**	.327**	.424**	.449**	-.241**	.289**	_	
13. Commitment	-.382**	-.219**	.272**	-.361**	-.138*	.612**	.380**	.412**	.473*	-.297	.170**	.619**	_
14. Job satisfaction	-.386**	-.262**	.266**	-.351**	-.021	.542**	.366**	.438**	.576**	-.300**	.186**	.646**	.724**

* p <.05. **p <.01

5.8.4 Multiple Regression Analysis

Job demands and job resources were entered into the model as individual variables and not combined together. Separating them avoids the effect of combining challenge job demands and hindrance job demands together but assessing their individual contributions to the model to avoid any possible counter effects on the relationships. Age, gender, educational qualifications and tenure were entered into the model as control variables as they could potentially confound the dependent variables. Gender was depicted as male -1 and female-2

5.8.4.1 Relationship Between Job Demands Job Resources and Commitment to the Workplace.

The relationship between psychosocial factors and individual and organisational health was tested using a hierarchical multiple regression. A hierarchical multiple regression was carried out to establish the relationship between job demands, job resources and commitment to the workplace. The first model comprised of control variables of education, gender, tenure and age. It explained 7.6% of variance in commitment to the workplace F (4.249) = 5.112, p < 01. The second model included work pace, work family conflict, emotional demands and quantitative demands. It explained 21% of variance in commitment to the workplace, F (8, 245) = 8.158, p < .001. Possibilities for development, social support from colleagues, influence at work, social support from supervisors and quality of leadership, in that order were respectively added to the final model, which was also significant, explaining 55.9.% of the total variance, F(13,240) = 23.422, p <.001. Quantitative demands were the only job demands variable which contributed significantly to the model, (β = -.130, p < .05). Interestingly, age was significantly and positively related to commitment to the workplace, (β = .116, p < .05). Education had a negative relationship with commitment to the workplace, (β = -.139, p < .01). Possibilities for development was the only job resource variable that was significantly associated with commitment to the workplace, (β = .509, p < .001). The results indicate that for example, as possibilities for development rises by one standard deviation 21.86), commitment to the workplace increases by .509 standard deviations. The standard deviation of commitment to the workplace is 20.23. For every 21.86 additional possibilities of development provided, commitment to the workplace levels will rise by 10.30 (Field, 2013). The relationship between quantitative demands and commitment to the workplace partly supported

hypothesis 4 and the relationship between possibilities for development and commitment to the workplace partly supported hypothesis 9. The results are presented in Table 5.6.

Table 5.6

Relationship Between Job Demands and Job Resources With Commitment to the Workplace

Model	Model 1	Model 2	Model 3
Predictor variables	β	β	β
Education	-.224***	-.184**	-.139**
Gender	-.047	-.083	-.049
Tenure	.108	.079.	.044
Age	.125	.135	.116*
Work pace		.031	- .093
Work family conflict		- .112	-.077
Emotional demands		- .069	-.093
Quantitative demands		-.274***	-.130*
Possibilities for development			.509***
Social support from colleagues			.082
Influence at work			.026
Social support from supervisors			.093
Quality of leadership			.038
R^2	.076**	.210***	.559***
ΔR^2	.076**	.134***	.349***
F	5.112**	8.158***	23.422***

***$p < 0.001$ **$p < 0.01$ *$p < 0.05$

5.8.4.2 Relationship Between Job Demands, Job Resources and Job Satisfaction.

The same control variables were entered into the first model, followed by the addition of job demands in the second model and job resources in the final model. The order of the specific variables and results are shown in Table 5.7. Control variables explained 2.4% of variance and did not contribute significantly to the model. When job demands were added, the model explained 21.1% of variance whilst the final model explained 51.2% of the variance in job satisfaction, F (13.237) = 19.116, $p < .001$. As expected, all job demands variables had negative relationships with job satisfaction. Quantitative demands and emotional demands had significant relationships with job satisfaction, ($\beta = -.119$, $p < .05$) and ($\beta = -.198$, $p < .01$) respectively. In line with the hypotheses, possibilities for development and quality of leadership were significantly associated with job satisfaction, ($\beta = .293$, $p < .001$), ($\beta = .354$, $p < .001$) respectively. The hypotheses 3 and 8 regarding job demands, job resources and job satisfaction were partly supported see Table 5.7.

Table 5.7

Relationship Between Job Demands and Job Resources With Job Satisfaction

Model	Model 1	Model 2	Model 3
Predictor variables	β	β	β
Education	-.108	-.058	-.011
Age	.071	-.078	.086
Tenure	.079	.050	.050
Gender	-.013	-070	-.077
Work family conflict		-.168*	-.096
Emotional demands		-.143*	-.198**
Quantitative demands		-.282***	-.119*
Work pace		.173**	.083
Social support from colleagues			.022
Social support from supervisors			-.003
Leadership quality			.354***
Possibilities for development			.293***
Influence at work			.030
R^2	.024	.211***	.512***
ΔR^2	.024	.187***	.301***
F	1.502	8.070***	19.116***

***$p < 0.001$ **$p < 0.01$ *$p < 0.05$

5.8.4.3 Relationship Between Job Demands Job Resources and General Well-Being.

The results of the hierarchical multiple regression indicated that the final model was significantly related to general well-being. The first model included control variables, followed by job demands, emotional demands, quantitative demands, work family conflict and work pace. Job resources were added into the final model; social support from colleagues, social support from supervisors, quality of leadership, possibilities for development and influence at work. Control variables explained 2.2% of variance whilst the introduction of job demands into the model increased the total variance explained from 2.2% to 39.4%. However, the final model explained 44.5 % of

the variance in general well-being, F (13,240) = 14. 776, $p < .001$. Gender was significantly related to general well-being (β = .155, $p < .01$). As anticipated, all job demands variables had significant positive relationships with poor general well-being except for work pace which had a negative relationship with poor general well-being. (see Table 5.8). Social support from supervisors was the only job resource that was significantly related to general well-being (β = - .163, $p < .05$). Hypothesis 1 that job demands are negatively related to general well-being was fully supported, however, hypothesis 6 that job resources are positively related to general well-being was partly supported since only possibilities for development had a significant relationship with general well-being.

Table 5.8

Relationship Between Job Demands and Job Resources With General Well-Being

Model	Model 1	Model 2	Model 3
Predictor variables	β	β	β
Education	.061	- .007	-.017
Gender	.121	.170**	.155**
Tenure	-.001	.051	.073
Age	-.069	-.082	-.081
Emotional demands		.162**	.171**
Quantitative demands		.221***	.153*
Work family conflict		.424***	.409***
Work pace		-.151**	-.111*
Social support from colleagues			-.105
Social support from supervisors			-.163*
Leadership quality			.113
Possibilities for development			-.083
Influence at work			-.063
R^2	.022	.394***	.445**
ΔR^2	.022	.373***	.050**
F	1.374	19.935***	14.776***

***$p < 0.001$ **$p < 0.01$ *$p < 0.05$

5.8.4.4 The Relationship Between Job Resources Job Demands and Work Engagement.

The first model comprised of control variables of education, gender, tenure and age and it explained 3.5% of the variance in work engagement F (4, 248) = 2.256, *p* >.05. The second model with job demands and control variables explained 17.1% of the variance in work engagement. F (8. 244) = 6.312, *p* < .001. The final model explained 43% of the variance in work engagement, F (13,239) = 13.895, *p* < .001, see Table 5.9. As expected, job demands were significantly related to work engagement. However, emotional demands did not have a significant relationship with work engagement. Job resources were significantly related to work engagement except for quality of leadership and social support from colleagues. Results are presented in Table 5.9. Hypothesis 2, which proposed that job demands are negatively related to work engagement, was partially supported since only emotional demands did not have a significant relationship with work engagement and work pace had a positive relationship with work engagement. However, hypothesis 7 that job resources are positively related to work engagement was partially supported.

Table 5.9

Relationship Between Job Demands and Job Resources With Work Engagement

Model	Model 1	Model 2	Model 3
Predictor variables	β	β	β
Education	-.130*	-.097	-.084
Gender	- .005	-.057	-.050
Tenure	.042	.051	.027
Age	.134	.094	.085
Quantitative demands		-.310***	-.162*
Work family conflict		-.168*	- .147*
Work pace		.202**	.112*
Emotional demands		.065	.025
Possibilities for development			.338***
Leadership quality			.029
Social support from supervisors			.213**
Influence at work			.134*
Social support from colleagues			-.027
R^2	.035	.171***	.430***
ΔR^2	.035	.136***	.259***
F	2.256	6.312***	13.895***

***p < 0.001 **p < 0.01 *p < 0.05

5.8.4.5 Relationship Between Job Demands, Job Resources and Job Performance.

The first model with control variables of education, gender, tenure and age explained 1.7% of variance whilst the second model with job demands explained 12.5 % of the variance in job performance. The final model with both job demands and job resources accounted for 15.7% of variance, F (13.236) = 3.379, p = < .001. Gender had a significant relationship with job performance, (β = -.128, p < .05). The only job demands variables that were significantly associated with job performance were work pace and work family conflict (β = .251, p < .001) and (β = - .159, p < .05).

Conversely, emotional demands and quantitative demands did not have significant relationships with job performance, (β = - .130, *p* > .05) and (β = - .108, *p* > .05). Unexpectedly, job resources did not have a significant relationship with job performance. Only influence at work was nearly significant, (β = .132, *p* =. 054). In that regard, hypothesis 5, which proposed that job demands are negatively related to job performance, was partly supported whilst hypothesis 10, which postulated that job resources have a positive relationship with job performance, was not supported.

Table 5.10

Relationship Between Job Demands and Job Resources With Job Performance

Model	Model 1	Model 2	Model 3
Predictor variables	β	β	β
Education	- .002	.020	.002
Gender	-.068	-.122	- .128*
Tenure	-.100	-.102	-.102
Age	-.015	-.023	-.030
Work family conflict		-.166*	-.159*
Quantitative demands		-.165*	-.108
Emotional demands		-.096	- .130
Work pace		.259***	.251***
Influence			.132
Leadership quality			-.054
Social support from colleagues			-.043
Possibilities for development			.047
			.140
Social support from supervisors			
R^2	.017	.125***	.157
ΔR^2	.017	.109***	.032
F	1.037	4.310***	3.379***

***p < 0.001 **p < 0.01 *p < 0.05

5.8.5 Interaction Results

This section presents findings for the following interaction hypotheses:

a) The relationship between job demands and general well-being will be weaker when job resources are high rather than low.
b) The relationship between job resources and organisational health outcomes (commitment to the workplace, job satisfaction, job performance and work engagement) will be weaker when job demands are high rather than low.

The major hypotheses were broken down into specific hypothesis for each of the job demands and job resources as moderators of general well-being and for each of the organisational health variables i.e. (commitment to the workplace, job performance, job satisfaction and work engagement). Each criterion had 20 interactions tested. An example is: *Influence at work moderates the relationship between emotional demands and general well-being.*

The interaction hypotheses were tested using SPSS 24 with PROCESS version 3 (Hayes, 2013). The underlying statistical method of analysis employed was hierarchical multiple regression, applying the concept of moderation. The multiple regression method seeks to establish the relationship between two or more independent variables on a dependent variable as explained earlier. Moderation occurs when the relationship between two variables is weakened or strengthened by the presence of another variable, it explains under what circumstances the effect happens or for what type of people. (Hayes & Rockwood, 2017). Data were checked for compliance with multiple regression conditions during the initial hierarchical multiple regression analysis discussed in the previous section.

In the PROCESS macro, all moderators were entered as W, in other earlier versions of PROCESS the predictor variable was considered to be M, in this case for example, each of the five job resources was entered as X and the outcome of general well-being as Y in separate regression models. The predictor and moderator variables were first centered on the mean using the PROCESS tool. Although this is not compulsory, Field (2013) recommends mean centering because it makes interpretation easier among other things. The product term which depicts the interaction is obtained by multiplying the moderator and the predictor, i.e. job

resources and job demands. The product term was computed by PROCESS, in order to determine a moderation effect, the interaction term must be significant (Hayes, 2013).

In the first instance, this study tested if high job resources (possibilities for development, influence at work, quality of leadership, social support from colleagues and social support from supervisors) individually buffer the effect of individual job demands (quantitative demands, emotional demands, work pace and work family conflict) on general well-being. Secondly, the study tested if job demands individually moderate the relationship between individual job resources and commitment to the workplace, job satisfaction, job performance and work engagement.

The hypothesis that the relationship between job demands and general well-being (GWB) is moderated by job resources was only supported when influence at work was a moderator for emotional demands, quantitative demands, work pace and general well-being. Influence at work was not a significant moderator for work family conflict but possibilities for development moderated the relationship between work family conflict and general well-being. Figures have been rounded off to 3 decimal places. The results are presented below.

5.8.5.1 Influence at Work Moderates the Relationship Between Emotional Demands and General Well-Being.

The model explained 19.98% of variance in general well-being, [F (3, 259) = 21.223, p = .0000. R^2 =.1998]. Emotional demands predicted general well-being [t (259) = 6.8037, p =. 0000]. As expected influence at work had a negative relationship with general well-being [t (259) = -.3.4356, p = .0007]. The interaction term was significant [t (259) = -2.8589, p = .0046, $\triangle R^2$= .0256]. It explained an additional 2.56% of the variance in general well-being.

As recommended by Field (2013), the moderator can be tested at three levels using either the standard deviation or percentiles. This study used one standard deviation below the mean as the low category, then at the mean level which is the moderate or average condition and lastly at one standard deviation above the mean which is the high level of the moderator variable. These conditional effects showed significant relationships between emotional demands and general well-being at all levels of influence at work, it was highly significant at the lower and mean levels of

influence at work, p = .0000, while the significance levels and effects scores slightly weakened at higher levels of influence, p = .0029.

To understand this relationship further, the Johnson-Neyman significance region was utilized to establish the significance cut off points. It showed that the relationship between emotional demands and well-being was highly significant at lower values of influence at work from -41.7391 up to 9.8234, p = .0000. The relationship turned positive from .4484 and started weakening but was still significant from 19.1984 to 29.0324. Therefore, the region of significance ranged from -41.7391 to 29.0324. The moderation was not significant at highest levels of influence at work, from 33.2609, [t (259) = 1.519, p = .1300, CI: 95% -.018 to .138]. As can be seen from Table 5.11, the effect size started to decrease as influence at work increased.

The simple slopes Figure 5.1 shows that when influence at work was high and emotional demands average, the GWB scores decreased, depicting good general well-being. As expected, when influence at work was high and emotional demands low, general well-being scores were at their lowest showing good health. When influence at work was low and emotional demands high, general well-being scores had the highest score of 22 depicting poor general well-being. When influence at work was average and emotional demands high, general well-being scores had the second highest score of 19 also reflecting poor general well-being and above the average score of 18 reported in the literature (e.g. Bergh, Leka & Zwetsloot, 2018). When both emotional demands and influence at work were high, general well-being was still relatively high, 16.66 above the cut off scores reported for professionals, which is 15.87. When influence at work was average and emotional demands low, general well-being was good as shown by low scores of general well-being. The results suggest that influence at work moderates the relationship between emotional demands and general well-being and support the hypothesis that the relationship between job demands and general well-being will be weaker when job resources are high and becomes stronger when job resources are low. Good general well-being is experienced in situations when job demands are low and job resources high. The results are shown in Table 5.11.

Table 5.11

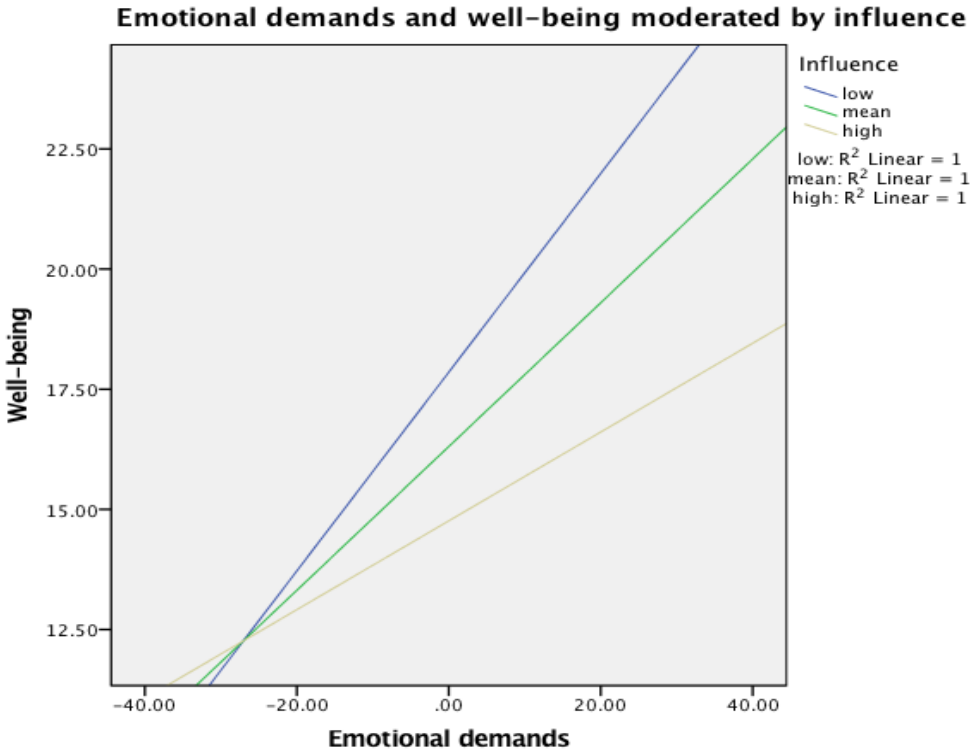
Influence at Work Moderates the Relationship Between Emotional Demands and General Well-Being

Variable	*B*	*SE B*	*T*	*P*	95% confidence Interval	
					LL	*UL*
Constant	16.3092	.449	36.350	.0000	15.426	17.193
Emotional demands	.150	.022	6.804	.0000	.106	.193
Influence	-.073	.021	-3.436	.0007	-.115	-.031
Influence x emotional demands	-.003	.001	-2.859	.0046	-.005	-.001
Low Influence	.203	.029	7.204	.0000	.150	.263
Average	.150	.022	6.804	.0000	.106	.193
High influence	.092	.031	3.008	.0029	.032	.153

R^2 =.1998, $\triangle R^2$= .0256

Figure 5.1

The Moderating Role of Influence at Work on the Relationship Between Emotional Demands and General Well-Being



5.8.5.2 Influence at Work Moderates the Relationship Between Work Pace and General Well-Being.

The model explained 6.19% of variance in general well-being. [*F* (3,259) = 5. 610, *p* = .0010. *R²* =. 062]. Work pace predicted general well-being [*t* (259) = 2.687, *p* =. 0077]. Influence at work had a negative relationship with general well-being [*t* (259) = -2.576, *p* = .0106]. The interaction between influence at work and work pace was significant [*t* (259) = -2.317, *p* = .0213, ΔR^2= .0198]. The interaction term explained an additional 1.98% of total variance in general well-being.

The conditional effects revealed that at low levels of influence at work, the relationship between work pace and general well-being was significant, *p* = .0008, at average the effect decreased but was still significant, *p* = .0077. However, at high levels of influence at work the relationship was not significant, *p* =.7214.

The Johnson-Neyman significant regions were significant when levels of influence at work were between -41.7391 and 6.5983. Influence at work scores ranged from -41.7391 to 52.0109. As shown in Figure 5.2, the highest score of general well-being occurred when influence at work was low and work pace was high. When work pace was average and influence at work was low, general well-being scores were still in the high range which depicts poor general well-being. As expected, the scores were lowest when influence at work was high and work pace was low, followed by when influence at work was average and work pace was low and when influence at work was high and work pace average, reflecting the conditions in which good general well-being was experienced. The results support the moderating effect of influence at work on the relationship between work pace and general well-being (see Table 5.12).

Table 5.12

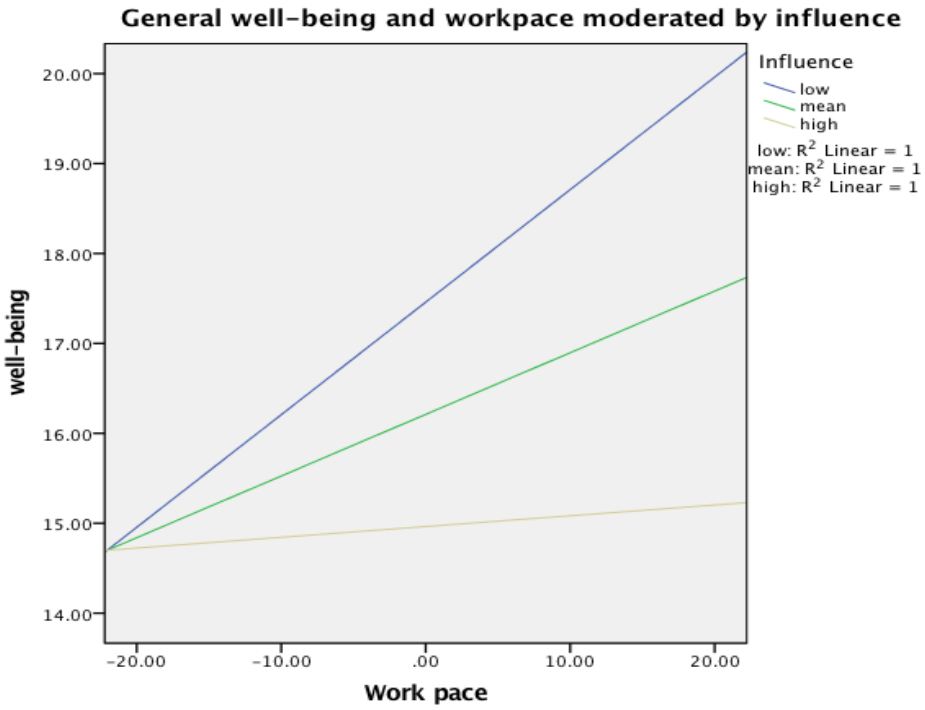
Influence at Work Moderates the Relationship Between Work Pace and General Well-Being

Variable	B	*SE B*	T	*P*	95% confidence Interval	
					LL	*UL*
Constant	16.212	.483	33.586	.0000	15.261	17.162
Work pace	.069	.026	2.687	.0077	.018	.119
Influence	-.059	.023	-2.576	.0106	-.104	-.014
Influence x work pace	-.003	.001	-2.317	.0213	-.005	-.000
Low influence	.125	.037	3.378	.0008	.052	.198
Average	.069	.026	2.687	.0077	.018	.119
High influence	.012	.034	.357	.7214	-.054	.078

R^2 =.1998, $\triangle R^2$=

Figure 5.2

The Moderating Role of Influence at Work on the Relationship Between Work Pace and General Well-Being



5.8.5.3 Possibilities for Development Moderates the Relationship Between Work Family Conflict and General Well-Being

The multiple regression model for testing the above hypothesis explained 34.92% of variance in general well-being [*F* (3, 258) = 45. 432, *p*= .0000. R^2 =. 3492]. The relationship between work family conflict and general well-being was significant [*t* (259) = 11.128, *p* =. 0000]. Possibilities for development had a negative significant relationship with general well-being [*t* (259) = -2.901, *p* = .0040]. The interaction term was also significant [*t* (259) = 2.5144, *p* = .0125, ΔR^2= .0162]. The interaction product explained an additional 1.62% of the variance in general well-being.

The conditional effects were highly significant at all levels of possibilities for development, *p* = .0000 respectively. This relationship was investigated further through the Johnson-Neyman region of significance. It showed that at very low levels of possibilities for development, the relationship was negative and non-significant. The range of significance commenced from -58.5937 until the highest value of

30.4748. As possibilities for development increased, the relationship became positive from .4748 and highly significant from -34.5252 [*t* (259) = 4.6285, *p* = .0000, CI: 95% .0646 to .1602].

The simple slopes test revealed that the best general well-being was experienced when possibilities for development were high and work family conflict low, followed by low work family conflict and average possibilities for development, then when both possibilities for development and work family conflict were low. Poor general well-being was experienced in situations where possibilities for development were low and work family conflict was high, then when possibilities for development were average and work family conflict was high. Interestingly, when both possibilities for development and work family conflict were high, general well-being was poor but not as bad as when possibilities for development were average or low. This study supports that an increase in work family conflict is bad for well-being, although the presence of possibilities for development may reduce the impact, the presence of possibilities for development works best when work family conflict is low.

Table 5.13 shows the results and Figure 5.3 presents a visual representation of the relationship.

Table 5.13

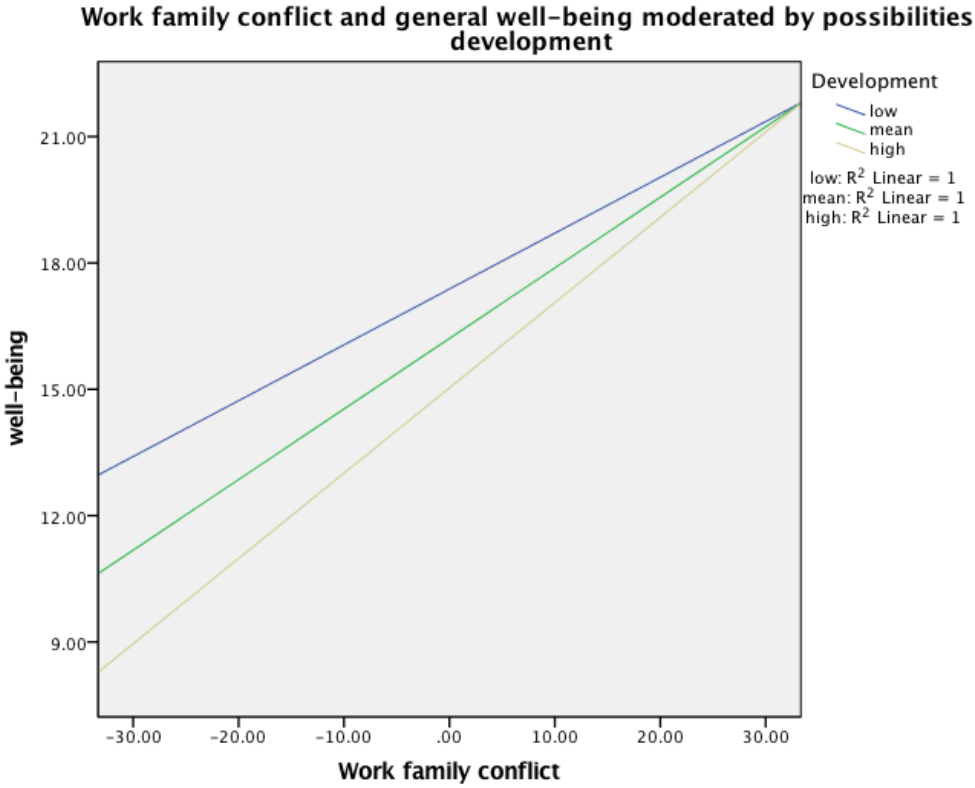
Possibilities for Development Moderates the Relationship Between Work Family Conflict and General Well-Being

Variable	B	*SE B*	T	*p*	97% confidence Interval	
					LL	*UL*
Constant	16.208	.403	40.266	.0000	15.415	17.001
Work family conflict	.168	.015	11.128	.0000	.138	.197
Development	-.054	.019	-2.901	.0007	-.090	-.017
Influence x work family conflict	.002	.001	2.514	.0046	.003	.003
Low Development	.133	.019	7.131	.0000	.096	.169
Average	.168	.015	11.128	.0000	.138	.197
High development	.203	.022	9.108	.0029	.159	.246

R^2 =. 3492: ΔR^2= .0162

Figure 5.3

The Moderating Role of Possibilities for Development on the Relationship Between Work Family Conflict and General Well-Being



Only significant interaction relationships for the hypotheses testing the moderation effect of job demands on the relationship between job resources and organisational health outcomes (commitment to the workplace, job satisfaction, job performance and work engagement) are presented in the following sections.

5.8.5.4 Emotional Demands Moderate the Relationship Between Commitment to the Workplace and Possibilities for Development.

The regression model accounted for 44.4% of the total variance in commitment to the workplace [F (3, 259) = 67. 879 p = .0000. R^2 =.444]. Possibilities for development predicted commitment to the workplace significantly [t (259) = 13.246, p =. 0000], emotional demands had a significant negative relationship with commitment to the workplace as predicted [t (259) = -5.2029, p = .0000]. The interaction term was also significant, [t (259) = 2.3083, p = .0218, ΔR^2= .0116]. The product term explained an additional 1.16% of the variance in general well-being.

The Johnson-Neyman region of significance did not find significant variation across levels of emotional demands, which were all significant. The simple slopes revealed that commitment to the workplace levels were highest when possibilities for development were high and emotional demands low, followed by when possibilities for development were high but emotional demands were average. Interestingly, commitment to the workplace was third highest when both emotional demands and possibilities for development were high. Commitment to the workplace was lowest when emotional demands were high and possibilities for development was low, followed when emotional demands were average but possibilities for development was low. The results show that the relationship between possibilities for development and commitment to the workplace is stronger when emotional demands are low although increasing possibilities for development in the presence of high emotional demands can still result in fairly high levels of commitment to the workplace. Results are shown in Table 5.14 and Figure 5.4.

Table 5.14

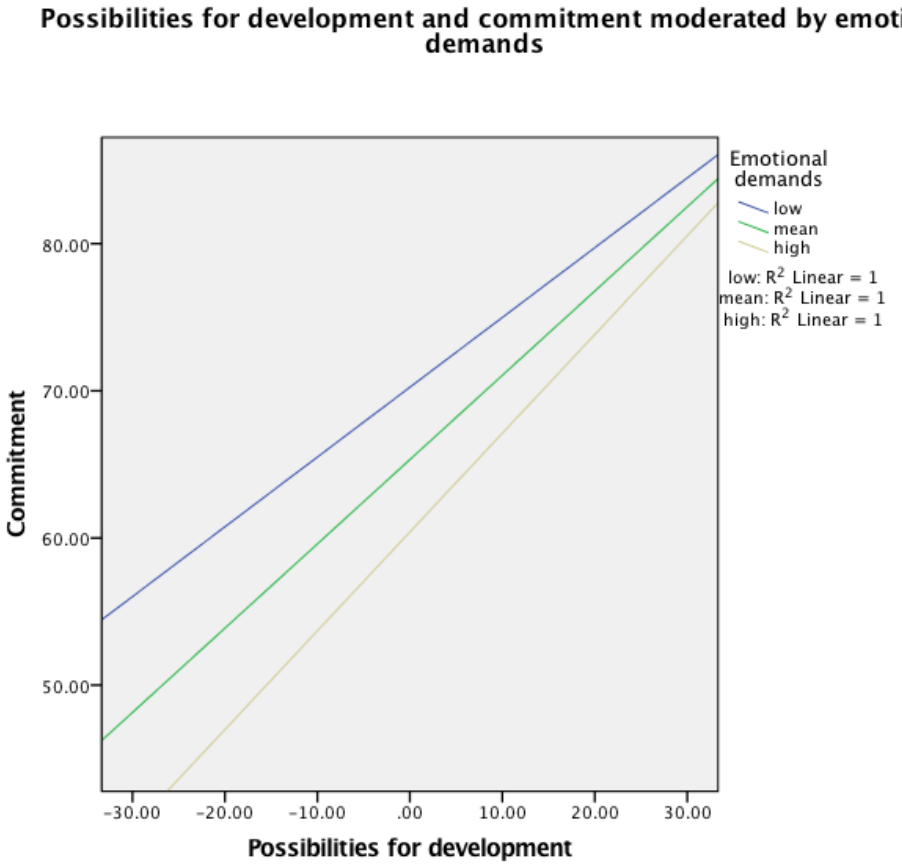
Emotional Demands Moderates the Relationship Between Possibilities for Development and Commitment to the Workplace

Variable	*B*	*SE B*	*T*	*p*	95% confidence Interval	
					LL	*UL*
Constant	65.3287	.9431	69.2670	.0000	63.4713	67.1860
Development	.5726	.0432	13.2456	.0000	.4875	.6578
Emotional demands	-.2395	.0460	-5.2029	.0007	-.3302	-.1489
Emotional demands x development	.0048	0021	2.3083	.0218	.0007	.0089
Low emotional demands	.4742	.0611	7.7572	.0000	.3538	.5945
Average	.5726	.0432	13.2456	.0000	.4875	.6578
High emotional demands	.6711	.0604	11.1196	.0000	.5523	.7900

R^2 =.4440: $\triangle R^2$= .0116

Figure 5.4

The Moderating Role of Emotional Demands on the Relationship Between Possibilities for Development and Commitment to the Workplace



5.8.5.5 Quantitative Demands Moderates the Relationship Between Commitment to the Workplace and Influence at Work.

The total variance in commitment to the workplace explained by the regression model was 21.1 % [*F* (3, 259) = 22. 883, *p* = .0000. R^2 =. 212]. The relationship between influence at work and commitment to the workplace was significant [*t* (259) = 4.517, *p* =. 0000], quantitative demands had a significant negative relationship with commitment to the workplace [*t* (259) = -5.459, *p* = .0000]. The interaction of quantitative demands and influence at work was significant [*t* (259) = 3.292, *p* = .0011, ΔR^2= .0335]. It explained an additional 3.35% of the variance in commitment to the workplace. The levels of commitment to the workplace were highest when influence at work was high and quantitative demands were low. Commitment to the workplace was also high when quantitative demands were low and influence at work

was average. Commitment to the workplace was lowest when influence at work was low and quantitative demands were high. The results indicate that high quantitative demands impact negatively on commitment to the workplace especially when influence at work is low but commitment to the workplace levels increase if influence at work is high but not to the same level as when quantitative demands are on average or low. This supports the hypothesis that quantitative demands moderate the relationship between influence at work and commitment to the workplace. Table 5.15 and Figure 5.5 depict this relationship.

Table 5.15

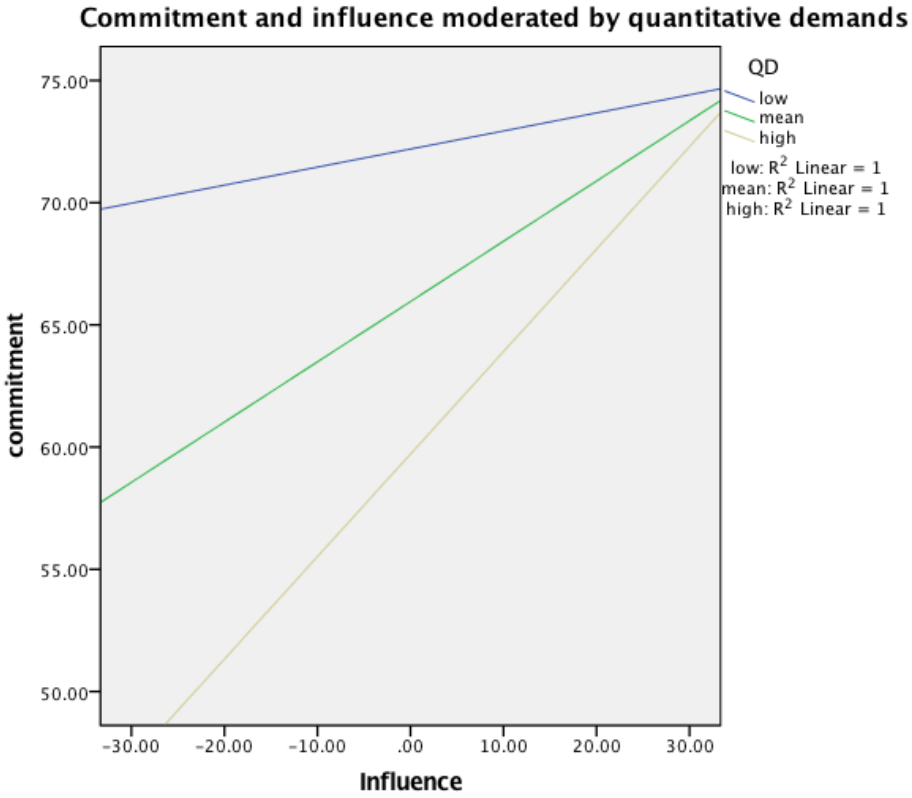
Quantitative Demands Moderates the Relationship Between Influence at Work and Commitment to the Workplace

Variable	*B*	*SE B*	*t*	*p*	95% confidence Interval	
					LL	*UL*
Constant	65.958	1.135	58.132	.0000	63.724	68.192
Influence	.247	.055	4.517	.0000	.140	.354
Quantitative demands	-.321	.059	-5.459	.0000	-.437	-.205
Quantitative demands x Influence	.009	.003	3.292	.0011	.004	.014
Low quantitative demands	.074	.068	1.086	.2784	-.060	.208
Average	.247	.055	4.517	.0000	.140	.354
High quantitative Demands	.420	.083	5.070	.0000	.257	.582

R^2 =. 212: ΔR^2= .0335

Figure 5.5

The Moderating Role of Quantitative Demands on the Relationship Between Influence at Work and Commitment to the Workplace



5.8.5.6 Work Family Conflict Moderates the Relationship Between Commitment to the Workplace and Influence at Work.

The model explained a total variance of 18.08% in commitment to the workplace [*F* (3,258) =18.690, *p* = .0000. R^2 =. 1808]. Influence at work significantly predicted commitment to the workplace [*t* (258) = 4.975, *p* =. 0000]. Work family conflict had a significant negative relationship with commitment to the workplace [*t* (258) = - 4.546, *p* = .0000]. The interaction was significant [*t* (258) = 2.444, *p* = .0152, ΔR^2= .0193], accounting for an additional 1.93% of variance in commitment to the workplace.

Analysis of the conditional effects showed that the relationship between commitment to the workplace and influence at work was not significant at low levels of work family conflict, *p* =.0625 but significant at high, *p* =.0000, and average levels of work family conflict, *p* =.0000.The Johnson-Neyman method of significant levels

showed that the relationship was not significant at low levels of work family conflict, it became significant from -.26.2668 up to the highest levels of work family conflict. Work family conflict ranges were between -47.9669 to 52. 0331.

The simple slopes analysis highlighted this relationship further. The highest level of commitment to the workplace was achieved when influence at work was high and work family conflict low, followed by when work family conflict was average but influence at work high. The lowest levels of commitment to the workplace were achieved when work family conflict was high and influence at work was low, followed by when influence at work was low and work family conflict was average. However, when both work family conflict and influence at work were high, commitment to the workplace levels remained fairly high but not as compared to when work family conflict was average or low. Again, these results suggest that work family conflict moderates the relationship between commitment to the workplace and influence at work. The results are presented in Table 5.16 and Figure 5.6.

Table 5.16

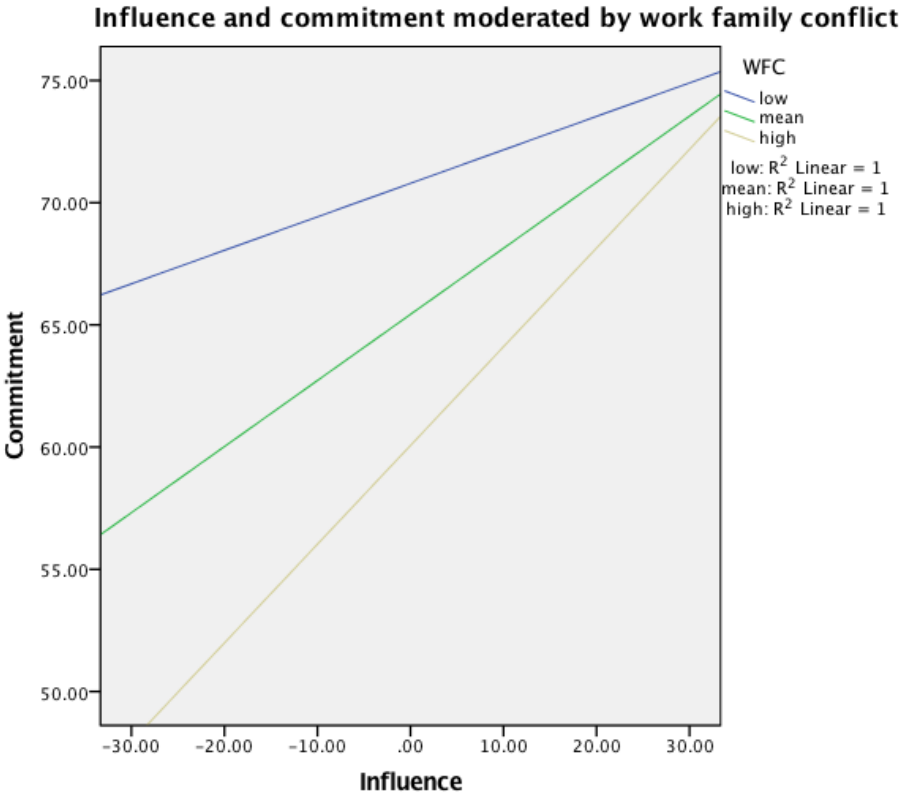
Work Family Conflict Moderates the Relationship Between Influence at Work and Commitment to the Workplace

Variable	*B*	*SE B*	*t*	*p*	95% confidence Interval	
					LL	*UL*
Constant	65.432	1.149	56.969	.0000	63.170	67.694
Influence	.271	.054	4.975	.0000	.163	.378
Work family conflict	-.197	.043	-4.546	.0000	-.282	-.112
Work family conflict x influence	.005	.002	2.444	.0152	.001	.009
Low work family conflict	.137	.073	1.871	.0625	-.007	.281
Average	.271	.054	4.975	.0000	.163	.378
High work family conflict	.404	.081	5.005	.0000	.245	.563

R^2 =. 1808: ΔR^2= .0193

Figure 5.6

The Moderating Role of Work Family Conflict on the Relationship Between Influence at Work and Commitment to the Workplace



5.8.5.7 Work Pace Moderates the Relationship Between Commitment to the Workplace and Possibilities for Development.

The model explained a total variance of 43.47% in commitment [*F* (3,259) = 65.352, *p* = .0000. R^2 =. 4347]. The relationship between possibilities for development and commitment to the workplace was significant [*t* (259) = 13.576, *p* =. 0000]. Work pace had a significant negative relationship with commitment to the workplace [*t* (259) = -4.782, *p* = .0000]. The interaction between work pace and possibilities for development was significant [*t* (259) = 2.333, *p* = .0204, ΔR^2= .0121]. It accounted for an additional 1.21% of variance in commitment to the workplace. The conditional effects were significant at all levels of work pace, *p* =. 0000.

The Johnson-Neyman significance regions showed that the relationship was not significant at the lowest levels of work pace. Work pace ranged from -65.6371 to

34.3629. It became significant from -63.1729 up to the highest levels of work pace, showing that there was much variation in significance levels.

The simple slopes analysis further explored this relationship. The highest level of commitment to the workplace occurred when possibilities for development were high and work pace was low, next when possibilities for development were high and work pace average, then when both work pace and possibilities for development were high. The lowest levels of commitment to the workplace were experienced when work pace was high and possibilities for development was low, followed by when work pace was average and possibilities for development was low, then when both possibilities for development and work pace were low. The moderating effect of work pace on the relationship between commitment to the workplace and possibilities for development was supported. The results are presented in Table 5.17 and Figure 5.7.

Table 5.17

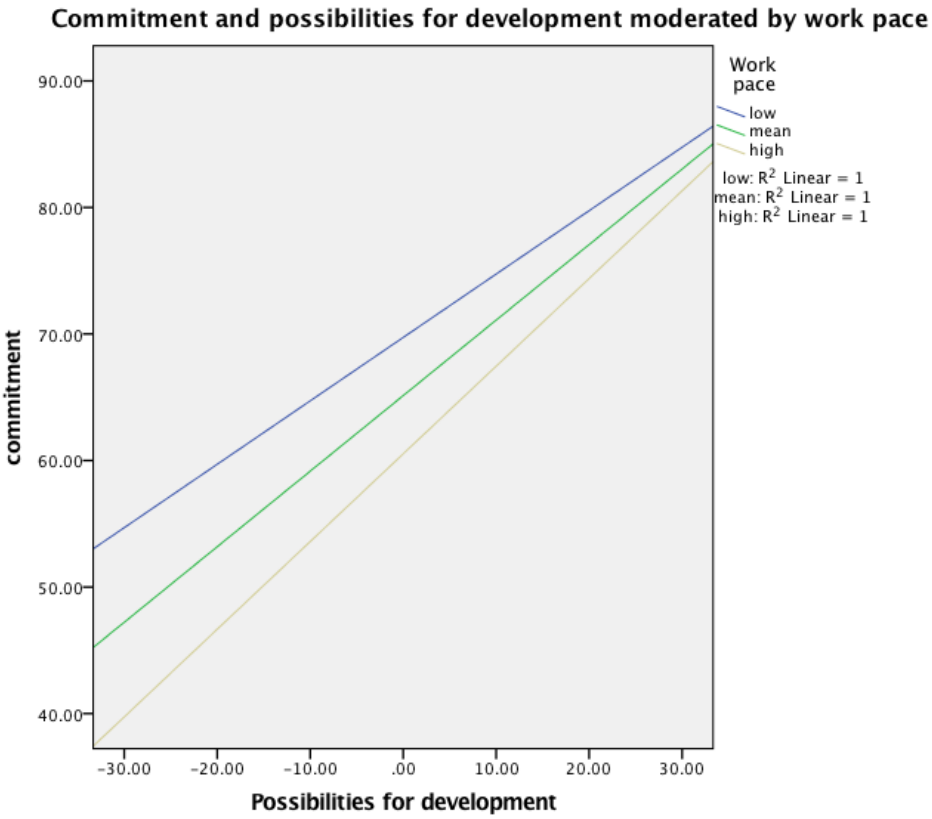
Work Pace Moderates the Relationship Between Possibilities for Development and Commitment to the Workplace

Variable	***B***	***SE B***	***Tt***	***p***	***95% confidence***	**Interval**
					LL	*UL*
Constant	65.131	.958	68.012	.0000	63.245	67.017
Possibilities for development	.597	.044	13.576	.0000	.510	.684
Work pace	-.242	.051	-4.782	.0000	-.341	-.142
Work pace x possibilities for development	.005	.002	2.333	.0204	.001	.009
Low work pace	.501	.059	8.496	.0000	.385	.617
Average	.597	.044	13.576	.0000	.510	.684
High work pace	.693	.061	11.281	.0000	.572	.814

R^2 =. 4347: ΔR^2= .0121

Figure 5.7

The Moderating Role of Work Pace on the Relationship Between Possibilities for Development and Commitment to the Workplace



5.8.5.8 Work Pace Moderates the Relationship Between Commitment to the Workplace and Influence at Work.

The model explained a total variance of 11.15% in commitment to the workplace [*F* (3,259) = 10.669, *p* = .0000. *R²* =. 1115]. There was a significant relationship between influence at work and commitment to the workplace [*t* (259) = 4.851, *p* =. 0000]. Work pace had a significant negative relationship with commitment to the workplace [*t* (259) = -2.804, *p* = .0054]. The interaction between work pace and influence at work was significant [*t* (259) = 1. 977, *p* = .0491, ∆*R²*= .0136]. It accounted for an additional 1.36% of variance in commitment to the workplace.

As shown in Table 5.18, the conditional effects were significant at all levels of work pace but weaker at the lowest level of work pace than at high and average levels. The Johnson-Neyman significance regions showed that the relationship was not significant at lower levels of work pace. Work pace ranged from -65.6371 to 34.3629. Significant levels commenced from -20.7736 up to 34.3629.

The simple slopes analysis (see Figure 5.8) revealed that commitment to the workplace was highest in situations of low work pace and high influence at work, at average work pace and high influence at work and when both work pace and influence at work were high. Commitment to the workplace was lowest in conditions of high work pace and low influence at work, average work pace and low influence at work, and at high work pace and average influence at work. The hypothesis that work pace moderates the relationship between influence at work and commitment to the workplace was supported.

Table 5.18

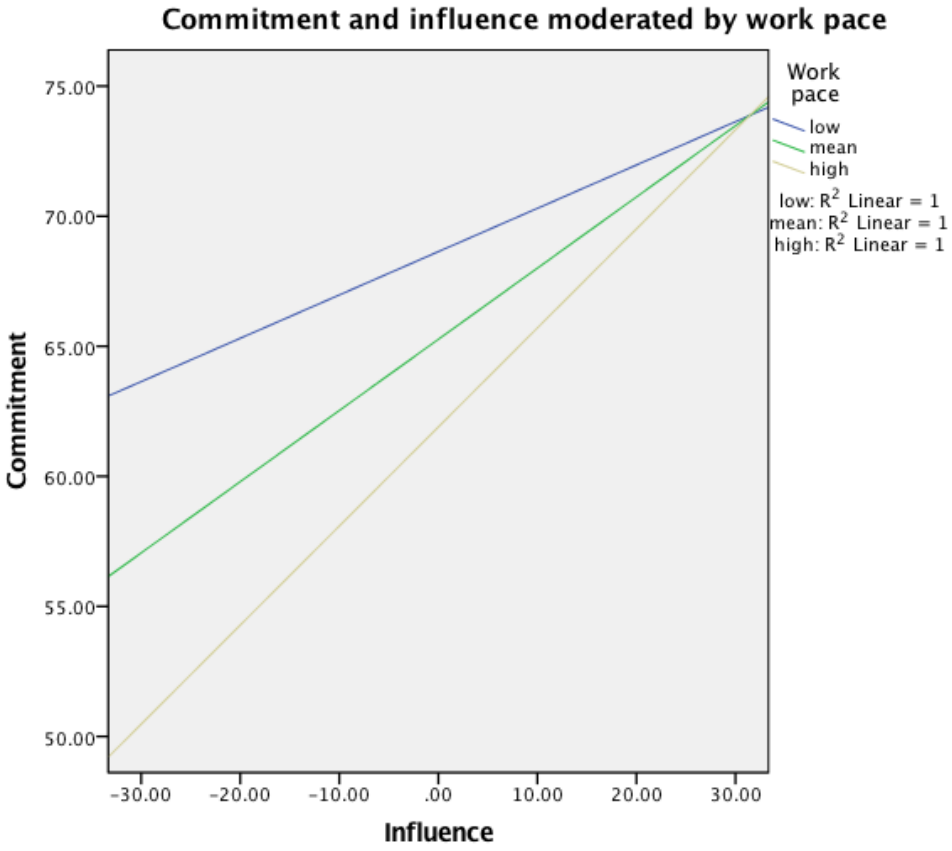
Work Pace Moderates the Relationship Between Influence at Work and Commitment to the Workplace

Variable	*B*	*SE B*	*t*	*p*	95% confidence Interval	
					LL	*UL*
Constant	65.267	1.194	54.683	.0000	62.917	67.617
Influence	.274	.056	4.851	.0000	.163	.385
Work pace	-.177	.063	-2.804	.0054	-.301	-.053
Work pace x influence	.006	.003	1.977	.0491	.000	.011
Low work pace	.167	.076	2.184	.0299	.016	.317
Average	.274	.056	4.851	.0000	.163	.385
High work pace	.381	.080	4.751	.0000	.223	.539

R^2 =. 1115: ΔR^2= .0136

Figure 5 8

The Moderating Role of Work Pace on the Relationship Between Influence at Work and Commitment to the Workplace



5.8.5.9 Quantitative Demands Moderates the Relationship Between Quality of Leadership and Job Performance.

The model accounted for 9.43% of variance in job performance [*F* (3.256) = 8. 7470, *p* = .0000, R^2 =. 0943]. The relationship between quality of leadership and job performance was significant [*t* (256) = 1.973, *p* =. 0496]. However, the relationship between quantitative demands was negative but not significant [*t* (256) = -1.8582, *p* =. 0643]. The interaction of quality of leadership and quantitative demands was significant [*t* (256) = 3.4654, *p* = .0006, ΔR^2= .0432]. The interaction explained an additional 4.32% of variance in job performance.

The conditional effects were significant at average and high levels of quantitative demands, becoming more significant as quantitative demands increased.

The levels of quantitative demands ranged from -40.8610 to 52.8890. Significant levels were between -.0204 to 52.8890 which are higher levels of quantitative demands.

The simple slopes analysis revealed that job performance was highest when both quantitative demands and leadership quality were high and lowest when quantitative demands were high and leadership quality was low. However, when both quantitative demands and leadership quality were low, performance was still relatively high. The results are presented in Table 5.19 and Figure 5.9. These results are consistent with the assertion that job resources gain their most motivational power when job demands are high (Halbesleben & Wheeler, 2008).

Table 5.19

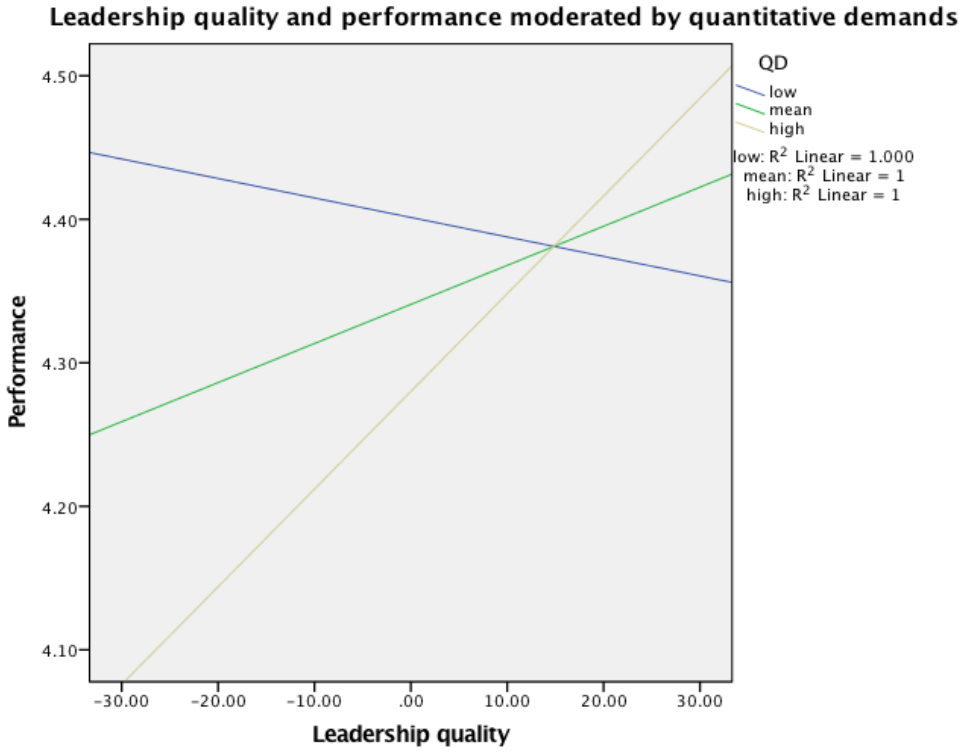
Quantitative Demands Moderates the Relationship Between Quality of Leadership and Job Performance

Variable	*B*	*SE B*	*t*	*P*	95% confidence Interval	
					LL	*UL*
Constant	4.3407	.0321	135.1009	.0000	4.2774	4.4040
Leadership quality	.0027	.0014	1.9727	.0496	.0000	.0054
Quantitative demands	-.0031	.0017	-1.8582	.0643	-.0064	.0002
Quantitative demands x leadership quality	.0002	.0001	3.4654	.0006	.0001	.0003
Low quantitative demands	-.0014	.0019	-.7050	.4814	-.0052	.0024
Average	.0027	.0014	1.9727	.0496	.0000	.0054
High quantitative demands	.0068	.0017	4.0115	.0001	.0035	.0102

R^2 =. 0943: ΔR^2= .0432

Figure 5.9

The Moderating Role of Quantitative Demands on the Relationship Between Quality of Leadership and Job Performance



5.8.5.10 Quantitative Demands Moderates the Relationship Between Social Support From Colleagues and Job Performance.

The model explained 6.86 % of variance in job performance [*F* (3.256) = 6.188, *p* = .0005, R^2 =. 0686]. Social support from colleagues significantly predicted job performance [*t* (256) = 2.572, *p* =. 0107]. Quantitative demands had a significant negative relationship with job performance [*t* (256) = -2.127, *p* = .0344]. The interaction between social support from colleagues and quantitative demands was significant [*t* (256) = 1.976, *p* = .0493, ΔR^2= .0144], accounting for an additional 1.44% of variance in job performance.

As shown in Table 5.20, the conditional effects were not significant at low levels of quantitative demands, *p* = .5527, but significant at average, *p* = .0107, and at high levels of quantitative demands, *p* = .0014. The Johnson-Neyman significance regions were from -5.8751 to 52.8890. Quantitative demands ranged from -40.8610 to

52.8890, showing significant levels at higher levels of the predictor. The simple slopes analysis showed that job performance was highest when quantitative demands were low and social support from colleagues high, and then when quantitative demands were average and social support from colleagues high, followed by when both quantitative demands and social support from colleagues were high. The lowest levels of job performance occurred when quantitative demands were high and social support from colleagues was low, then when quantitative demands were average and social support from colleagues was low, and when quantitative demands were high and social support from colleagues was average. The results suggest that quantitative demands moderate the relationship between social support from colleagues and job performance (see Table 5.20 and Figure 5.10).

Table 5.20

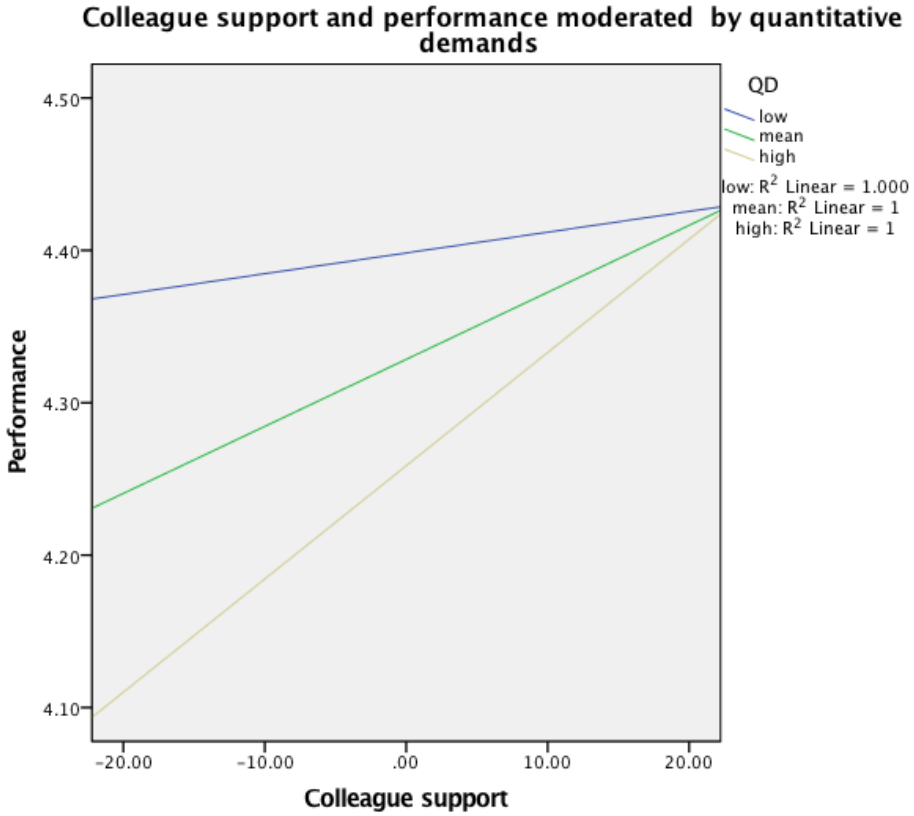
Quantitative Demands Moderates the Relationship Between Social Support From Colleagues and Job Performance

Variable	*B*	*SE B*	*T*	*p*	95% confidence Interval	
					LLCI	ULCI
Constant	4.3285	.0325	133.1272	.0000	4.2645	4.3926
Social support from colleagues	.0044	.0017	2.5724	.0107	.0010	.0078
Quantitative demands	-.0036	.0017	-2.1274	.0344	-.0069	-.0003
Quantitative demands x social support from colleagues	.0002	.0001	1.9757	.0493	.0000	.0003
Low quantitative demands	.0014	.0023	.5945	.5527	-.0032	.0059
Average	.0044	.0017	2.5724	.0107	.0010	.0078
High quantitative demands	.0074	.0023	3.2294	.0014	.0029	.0120

R^2 =. 0686: ΔR^2= .0144

Figure 5.10.

The Moderating Role of Quantitative Demands on the Relationship Between Social Support From Colleagues and Job Performance



5.8.5.11 Quantitative Demands Moderates the Relationship Between Influence at Work and Job Performance.

10.8 % of variance in job performance was accounted for by the regression model [*F* (3.256) = 10.187, *p* = .0000, R^2 =. 1082]. The relationship between influence at work and job performance was significant [*t* (256) = 3. 373, *p* =. 0009]. Quantitative demands had a significant negative relationship with job performance [*t* (256) = -2.046, *p* = .0418]. The interaction between influence at work and quantitative demands was significant [*t* (256) = 3.873, *p* = .0001, ΔR^2= .0531]. It accounted for an additional 5.31% of variance in job performance.

The conditional effects were not significant at low levels of quantitative demands, *p* = .7880, but significant at average, *p* = .0009, and highly significant at high levels of quantitative demands, *p* = .0000.

The Johnson-Neyman significance regions were from -7.4393 to 52.8890 whilst quantitative demands ranged from -40. 8610 to 52.8890.

Interestingly, simple slopes analysis revealed highest levels of job performance occurring in situations where both influence at work and quantitative demands were high, when quantitative demands were on average levels and influence at work was high and when both quantitative demands and influence at work were low. Lowest levels of job performance occurred when quantitative demands were high but influence at work was low, then when quantitative demands were average but influence at work was low and when quantitative demands were high and influence at work was average. The results suggest that quantitative demands moderate the relationship between job performance and influence at work (see Table 5.21 and Figure 5.11).

Table 5.21

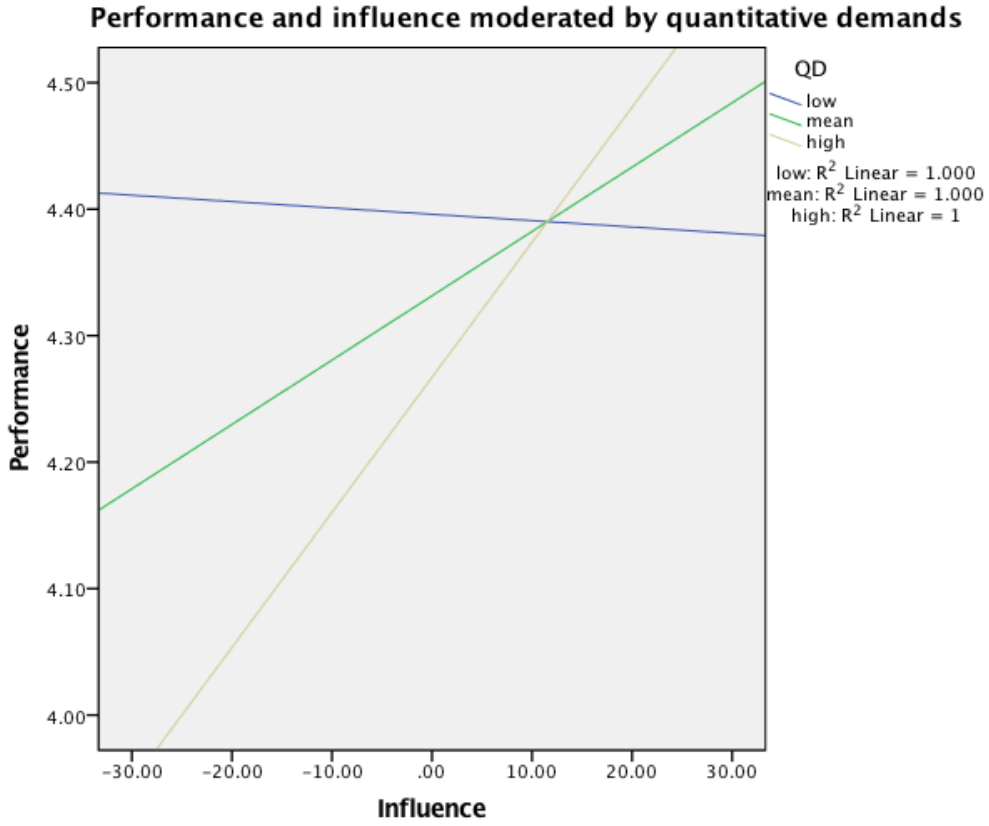
Quantitative Demands Moderates the Relationship Between Influence at Work and Job Performance

Variable	*B*	*SE B*	*T*	*P*	95% confidence Interval	
					LL	*UL*
Constant	4.3315	.0313	138.5872	.0000	4.2700	4.3931
Influence	.0051	.0015	3.3729	.0009	.0021	.0081
Quantitative demands	-.0033	.0016	-2.0456	.0418	-.0065	-.0001
Quantitative demands x influence	.0003	.0001	3.8727	0001	.0001	.0004
Low quantitative demands	-.0005	.0019	-.2691	.7880	-.0042	.0032
Average	.0051	.0015	3.3729	.0009	.0021	.0081
High quantitative demands	.0107	.0023	4.6803	.0000	.0062	.0152

R^2 =. 1082: ΔR^2= .0531

Figure 5.11

The Moderating Role of Quantitative Demands on the Relationship Between Influence at Work and Job Performance



5.8.5.12 Work Family Conflict Moderates the Relationship Between Quality of Leadership and Job Performance.

The model accounted for 8.56% of variance in job performance [*F* (3.255) = 7.836, *p* = .0001, R^2 =. 0856]. The relationship between quality of leadership and job performance was significant [*t* (255) = 2.436, *p* =. 0156]. The relationship between work family conflict was negative and significant [*t* (255) = -2.644, *p* =. 0087]. The interaction of quality of leadership and work family conflict was significant [*t* (255) = 2.2873, *p* = .0230, ΔR^2= .0191]. An additional 1.91% of variance in job performance was accounted for by the interaction of work family conflict and leadership quality. The conditional effects were significant at average, *p* =. 0156, and at high levels of work family conflict, *p* =. 0010. The levels of work family conflict ranged from -48.1064

to 51.8936. Significant levels were between -5.7413 to 51.8936 which are higher levels of work family conflict.

As expected, the simple slopes confirmed that job performance was highest at low levels of work family conflict and at high levels of quality of leadership, at average levels of quality of leadership and low levels of work family conflict, and at high levels of quality of leadership and average levels of work family conflict. Therefore, job performance was highest when leadership quality was high and work family conflict was low. The lowest levels of job performance occurred when work family conflict was high and leadership quality was low, when work family conflict was high and leadership quality was average and when work family conflict was average but quality of leadership was low. The results support the moderation effect of work family conflict on the relationship between job performance and quality of leadership (see Table 5.22 and Figure 5.12).

Table 5.22

Work Family Conflict Moderates the Relationship Between Quality of Leadership and Job Performance

Variable	*B*	*SE B*	*t*	*p*	95% confidence Interval	
					LL	*UL*
Constant	4.3229	.0318	136.0980	.0000	4.2603	4.3854
Leadership quality	.0033	.0013	2.4356	.0156	.0006	.0059
Work family conflict	-.0031	.0012	-2.6441	.0087	-.0055	-.0008
Work family conflict x leadership quality	.0001	.0000	2.2873	.0230	.0000	.0002
Low work family conflict	.0005	.0018	.2898	.7722	-.0030	.0041
Average	.0033	.0013	2.4356	.0156	.0006	.0059
High work family conflict	.0060	.0018	3.3426	.0010	.0025	.0096

R^2 =. 0856: ΔR^2= .0531

Figure 5.12

The Moderating Role of Work Family Conflict on the Relationship Between Quality of Leadership and Job Performance



5.8.5.13 Work Family Conflict Moderates the Relationship Between Influence at Work and Job Performance.

10. 22% of total variance in job performance was accounted for by the regression model [*F* (3.255) = 9.523, *p* = .0000, *R²* =. 1022]. Influence at work predicted job performance significantly [*t* (255) = 3.258, *p* =. 0013]. As predicted, the relationship between work family conflict and job performance was negative and significant [*t* (255) = -2.845 *p* =. 0048]. The interaction of influence at work and work family conflict was significant [*t* (255) = 2.627, *p* = .0092, ΔR^2= .0247], explaining an additional 2.47% of variance in job performance.

The conditional effects were significant at average, *p* =. 0013, and at high levels of work family conflict, *p* =. 0001, and not significant at lower levels of work family conflict, *p* =. 6447. The levels of work family conflict ranged from -48.1064 to 51.8936 on the Johnson-Neyman significant regions. Significant levels were between -12.1882 to 51.8936, which are within the higher levels of work family conflict. As expected, job performance was highest at low levels of work family conflict and at high levels of influence at work, at average levels of work family conflict and at high levels of influence at work and when both influence at work and work family conflict were high. Job performance was lowest when work family conflict was high and influence at work was low, when influence at work was low and work family conflict average, and when work family conflict was high and influence at work was average. The results support the moderation effect of work family conflict on the relationship between job performance and influence at work. The best job performance was found when work family conflict was low and when influence at work was high. In that regard, reducing work family conflict and increasing influence at work may enhance job performance (see Table 5.23 and Figure 5.13).

Table 5.23

Work Family Conflict Moderates the Relationship Between Influence at Work and Job Performance

Variable	*B*	*SEB*	*t*	*p*	95% confidence Interval	
					LL	*UL*
Constant	4.3118	.0310	139.0197	.0000	4.2507	4.3729
Influence	.0048	.0015	3.2582	.0013	.0019	.0077
Work family conflict	-.0033	.0012	-2.8453	.0048	-.0056	-.0010
Work family conflict x influence	.0001	.0001	2.6266	.0092	.0000	.0002
Low work family Conflict	.0009	.0020	.4617	.6447	-.0030	.0048
Average	.0048	.0015	3.2582	.0013	.0019	.0077
High work family conflict	.0087	.0022	3.9733	.0001	.0044	.0130

R^2 =. 1022: ΔR^2= .0247

Figure 5.13

The Moderating Role of Work Family Conflict on the Relationship Between Influence at Work and Job Performance



5.8.5.14 Work Family Conflict Moderates the Relationship Between Social Support From Colleagues and Job Satisfaction.

The regression model accounted for 19.89% of variance in job satisfaction [*F* (3, 256) = 20.862, *p* = .0000. R^2 =. 1989]. All variables significantly predicted job satisfaction, social support from colleagues [*t* (256) = -5.400, *p* =. 0000], the relationship between work family conflict and job satisfaction was negative [*t* (256) = -.4.101, *p* = .0001]. The interaction term was significant [*t* (256) = 2.191, *p* = .0294, ΔR^2= .0153], explaining an additional 1.53% of variance in job satisfaction. The moderation was highly significant at lower levels of work family conflict relatively.

This trend was reflected by the Johnson-Neyman significance region where social support from colleagues was highly significant at lower levels of work family conflict and not significant at higher levels. Significant levels ranged from -48.0702 to 32.1736. Work family conflict ranged from -48.0702 to 51.9298.

As predicted, the lowest levels of job satisfaction were experienced when work family conflict was high and social support from colleagues was low. The highest levels of job satisfaction occurred when work family conflict was low and social support from colleagues was high, lending support for the moderating effect of work family conflict on social support from colleagues and job satisfaction. The results are shown in Table 5.24 and Figure 5.14.

Table 5.24

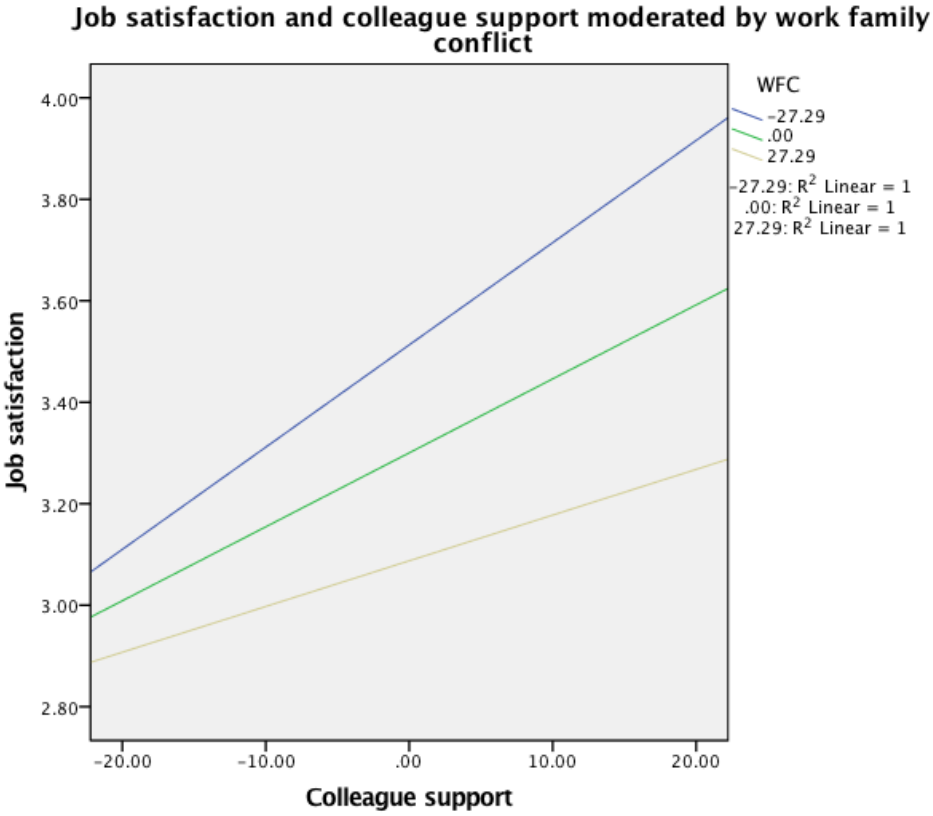
Work Family Conflict Moderates the Relationship Between Social Support From Colleagues and Job Satisfaction

Variable	*B*	*SE B*	*t*	*p*	95% confidence Interval	
					LL	UL
Constant	3.3004	.0515	64.0786	.0000	3.1989	3.4018
Social support from colleagues	.0146	.0027	5.3998	.0000	.0093	.0199
Work family conflict	-.0078	.0019	-4.1010	.0001	-.0115	-.0041
Social support from colleagues x work family conflict	-.0002	.0001	-2.1906	.0294	-.0004	.0000
Low work family conflict	.0202	.0037	5.4784	.0000	.0129	.0274
Average	.0146	.0027	5.3998	.0000	.0093	.0199
High work family conflict	.0090	.0037	2.4085	.0167	.0016	.0164

R^2 =. 1989: ΔR^2= .0153

Figure 5.14

The Moderating Role of Work Family Conflict on the Relationship Between Social Support From Colleagues and Job Satisfaction



5.8.5.15 Emotional Demands Moderates the Relationship Between Influence at Work and Job Satisfaction

The regression model explained 19.37% of variance in job satisfaction [*F* (3. 257) = 20.261, *p* = .0000]. *R²* =. 1937]. Influence at work significantly predicted job satisfaction [*t* (257) = 5.415, *p* =. 0000], emotional demands had a significant negative relationship with job satisfaction [*t* (257) = -.5.124, *p* = .0000]. The interaction term was significant [*t* (257) = 3.1358, *p* = .0019, ΔR^2= .0313]. It explained an additional 3.13% of variance.

As highlighted in Table 5.25, the conditional effects showed that the relationship between influence at work and job satisfaction was not significant at low levels of

emotional demands, p = .0587, but was significant at average levels of emotional demands, p = .0000, and at high levels of emotional demands, p =. 0000.

This relationship was further explored using the Johnson-Neyman significance regions which also indicated that the moderation was not significant at very low levels of emotional demands. The significance region ranged from -19.9494 to 50.9971. Emotional demands ranged from -49.0029 to 50.9971. In addition, the simple slopes analysis (see Figure 5.15) showed that job satisfaction was highest when emotional demands were low and influence at work was high and lowest when emotional demands were high and influence at work was low. Interestingly, when both influence at work and emotional demands were high, job satisfaction was relatively high but not similar to levels when emotional demands were on average and influence was low.

Table 5.25

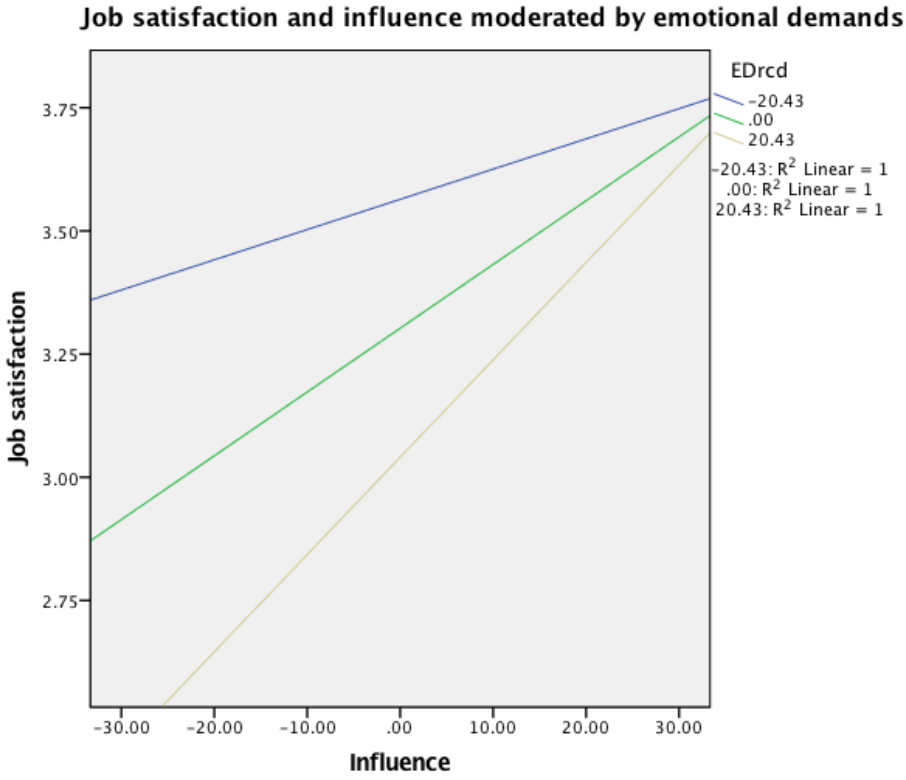
Emotional Demands Moderates the Relationship Between Influence at Work and Job Satisfaction

Variable	*B*	*SE B*	*T*	*p*	95% confidence Interval	
					LL	*UL*
Constant	3.3026	.0507	65.0901	.0000	3.2026	3.4025
Influence	.0129	.0024	5.4146	.0000	.0082	.0177
Emotional demands	-.0128	.0025	-5.1240	.0000	-.0177	-.0079
Emotional demands x influence	.0003	.0001	3.1358	.0019	.0001	.0005
Low emotional demands	.0061	.0032	1.8993	.0587	-.0002	.0125
Average	.0129	.0024	5.4146	.0000	.0082	.0177
High emotional demands	.0198	.0032	6.1190	.0029	.0134	.0261

R^2 =. 1937: ΔR^2= .0313

Figure 5.15

The Moderating Role of Influence at Work on the Relationship Between Emotional Demands and Job Satisfaction



5.8.5.16 Work Pace Moderates the Relationship Between Influence at Work and Job Satisfaction.

9.06 % of variance in job satisfaction was explained by the multiple regression model [*F* (3. 257) = 8.398, *p* = .0000. *R²* =. 0906]. The relationship between influence at work and job satisfaction was significant [*t* (257) = 4.566], *p* =. 0000 and work pace had a negative but non-significant relationship with job satisfaction [*t* (257) = -.840, *p* = .4019]. The interaction term was significant [*t* (257) = 2.275, *p* = .0238 ΔR^2= .0186]. It explained an additional 1.86% of variance in job satisfaction.

The relationship between influence at work and job satisfaction was not significant at low levels of work pace, *p* =. 0808, but significant at average levels, *p* =. 0000, and at high levels of work pace, *p* =. 0000.

The same tendency was observed with the Johnson-Neyman significance regions. Work pace levels commenced at -65.6128 but significant levels only began at -17.4867 until 34.3872, which was the highest level of work pace.

Interestingly, as Figure 5.16 shows, the highest levels of job satisfaction were experienced when both work pace and influence at work were high, then when work pace was average and influence at work was high. The third highest level of job satisfaction occurred when work pace was low but influence at work was high, thus highest levels of job satisfaction were experienced when influence at work levels were high rather than low. The lowest level of job satisfaction occurred when work pace was high and influence at work was low. These results support the notion that work pace moderates the relationship between job satisfaction and influence at work (see Table 5.26).

Table 5.26

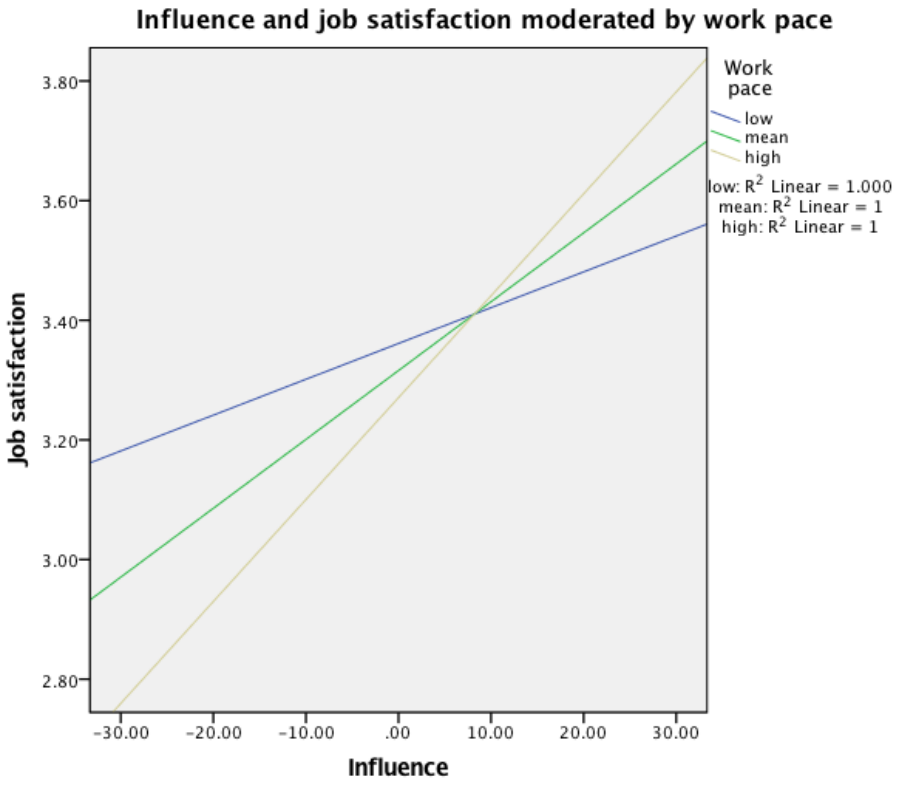
Work Pace Moderates the Relationship Between Influence at Work and Job Satisfaction

Variable	*B*	*SE B*	*T*	*p*	95% confidence Interval	
					LLCI	ULCI
Constant	3.3160	.0535	61.9465	.0000	3.2106	3.4214
Influence	.0115	.0225	4.5661	.0000	.0065	.0165
Work pace	-.0024	.0028	-.8397	.4019	-.0079	.0032
Influence x work pace	-.0003	.0001	2.2747	.0238	.0000	.0005
Low work pace	.0060	.0034	1.7528	.0808	-.0007	.0127
Average work pace	.0115	.0025	4.5661	.0000	.0065	.0165
High work pace	.0170	.0036	4.7522	.0000	.0100	.0241

R^2 =. 0906: ΔR^2= .0186

Figure 5.16

The Moderating Role of Influence at Work on the Relationship Between Work Pace and Job Satisfaction



5.8.5.17 Quantitative Demands Moderates the Relationship Between Influence at Work and Job Satisfaction.

The model explained 19.38% of variance in job satisfaction [*F* (3. 257) = 20.270, *p* = .0000. R^2 =. 1938]. The relationship between influence at work and job satisfaction was significant [*t* (257) = 4.288, *p* =. 0000]. Quantitative demands had a negative significant relationship with job satisfaction [*t (257)* = -5.257, *p* = .0000]. The interaction of quantitative demands and influence at work was significant [*t* (257) = 2.758, *p* = .0062 ΔR^2= .0242]. It explained an additional 2.42% of variance in job satisfaction.

Conditional effects were not significant at lower levels of quantitative demands, *p* = .1852, but were significant at the average level, *p* = .0000, and at high levels of quantitative demands, *p* = .0000. The range of quantitative demands on the Johnson-

Neyman significant regions were between -40.9290 and 52.8210. Significant levels were between -15.2305 and 52.8210 showing that the relationship was more significant at higher levels of quantitative demands.

Further investigations through simple slopes analysis showed that job satisfaction was lowest when quantitative demands were high and influence at work was low. The highest levels of job satisfaction were experienced when quantitative demands were low and influence at work was high followed when influence at work was high and quantitative demands were average. The third highest level occurred when influence at work was high and quantitative demands were average rather than high. These results suggest that quantitative demands have a moderating effect on the relationship between influence at work and job satisfaction (see Table 5.27 and Figure 5.17).

Table 5.27

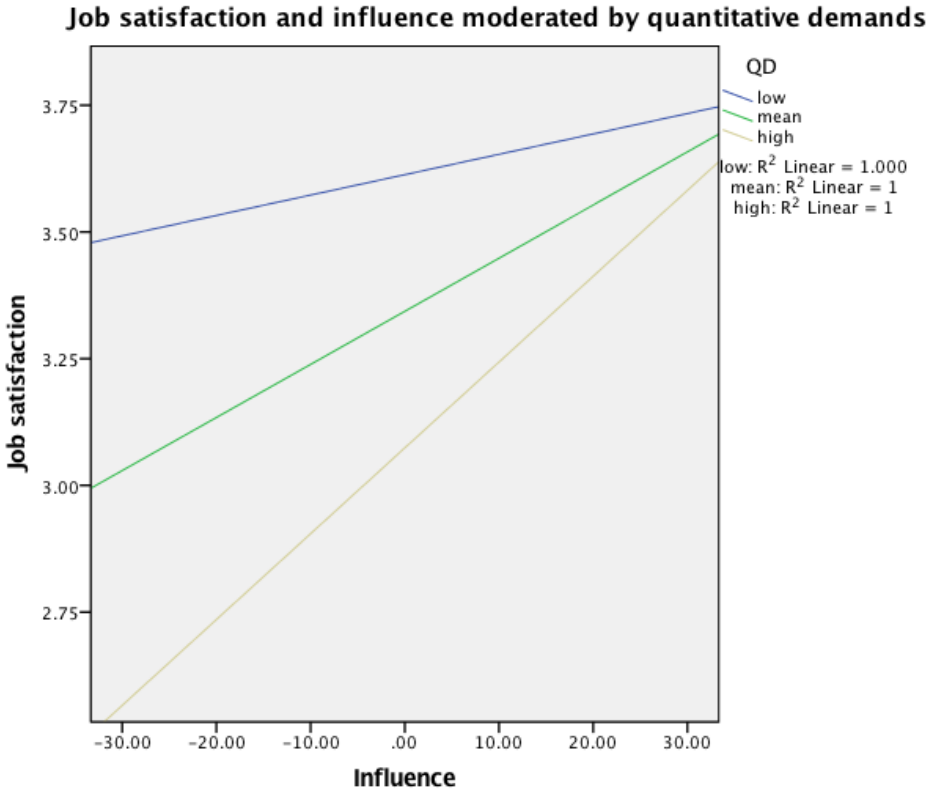
Quantitative Demands Moderates the Relationship Between Influence at Work and Job Satisfaction

Variable	*B*	*SE B*	*t*	*p*	95% confidence Interval	
					LLCI	ULCI
Constant	3.3436	.0509	65.7259	.0000	3.2434	3.4438
Influence	.0105	.0024	4.2881	.0000	.0057	.0153
Quantitative demands	-.0139	.0026	-5.2571	.0000	-.0191	-.0087
Influence x quantitative demands	.0003	.0001	2.7576	.0062	.0001	.0006
Low quantitative demands	.0040	.0030	1.3286	.1852	-.0019	.0100
Average quantitative demands	.0105	.0024	4.2881	.0000	.0057	.0153
High quantitative demands	.0169	.0037	4.5682	.0000	.0096	.0242

R^2 =. 1938: ΔR^2= .0242

Figure 5.17

The Moderating Role of Influence at Work on the Relationship Between Quantitative Demands and Job Satisfaction



5.8.5.18 Emotional Demands Moderates the Relationship Between Influence at Work and Work Engagement.

The multiple regression model explained 15.25% of variance in work engagement [*F* (3. 256) = 15. 119, *p* = .0000. *R²* =. 1525]. The relationship between influence at work and work engagement was significant [*t* (256) = 6.256, *p* =. 0000]. However, the relationship between emotional demands and work engagement was not significant [*t* (256) = -1.663, *p* = .0975]. The interaction term was significant [*t* (256) = 2.235, *p* = 0263, ΔR^2= .0168]. It explained an additional 1.68% of variance in work engagement.

The relationship between influence at work and work engagement was significant at all levels of emotional demands but more significant at higher levels of emotional demands.

The Johnson-Neyman significance regions values ranged from -48.9746 to 51.0254. They were significant from -29.8468 to 51.0254. The relationship was not significant at the lowest levels of emotional demands. The simple slopes analysis showed that bank employees experienced the most work engagement when both emotional demands and influence at work were high, when emotional demands were average and influence at work was high, and when emotional demands were low but influence at work was high. As expected, the lowest levels of work engagement were experienced when emotional demands were high and influence at work was low, followed by when emotional demands were on average and influence at work was low, then when both emotional demands and influence at work were low. Thus, emotional demands moderated the relationship between influence at work and work engagement (see Table 5.28 and Figure 5.18).

Table 5.28

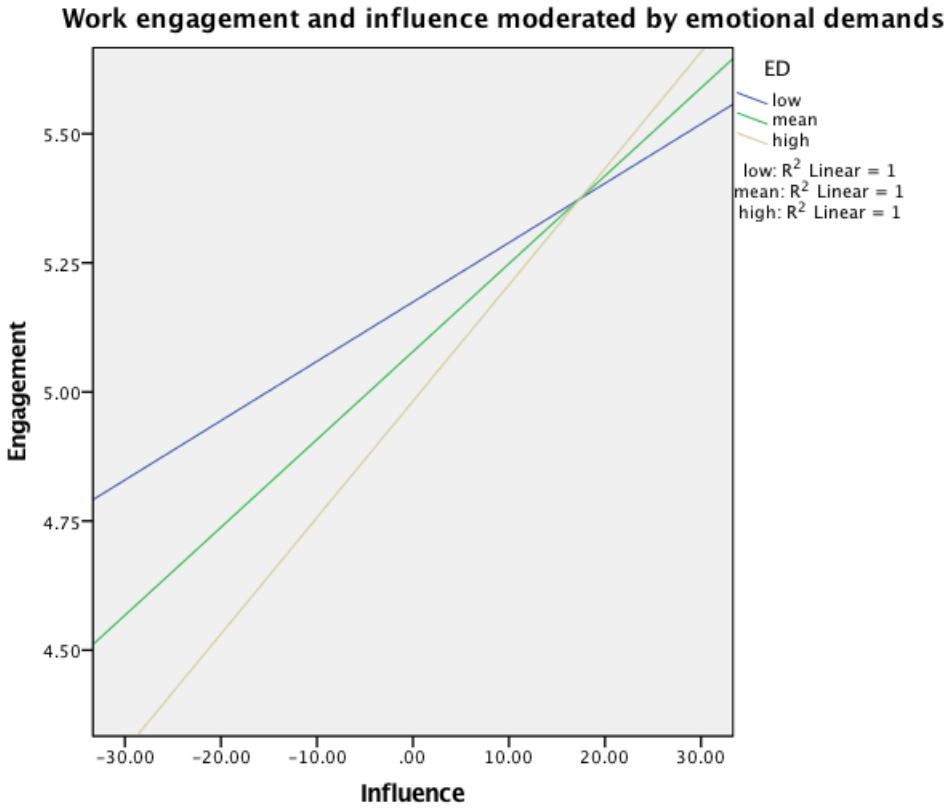
Emotional Demands Moderates the Relationship Between Influence at Work and Work Engagement

Variable	*B*	*SE B*	*T*	*p*	95% confidence Interval	
					LLCI	ULCI
Constant	5.0783	.0574	88.4369	.0000	4.9652	5.1914
Influence	.0170	.0027	6.2562	.0000	.0117	.0224
Emotional demands	-.0047	.0028	-1.6631	.0975	-.0103	.0009
Influence x emotional demands	.0003	.0001	2.2349	.0263	.0000	.0005
Low emotional demands	.0115	.0037	3.1153	.0020	.0042	.0188
Average emotional demands	.0170	.0027	6.2562	.0000	.0117	.0224
High emotional demands	.0225	.0037	6.1526	.0000	.0153	.0298

R^2 =. 1525: ΔR^2= .0168

Figure 5.18

The Moderating Role of Emotional Demands on the Relationship Between Influence at Work and Work Engagement



5.8.5.19 Quantitative Demands Moderates the Relationship Between Influence at Work and Work Engagement.

The total variance in work engagement explained by the multiple regression model was 22.26% [*F* (3. 256) = 24. 057, *p* = .0000. R^2 =. 2226]. The relationship between influence at work and work engagement was significant [*t* (256) = 6.107, *p* =. 0000]. Quantitative demands had a negative relationship with work engagement [*t* (256) = -.4.212, *p* = .0000]. The interaction of quantitative demands and influence at work was significant [*t* (256) = 3.286, *p* = .0012, ΔR^2= .0333]. It explained an additional 3.33% of the variance in work engagement.

The relationship of influence at work and work engagement was significant at all levels of quantitative demands but stronger at average and high levels. The significant region of Johnson-Neyman occurred from -21.8368 to 52.8890. The

significant range was between -40.8610 to 52. 8890.The simple slopes assessment showed that the highest levels of work engagement occurred when influence at work was high and quantitative demands were low, followed by when quantitative demands were average and influence at work was high, and when both quantitative demands and influence at work were high. Work engagement had lowest scores when influence at work was low and quantitative demands were high, when quantitative demands were on average and influence at work was low and when influence at work was average but quantitative demands was high respectively (see Table 5.29 and Figure 5.19).

Table 5.29

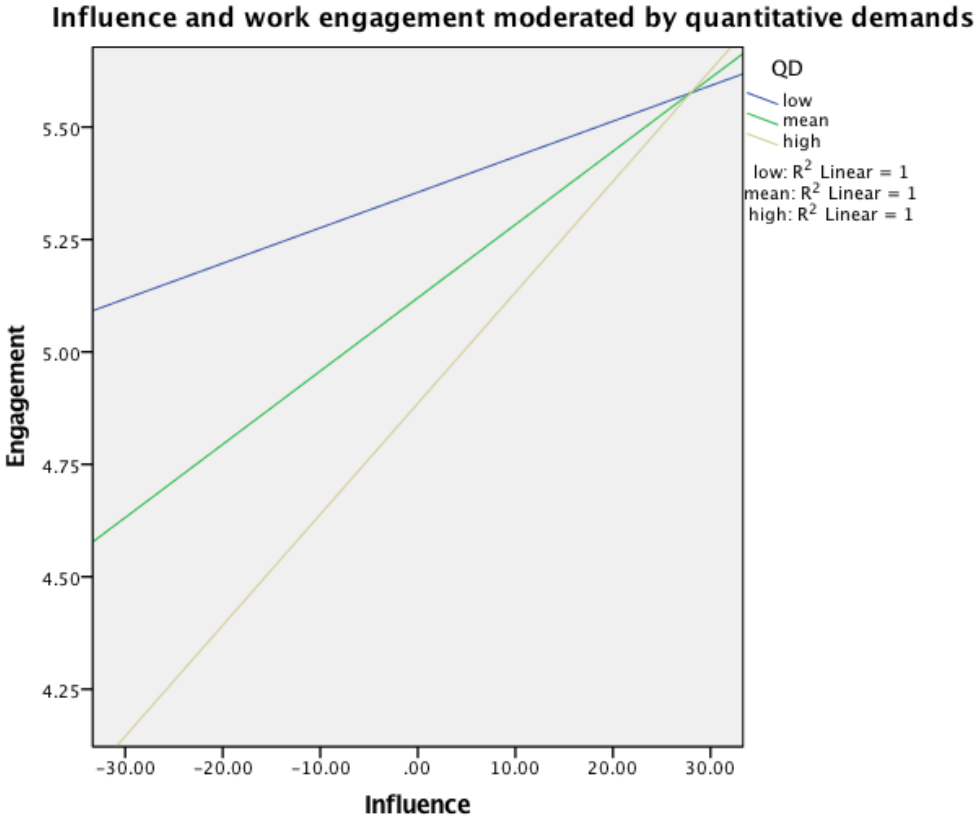
Quantitative Demands Moderates the Relationship Between Influence at Work and Work Engagement

Variable	*B*	*SE B*	*t*	*p*	95% confidence Interval	
					LL	*UL*
Constant	5.1204	.0553	92.6224	.0000	5.0116	5.2293
Influence	.0163	.0027	6.1067	.0000	.0110	.0215
Quantitative demands	-.0120	.0029	-4.2117	.0000	-.0176	-.0064
Influence x quantitative demands	.0004	.0001	3.2855	.0012	.0002	.0007
Low quantitative demands	.0079	.0033	2.3831	.0179	.0014	.0144
Average quantitative demands	.0163	.0027	6.1067	.0000	.0110	.0215
High quantitative demands	.0247	.0040	6.1158	.0000	.0167	.0326

R^2 =. 2226: ΔR^2= .0333

Figure 5.19

The Moderating Role of Quantitative Demands on the Relationship Between Influence at Work and Work Engagement



5.8.5.20 Work Pace Moderates the Relationship Between Influence at Work and Work Engagement.

The multiple regression model explained 14.56% of variance in work engagement [*F* (3. 256) = 14.315, *p* = .0000. R^2 =. 1456]. The relationship between influence at work and work engagement was significant [*t* (256) = 6.136, *p* =. 0000] whilst the relationship between work pace and work engagement was not significant [*t* (256) = .3951, *p* = .6931]. The interaction between influence at work and work pace was significant [*t* (256) = 2.3842, *p* = .0179, ΔR^2= .0193], explaining an additional 1.93% of variance.

The conditional effects analysis found the relationship between influence at work and work engagement to be significant at all levels of work pace. However, the Johnson-Neyman method showed significance levels from -25.3480 to 34.4401. The

ranges of work pace were within -65.5599 and 34.4401. Interestingly, the highest levels of work engagement were experienced when both work pace and influence at work were high, followed by when work pace was average and influence at work was high, then when work pace was low and influence at work was high. The lowest levels of work engagement occurred when work pace was high and influence at work was low, followed by when work pace was average and influence at work was low, then when both work pace and influence at work were low. The results support the moderating role of work pace on work engagement and influence at work (see Table 5.30 and Figure 5.20).

Table 5.30

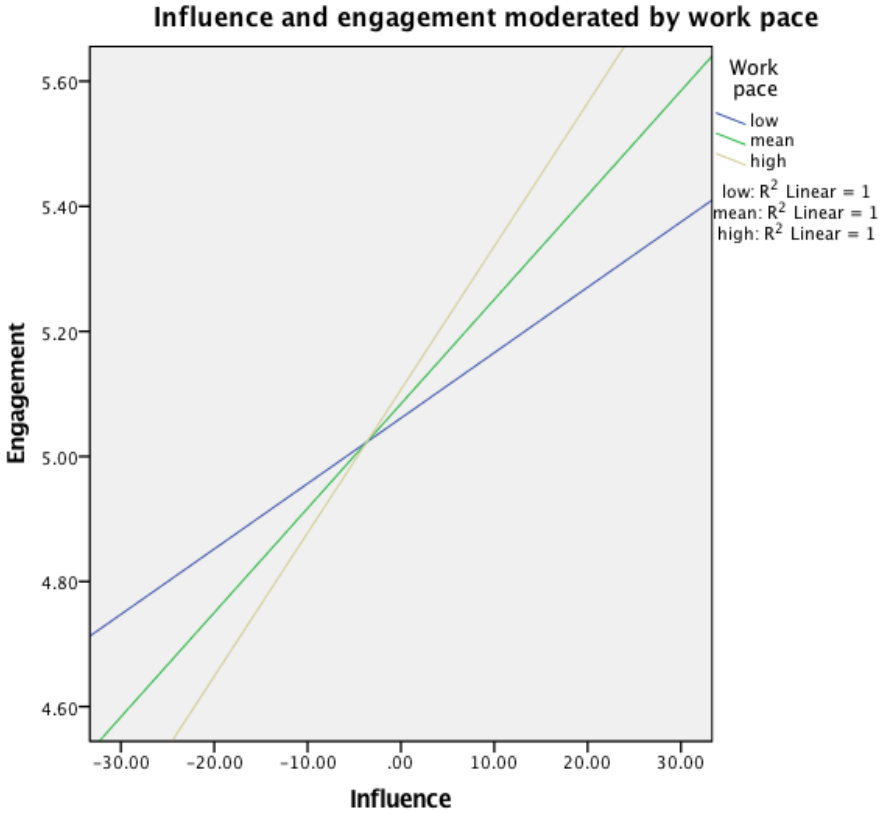
Work Pace Moderates the Relationship Between Influence at Work and Work Engagement

Variable	***B***	***SE B***	***t***	***p***	**95% confidence**	**Interval**
					LL	*UL*
Constant	5.0842	.0574	88.5741	.0000	4.9711	5.1972
Influence	.0167	.0027	6.1358	.0000	.0113	.0220
Work pace	.0012	.0030	.3951	.6931	-.0048	.0071
Influence x work pace	.0003	.0001	2.3842	.0179	.0001	.0006
Low quantitative demands	.0105	.0037	2.8526	.0047	.0032	.0177
Average quantitative demands	.0167	.0027	6.1358	.0000	.0113	.0220
High quantitative demands	.0229	.0039	5.9173	.0000	.0153	.0305

R^2 =. 1456: ΔR^2= .0193

Figure 5.20

The Moderating Role of Influence at Work on the Relationship Between Work Pace and Work Engagement



5.9 Discussion

Work provides many benefits to people and for some it provides a sense of purpose. For some people, when they lose their jobs, their whole identity becomes lost in addition to the loss of income. In Zimbabwe, most people consider themselves to be lucky or blessed if they have jobs because of the high unemployment rate and challenging economic environment. Despite the many benefits that come with work which may be financial and or psychological, it has become known that work may pose serious threats to individual health if certain work characteristics are not managed well. Issues to do with work organisation and their relationship with individual and organisational health have attracted a lot of interest in recent years. Scholars have been motivated to find out those aspects of work that influence health

negatively, for example antecedents of work-related stress (Taris, Leisink & Schaufeli, 2017). This interest can be traced back to the rise of burnout in the beginning of the century, where scholars came out with various theories and models in an attempt to understand the antecedents of ill health and work outcomes (Bakker & Demerouti, 2017). These include the demand-control-support model (Johnson & Hall, 1998), the effort-reward imbalance model (Siegrist, 1996; Siegrist & Weber, 1986) and the job demands - resources model (Demerouti et al., 2001).

On a positive note, there are job resources that have been found to influence work attitudes which will consequently influence job performance positively and enhance the achievement of organisational objectives and competitiveness, for example, the positive effects of commitment to the workplace, job satisfaction and work engagement on performance have been reported in the literature (Schaufeli, 2017).

This study utilized the job demands-resources model as a theoretical framework to select certain job demands which can influence well-being and organisational health. Based on the literature as described earlier and informed by results of the qualitative study, we hypothesized that job demands (work pace, quantitative demands, emotional demands and work family conflict) will be negatively related to general well-being whilst job resources will be positively related to general well-being. In addition, we hypothesized that job resources will be positively associated with work engagement, job performance, commitment to the workplace and job satisfaction and there will be a negative association of these outcomes with job demands. Interactions between the study variables were also tested in order to understand the circumstances in which these relationships occur.

5.9.1 Hypotheses Testing Findings

Generally, most of the research hypotheses were largely supported in this study. The hypothesis that job demands are negatively related to commitment to the workplace. and that job resources are positively related to commitment to the workplace was partly supported where quantitative demands and possibilities for development were the only variables that were significantly related to commitment to the workplace. Most bank employees place a lot of value on an organisation that provides possibilities for development as the need for continuous learning is critical in

that context. The positive relationship between possibilities for development and commitment to the workplace was expected based on previous research, for example, Bulut and Culha (2010) found that training positively influenced employee commitment in the hotel industry. Provision of training enables employees to improve their knowledge skills and abilities some of which will be used even after one has left the organisation. Further, Briscoe and Finkelstein (2009) found that a negative relationship between a boundaryless, mindset and normative commitment was observed only when individuals perceived low levels of developmental opportunities. The non-significant relationships with commitment to the workplace were unexpected. The negative relationship between quantitative demands and commitment to the workplace is in line with research by Llorens, Bakker, Schaufeli and Salanova (2006) who reported on the negative relationship between quantitative overload and commitment.

As expected, job demands had a negative relationship with job satisfaction. Emotional demands and quantitative demands had significant negative relationships with job satisfaction. Contrary to expectations, work pace and work family conflict were not significantly related to job satisfaction. The findings are in line with previous studies, which reported on the negative effect of job demands on job satisfaction. For example, Fuss et al. (2008), found a positive relationship between low work family conflict and an increase in job satisfaction. In a meta-analysis on antecedents of job stress and job satisfaction in nurses, McVicar (2016) found that job demands of work pressure and emotional demands were related to both stress and job satisfaction consistently between 2000 and 2013. Job satisfaction is an attitudinal concept, which highlights an individual's perception of whether they like or dislike their job, whether they are happy at work on not. In this study, job satisfaction was assessed as a single item, meaning that the job was assessed in its totality. Emotional demands and quantitative demands require a lot of effort on the part of the worker and are likely to leave the worker with no energy to do other things, especially when job resources are low (Bakker & Demerouti, 2007). These impacts negatively on the levels of job satisfaction. Workers who face emotional demands become psychologically affected and there are most likely to perceive their job negatively especially when they start thinking about the emotional encounter, for example, with a colleague or client.

As predicted, job resources had a positive relationship with job satisfaction. Possibilities for development and quality of leadership were the only significant predictors of job satisfaction. Given, the motivational nature of job resources, workers with access to high job resources are more likely to be satisfied with their jobs. In their very nature, job resources facilitate the attainment of work goals and reduce the negative impact of job demands thereby increasing job satisfaction. For example, Lopes, Lagoa and Calapez (2014), in a survey on European working conditions, highlighted that work pressure which was not complemented by autonomy was associated with reduced job satisfaction, and job autonomy enhanced job satisfaction. The finding that influence at work was not related to job satisfaction was unexpected and inconsistent with the results by Lopes, Lagoa and Calapez (2014) where autonomy which may be conceptually related to influence at work increased job satisfaction. In addition, they also reported that job resources have intrinsic motivation, which satisfy basic needs which include autonomy. Social support from both colleagues and supervisors was not significantly related to job satisfaction which was unexpected. Workers in this study found possibilities for development and quality of leadership to be related to job satisfaction. When an employee gets opportunities to develop themselves, they acquire new skills and knowledge which enable them to do their job effectively which may facilitate job satisfaction especially when they know that they have good leadership. Moreover, Yeh (2015) also found that job resources enhance job satisfaction whilst job demands decrease job satisfaction. In addition, Tims, Bakker & Derks (2013) supported the positive relationship between job resources and job satisfaction. Job satisfaction has been found to vary depending on whether a bank was privately or publicly owned (George & Zakkariya, 2015). These variations were not assessed in this study.

Consistent with the hypotheses on general well-being, job demands had positive relationships with poor general well-being except for work pace which had a negative relationship with poor general well-being. An increase in job demands was associated with an increase in general well-being scores. High scores of general well-being are associated with poor health. All job demands scales were significant predictors of poor well-being. These results support the negative relationship that has been reported between job demands and general well-being (Bergh, Leka & Zwetsloot, 2018; Bliese, Sonnetag & Edwards, 2017; Desrumaux et al., 2015;

Houdmont, Zhou & Hassard, 2011; Tadic, Bakker & Oerlemans, 2014; De Witte, Pienaar & De Cuyper, 2016). The results for work pace were not expected. Work pace may have acted as a challenge demand in this study.The job demands resources model purports that long term exposure to work demands in the absence of job resources may result in poor health, according to one of the dual processes of the model which is the health impairment process (Janse van Rensburg, Boonzaier & Boonzaier, 2013).

As anticipated, the results showed a negative relationship between job resources and general well-being. However, social support from supervisors was the only significant predictor of general well-being among job resources. Quality of leadership, possibilities for development, social support from colleagues` and influence at work were not significant predictors of general well-being. These results were not expected. The findings provide partial support for the hypothesis that job resources have a positive relationship with well-being. This may be explained by the fact that job resources may not always yield the intended benefits, some scholars have suggested that they may even result in strain if unsolicited or overwhelming and also others have suggested the need to come up with specific job resources that are relevant for the organisation or profession in question (van Veldhoven et al., 2017). Other studies have supported the positive relationship between job resources and well-being, for example Schaufeli and Bakker (2004), Rodwell and Munro (2013) and Skaalvik and Skaavik (2018). The findings highlight social support from supervisors as an important antecedent for the well-being of bank employees. Similarly, Drummond et al. (2017) found that supervisor support was one of the variables that were associated with a reduction of psychological strain. Research has supported the positive relationship of supervisor support and well-being (Charoensukmongkol, Moqbel & Gutierrez-Wirsching, 2016; Somers, Birnbaum & Casal, 2018). Supervisor support was seen as one of the key resources to facilitate health and well-being and should be considered as an important factor in health promotion at work, a lack of it was associated with poor well-being (Hammig, 2017). One possible reason of why the remaining job resources were not important predictors of general well-being is that they might initiate a different and independent process for job demands with regards to well-being. Job demands are the most important predictors of well-being based on the health impairment process whilst job resources have been found to be the most

important predictors of work engagement, motivation and work enjoyment. Support for these relationships has been reported in a recent meta-analysis (Bakker, Demerouti & Sanz-Vergel, 2014). In another meta-analysis, Lee and Ashforth (1996) found that job demands were the most relevant predictors of burnout compared to job resources. Similar findings were found by Bakker, Demerouti and Schaufeli (2003) where job resources were weakly related to health problems whilst job demands were the most important predictors of health problems.

The hypothesis that job resources will be positively related to work engagement was supported. This is one of the central proposition of the job demands-resources theory (Schaufeli, 2017). As anticipated, job resources had a positive relationship with work engagement. The regression results found job resources to be significantly related to work engagement with the exception of quality of leadership and social support from colleagues. Although we expected all job resources variables to have positive significant relationships with work engagement, the findings are still consistent with the literature, for example workers who perceived support from their supervisor or organisation were found to be more engaged in their jobs (Rai, Ghosh, Chauhan & Mehta, 2017). Additionally, Teoh, Hassard and Cox (2018) found that job resources predicted work engagement more strongly than job demands. However, the results for quality of leadership and social support from colleagues were unexpected.

Correlation results showed that job demands had a negative relationship with work engagement except for work pace which had a positive but non-significant relationship with work engagement. Further, emotional demands had a non-significant negative relationship with work engagement. Multiple regression results indicated that job demands were significantly related to work engagement. Unexpectedly, work pace had a positive relationship with work engagement suggesting that it may have been perceived as a challenge demand. However, emotional demands did not contribute significantly to the model. This is contrary to some previous findings, for example, van Mol et al. (2017) found that work engagement was negatively related to cognitive and emotional demands. Largely, the findings are congruent with the literature, for example, Besieux, Baillien, Verbeke and Euwema (2018) found that job demands had a negative relationship with engagement whereas job resources had a positive relationship with engagement. In addition, they commented on other factors that influence work engagement which were not investigated in this study like

transformational leadership and personal characteristics. Kunte and RungRuang (2018) also found support for the negative relationship between job demands and engagement in Thailand. The reviews by Schaufeli and Taris (2014) and Bakker and Demerouti (2017) render support for the hypothesised direction of the relationship between job demands and job resources with work engagement. Further support for the positive relationship of job resources and work engagement and the negative relationship between job demands and work engagement was reported by Oshio, Inoue and Tsutsumi (2018) and in South Africa by van Rensburg, Boonzaier and Boonzaier (2013). In Zimbabwe, Buitendach, Bobat, Muzvidziwa and Kanengoni (2016) found that a stronger relationship existed between job resources and work engagement than between job demands and work engagement suggesting that bus drivers who had high job resources were more likely to have high work engagement. The job resources that were significantly related to work engagement had stronger relationships compared to the job demands variables that were significant. This is consistent with empirical evidence (Schaufeli & Bakker, 2004) and meta-analytic evidence (Christian, Garza & Slaughter, 2011).

It is important to note that the direct relationships between most of the study variables has been established mostly in developed countries, but the same knowledge is sparse in African countries in transition like Zimbabwe, hence the investigations in this study. The researcher acknowledges that scholars are now investigating other aspects which include for example, conditions when variations of work engagement levels within an individual occur, distal antecedents of work engagement which influence job resources like human resources practices, and how engagement can be studied in light of big data in a nut shell (Bakker & Albrecht, 2018).

The hypothesis that job resources will be positively related to performance was supported by the correlation results. Unexpectedly, the multiple regression results did not support the relationship between job resources and job performance. These results may mean that bank employees may continue to perform even in the absence of job resources because the consequences of not performing would be unbearable. There are very little, if any, alternative employment opportunities so they cannot afford to lose their jobs due to non-performance. This is reflected from the fact that most bankers perceived themselves as performing well in this study. However, these

performance scores may not necessarily mean that working conditions and job characteristics are good and facilitating job performance. Notwithstanding the above observations, other studies have found support for the positive relationship between job resources and performance (Bakker, Demerouti & Verbeke 2004; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). Job resources play a motivating role to employees, which positively influence job performance, which is proposition number 6 of the JD-R theory (Bakker & Demerouti, 2017).

As hypothesized, all job demands variables had negative relationships with job performance except for work pace which had a positive relationship with job performance. Only work pace and work family conflict were significant predictors of job performance. On the contrary, emotional demands and quantitative demands did not contribute significantly to the prediction of job performance. Work pace could be positively associated with job performance because as people work more rapidly tasks will be completed faster. Additionally, working at a high work pace was associated with both idea generation and idea implementation (Dediu, Leka & Jain, 2018) which supports the positive relationship between work pace and job performance. However, the direct relationship of work pace and job performance alone may be misleading. The effect on health of those working at a higher pace but still performing needs to be investigated further. The insignificant finding of the relationship between emotional demands and job performance may be related to a culture where expression of emotions may be seen as a sign of weakness by some people, especially men (Brownhill & Wilhelm, 2002). The negative relationship of job demands and job performance could be associated with the notion that job demands, in this case work family conflict, force workers to expend a lot of energy in trying to cope with these demands, as Xanthopoulou, Bakker, Demerouti and Schaufeli (2009) observed, this will leave employees with little energy to focus on their tasks affecting performance negatively due to strain.

5.9.2 Interactions Between Job Demands, Job Resources and General Well-Being

The buffering hypothesis of the JD-R postulates that job resources can reduce the negative effects of job demands on well-being (Rai, 2018). The only job resources that were significant moderators of general well-being were influence at work and possibilities for development. Influence at work moderated the effect of emotional

demands and of work pace on general well-being whilst possibilities for development moderated the effect of work family conflict on general well-being.

As expected, general well-being were at its best when influence at work was high and emotional demands and work pace were low. General well-being was worse when influence at work was low and emotional demands and work pace were high. The results suggest that influence at work moderates the relationship between emotional demands and general well-being and between work pace and general well-being. Further, the results highlight that the best general well-being is experienced when emotional demands and work pace are low and influence at work is high.

The results imply that increasing job resources, in this case, influence at work and reducing job demands (work pace and emotional demands) may result in good general well-being. This is consistent with the literature where several studies have suggested that good well-being is achieved in situations where job demands are low and job resources are high (Bergh, Leka & Zwetsloot, 2018). Wolter et al. (2019) reported that job demands reduce well-being whilst job resources promote it, in their study of police officers, they found a positive relationship between job demands and emotional exhaustion and a positive relationship between job resources and general well-being. Job resources were able to reduce emotional exhaustion. In a similar vein, Schuler, Sheldon, Prentice and Halusic (2016) found that perceived autonomy support had a positive effect on well-being. Autonomy can be conceptually related to influence at work as both are associated with the amount of control that an employee is availed. Emotional demands on their own have been associated with ill health in educators especially in secondary schools where they interact with adolescents (Jackson & Rothman, 2006). In such a situation providing job resources may assist in reducing the negative impact on health. Another possible explanation why influence at work was a significant moderator of emotional demands and work pace is that when an employee has influence at work they can request to take a break from working on a fast pace and find time to recuperate or they can try to change the pace or switch tasks, influence at work enables an employee to negotiate the amount of work that is assigned to them, they can even suggest ways to cope with emotionally demanding situations.

Although the results support the moderating effect of influence at work on the individual relationships between work pace and general well-being and emotional demands and general well-being, they do not really show the importance of job resources when bankers are faced with high job demands, in this case when work pace or emotional demands are high, the buffering impact of high influence at work is not very clear but it does suggest that a combination of high influence at work and low work pace or emotional demands is associated with better general well-being. However, when both work pace and influence at work were high, general well-being was comparatively good as reflected by low scores but not to the levels when work pace was low or average. This is consistent with a study by Chiang, Birtch and Kwan (2010) who found that levels of job stress were higher when levels of control were lower. Although the main effects of job demands and job resources were significant in that study, control and the availability of work family practices did not buffer the interactions between job demands, job resources and stress. However, they found that the relationship of job control on stress was stronger when work life balance practices (a job resource) were higher rather than low, supporting the role of job resources. In addition, Corin and Bjork (2016) found that a lack of some job resources like influence at work and supervisory support to cope with job demands which included emotional demands, time pressure and restricted control explained poor well-being that was experienced by first-line human service managers who were exposed to high demands and low job resources.

Possibilities for development was a significant moderator of general well-being and work family conflict. Participants experienced the best general well-being when possibilities for development were perceived to be high and work family conflict was low. Poor general well-being was experienced in situations where possibilities for development were low and work family conflict was high. Interestingly, when both possibilities for development and work family conflict were high, general well-being was comparatively poor than when possibilities for development were average or low. This study supports the notion that an increase in work family conflict is bad for well-being. Although the presence of possibilities for development may reduce the impact, the existence of possibilities for development seems to be more beneficial when work family conflict is low. The results are contrary to the findings of Demerouti, Bouwman and Sanz-Vergel (2011) who investigated the moderating effect of developmental

possibilities, relationship with supervisor, participation in decision making and relationship with colleagues, on the relationship between work family conflict on absence frequency which is an indicator of well-being. They found that only participation in decision making buffered the effect of work family conflict on absence frequency whilst developmental possibilities did not have a significant relationship. However, the findings still supported partially the buffering role of job resources on work family conflict and indicators of poor well-being, implying that the specific type of job resources that will be important depend on the particular context and organisation or sector. Provision of possibilities for development may still have a positive impact on perceptions of well-being as shown in this study (Begat, Ellefsen, Polit & Severinsson, 2005). As discussed earlier, the relationship between possibilities for development and general well-being has been supported in the literature (Hammig, 2017).

Generally, the results are also consistent with previous research, which found better well-being when job demands including emotional demands and work pressure, which can be related to work pace, were low and job resources were high, i.e. autonomy, social support and opportunities for development (Bakker, Demerouti & Euwema, 2005; Bakker, Van Veldhoven & Xanthopoulou, 2010; Xanthopoulou et al., 2007). Interestingly, job resources became more important in their interaction with job demands and general well-being unlike in their direct effect with general well-being where the multiple regression results found a non-significant relationship with general well-being. The findings suggest that job resources are more relevant for general well-being when bank employees are facing low job demands. The hypotheses regarding interactions between job demands and general well-being were supported, the relationship between job demands and general well-being was weaker when job resources were high indicating that general well-being was best when job demands were low. The relationship between job demands and general well-being was stronger when job resources were low as reflected by the worst general well-being that was experienced when job demands were high and job resources were low.

5.9.3 Interactions Between Job Demands, Job Resources and Commitment to the Workplace

The final interaction hypothesis was that the relationship between job resources and organisational health outcomes will be weaker when job demands are high. Job demands were treated as the moderator variables in the analyses.

The significant moderating interactions between job demands and job resources variables in relation to commitment to the workplace were emotional demands and possibilities for development, quantitative demands and influence at work, work family conflict and influence at work, work pace and influence at work, and work pace and possibilities for development. In line with the hypotheses, the highest levels of commitment to the workplace were reported when job resources (possibilities for development and influence at work) were high and job demands were low; (emotional demands, quantitative demands, work family conflict and work pace). Commitment to the workplace was lowest when job demands were high and job resources were low. However, when they are high job demands, increasing job resources may increase the levels of commitment to the workplace, for example, as shown by fairly high levels of commitment to the workplace that was perceived when both emotional demands and possibilities for development were high or when both work family conflict and influence at work were high.

The findings on interactions with commitment to the workplace are consistent with previous literature which supports the role of job resources in influencing work attitudes positively and the negative impact of high job demands coupled with low job resources on commitment to the workplace. Several studies have reported the negative relationship between specific job demands with commitment, for example, Farradinna and Halim (2016) found that work family conflict negatively influenced organisational commitment in the banking sector of Indonesia. Certain job resources can lessen this negative effect, as such, influence at work was reported to act as a protective factor against work family conflict, which can explain why commitment to the workplace was highest when influence at work was high and work family conflict was low (Mache et al., 2015). Contrary to these findings, Bakker, van Veldhoven and Xanthopoulou (2010) found that commitment was highest when both job demands and job resources were high in a large study involving 148 organisations where 13 out of 16 interactions of job demands and job resources were significantly related to organisational commitment. The job demands they tested included quantitative demands and emotional demands whilst job resources included learning possibilities, colleague support, leader support and autonomy, which are similar to the variables tested in the present study. Similarly, colleague support did not have significant interactions with workload, a measure of quantitative demands and with emotional

demands and commitment. The reason that they gave may be relevant in this study where colleague support may be important at the group level, which is different from the broader organisational level which is appropriate for organisational commitment. Having colleague support may make tasks more manageable but factors at the organisational level may be more important for commitment to the workplace.

Boyd et al. (2011) tested both causal and reversed relationships of job resources, strain and commitment and found support for the motivational theory of the JD-R where job resources at time 1 predicted commitment at time 2 whilst job demands of work pressure and work load which can be part of quantitative demands predicted strain at time 2 which was mediated by job resources. Further, Jong and Ford (2016) found that aggregated job resources were associated with employee commitment overtime although mediated by perceived low levels of workload a form of quantitative demands. This study shows that commitment to the workplace increases when job resources are perceived to be high and job demands to be low. Additionally, it also highlights that commitment can still be obtained even when job demands are present as long as job resources are availed. However, this study shows that the amount of commitment to the workplace that is experienced when both the particular job demand and job resource is high is comparatively lower than in a situation when there are high job resources and low job demands, providing partial support for the buffering hypothesis.

5.9.4 Interactions Between Job Demands, Job Resources and Job Performance

The variables that supported the moderating hypotheses between job demands, job resources and job performance were quantitative demands and quality of leadership, quantitative demands and social support from colleagues, quantitative demands and influence at work, work family conflict and quality of leadership and work family conflict and influence at work.

Quantitative demands were a significant moderator of quality of leadership and job performance and of influence at work and job performance. Job performance was highest when both quantitative demands and quality of leadership or influence at work were high and lowest when quantitative demands were high and quality of leadership or influence at work was low. However, when both quantitative demands and

leadership quality were low, job performance was still comparatively high. It may be argued that bankers performed generally well irrespective of whether quality of leadership and quantitative demands were perceived as low. It could be attributed to the earlier explanation that the implications of not performing are worse so bank employees perform even when conditions are poor. However, the boosting concept of job resources was supported as job performance was best when both quantitative demands and quality of leadership or influence at work were high; the boosting concept occurs when job resources become most motivational when job demands are high (Bakker, Hakanen, Demerouti & Xanthopoulou, 2007; Breevaart & Bakker, 2018). This is consistent with Hobfoll's (2001) proposition that different types of resources obtain their motivational power and are most beneficial when they are needed (Bakker & Demerouti, 2017). The results also suggest that the nature of leadership becomes important for job performance in the face of high quantitative demands. The quality of leadership influences the level of job performance (Ng, 2016). One way in which quality of leadership affects job performance is by influencing knowledge sharing amongst employees, which facilitate job performance (Masa' deh, Obeidat & Tarhini (2016). Further, Thompson and Webber (2016) noted that quality of leadership creates an environment that fosters greater employee decision making and more productive employees who form partnerships with their leaders, working together to achieve excellent performance. Moreover, Usman, Murniati and Marzuki (2016) found that the quality of leadership which is consultative, participative and instructive improved performance. In addition, work influence has also been positively associated with job performance (Soha et al., 2016).

Job performance was also highest when job demands were low and job resources were high and lowest when job demands were high and job resources were low. This occurred in the interactions between quantitative demands and social support from colleagues, between work family conflict and quality of leadership, and between work family conflict and influence at work, These findings suggest that bank staff perform best when there is support from colleagues, good quality of leadership and influence at work and when quantitative demands and work family conflict are low. Quantitative demands were one of the job demands that were negatively associated with both task and contextual performance (Al-Homayan, Shamsudin, Subramaniam & Islam, 2013). Work family conflict has also been negatively related

with job performance in Indonesian banks since it involves working long hours, which requires a lot of energy that may result in workers losing focus on their work thus influencing performance negatively (Nagami, Tsutsumi, Tsuchiya & Morimoto, 2010). They also observed that work family conflict and job overload is common in developing countries. In addition, Ashfaq, Mahmood and Ahmed (2013) also found a negative relationship between work family conflict and job performance in Pakistanian banks.

The interaction results on job performance extend support for the motivational hypothesis of the JD-R which posits that when workers are motivated, their behaviour is directed towards task accomplishment and they focus all their attention on the work at hand and job performance is enhanced in the process (Bakker & Demerouti, 2017). Motivation is achieved when there are job resources available. When job demands are high, more energy is exerted and workers become strained, mistakes can be made and attention span can be affected thereby influencing performance negatively (Taris, 2006). However, in some situations, findings from this study suggest that job performance is also at its best when job resources are high and job demands are low, so in this case job performance is enhanced by decreasing job demands if possible, since this may not be very practical in terms of implementation in some situations. This is consistent with previous research, (e.g. Bakker, van Emerik & van Riet, 2008; Nielsen et al., 2017). Job demands including quantitative demands and emotional demands were negatively related to job performance because they require a lot of energy and effort to cope with which makes it difficult for employees to remain focused on their tasks (Al-Homayan, Shamsudin, Subramaniam & Islam, 2013). According to Bakker, Demerouti, de Boer & Schaufeli (2003), inadequate job resources preclude the attainment of goals and having access to job resources may motivate workers to perform their jobs well. The nature of variables influences performance differently, for example high quantitative demands coupled with high quality of leadership resulted in the highest levels of job performance but when combined with social support from colleagues job performance was not at its best, job performance was highest when quantitative demands were low and colleague support was high. The mechanisms are complex and may need further research to determine in which circumstances quantitative demands act as challenge demands or which

type of job resources enhances job performance when faced with quantitative demands.

The relationship between job resources and job performance is not limited to the variables that have been investigated in this study, for example, the presence of job resources could also be as a result of job crafting where individuals actively seek out job resources and try to minimize job demands on their own, not just waiting for things to happen to them passively. Dubbelt, Demerouti and Rispens (2019) found that seeking resources and decreasing job demands by workers was associated with increased task performance, engagement and career satisfaction. Engagement levels can also fluctuate within an individual depending on the task that there are doing. Specifically, Reina-Tamayo, Bakker and Derks (2017) found that episodic engagement was related positively to job performance but mediated the relationship between job resources and the negative impact of hindrance demands on performance. Whether job performance is best when both job demands and job resources are high or is best when job resources are high and job demands are low may depend on the specific variables being investigated and the context (van Woerkom, Bakker & Nishii, 2016).

5.9.5 Interactions Between Job Demands, Job Resources and Job Satisfaction

The only significant interactions between job demands, job resources and job satisfaction were influence at work and quantitative demands, influence at work and emotional demands, social support from colleagues and work family conflict and influence at work and work pace.

Work family conflict significantly moderated the association between social support from colleagues and job satisfaction. As predicted, the lowest levels of job satisfaction were experienced when work family conflict was high and social support from colleagues was low. The highest levels of job satisfaction occurred when work family conflict was low and social support from colleagues was high, lending support for the moderating effect of work family conflict on social support from colleagues and job satisfaction. Creating a good work life balance and provision of social support enhances job satisfaction (Mas-Machuca, Berbegal-Mirabent & Alegre, 2016). Moreover, previous research supported a positive relationship between social support from colleagues and job satisfaction (van der Heijden, van Dam & Hasselhorn, 2009;

Yuh & Choi, 2017). Social support from colleagues may enhance job satisfaction by providing assistance and clarifying ambiguities in tasks (Collins, Hislop & Cartwright, 2016). In contrast, other scholars found that social support from supervisors was significantly related to job satisfaction and not social support form colleagues (Brough & Frame, 2004; Brough & Pears, 2004). Job control which is conceptually related to influence at work has been found to be positively related to job satisfaction whilst job demands which were measured by eight items from the Copenhagen psychosocial questionnaire including quantitative demands were negatively related to job satisfaction (Karanika-Murray, Michaelides, George and Wood, 2017).

The interaction of emotional demands with influence at work and job satisfaction was significant. The participants reported the highest levels of job satisfaction when emotional demands were perceived as low and influence at work was perceived as high and lowest levels of job satisfaction were perceived when emotional demands were high and influence at work was low. However, when both influence at work and emotional demands were high, job satisfaction was relatively high but not as high as when influence at work was low and emotional demands were average or low. Kinzl et al. (2005) found that influence over handling tasks was strongly associated with job satisfaction. The bank employees were more satisfied with their jobs when they did not have many interactions that were emotionally challenging. This situation may not be commonly found in some bank positions like front office officers where interaction with customers and other key stakeholders is frequent and may result in emotional demands. There is need to ensure that bank employees are provided with adequate influence at work as much as possible in order to enhance job satisfaction especially when faced with emotional demands, given the findings that when influence at work was perceived to be low and emotional demands high job satisfaction was at its lowest.

The same trend was observed when job satisfaction was lowest in situations when quantitative demands were high and influence at work was low and highest when quantitative demands were low and influence at work was high. Autonomy at work has been associated with higher levels of job satisfaction (Bradley, Taylor & Nguyen, 2003). The results imply that reducing job demands in the form of quantitative and emotional demands and increasing influence at work will increase the levels of job satisfaction. As discussed earlier, this may not be very practical in a real

work situation although where it is feasible reducing job demands will enhance job satisfaction. Gao, Shi, Niu and Wang (2013) found that work family conflict was negatively related to job satisfaction although emotional intelligence weakened this relationship.

Additionally, work pace significantly moderated the relationship between influence at work and job satisfaction. Remarkably, the highest levels of job satisfaction were experienced when both work pace and influence at work were high, followed by when work pace was average and influence at work was high. The third highest levels of job satisfaction occurred when work pace was low but influence at work was high, thus highest levels of job satisfaction were experienced when influence at work levels were high rather than low. The lowest level of job satisfaction occurred when work pace was high and influence at work was low. These results support the hypothesis that work pace moderates the relationship between job satisfaction and influence at work. Job satisfaction was at its best when both work pace and influence at work were high, lending support for the proposition that job resources work best when job demands are high (Bakker, Demerouti & Euwema, 2005). In another view, work pace could have been acting as a challenging demand. Contrary to these findings, Stansfield, North, White and Marmot (1995) found a negative relationship between work pace and job satisfaction. The results also show that when work pace was low and influence at work was high job satisfaction was not at its best, so reducing job demands may not work at all situations, sometimes it can reduce the challenge in the job but can only act as a challenge demand when other demands are kept low (Bakker & Demerouti, 2018).

5.9.6 Interactions Between Job Demands, Job Resources and Work Engagement

The only significant interactions between job demands, job resources and work engagement were emotional demands and influence at work, quantitative demands and influence at work and work pace and influence at work.

Emotional demands moderated the relationship between influence at work and work engagement as hypothesized. The bankers experienced the most work engagement when both emotional demands and influence at work were high and as expected, the lowest levels were experienced when emotional demands were high

and influence at work was low. The role of influence at work on work engagement was more important when quantitative demands were high consistent with previous research which supported the boosting hypothesis (Bakker & Demerouti, 2008; Bakker, van Veldhoven & Xanthopoulou, 2010). Another possible explanation is the direct effect of having high autonomy or influence at work or social support from colleagues, which has been associated with increased levels of work engagement (Bakker & Demerouti, 2007; Schaufeli, Bakker & Van Rhenen, 2009). The significant relationship of influence at work with work engagement can be related to the finding that job control appeared to have the most positive relationships with work engagement consistently in a longitudinal study conducted by Mauno, Kinnunen and Ruokolainen (2007). Further, Xanthopoulou, Bakker and Fischbach (2013) reported a negative relationship between emotional demands and work engagement but in situations when self-efficacy was low, self-efficacy was not investigated in this study but their results suggest that the relationships are not very simple but other factors may be at play, which may call for further investigation.

Quantitative demands was a significant moderator of the relationship between influence at work and work engagement. The highest levels of work engagement were perceived when influence at work was high and quantitative demands were low. Work engagement had lowest scores when influence at work was low and quantitative demands were high. The highest levels of work engagement were obtained in different situations, either when both job resources and job demands were high as with emotional demands and influence at work or with the relationship between work pace and influence at work. In addition, the highest work engagement can be achieved when job demands are minimal but with more job resources availed, specifically influence at work.

In addition, work pace was a significant moderator of influence at work and work engagement. The highest levels of work engagement were experienced when both work pace and influence at work were high. As expected the lowest levels of work engagement occurred when work pace was high and influence at work was low. The results support the moderating role of work pace on work engagement and influence at work. As mentioned before, work pace could have been acting as a challenge demand. This may need further examination to ascertain how work pace was perceived. However, whether job demands will be negatively or positively related to

work engagement depends on the particular job demand whether it is perceived as a hindrance or challenge demand, hindrance demands will be negatively associated with work engagement (Crawford, Lepine & Rich, 2010).

The interaction results on work engagement discussed above support the proposed hypothesis on the relationship between job demands, job resources and work engagement. Job resources enhance work engagement whilst hindrance job demands negatively affect work engagement. Job resources increase work engagement especially when work demands are high (Crawford, Lepine & Rich, 2010). The buffering hypothesis was largely supported by the interactions with work engagement and job performance compared with other variables. Consistent with the boosting concept, work engagement was highest when both job resources and job demands were high in some cases (van Mol et al., 2017). However, in some situations work engagement was highest when job demands were low and job resources were high as in the case of work family conflict as a moderator of the relationship between social support from colleagues and work engagement.

In summary, the interaction results provided support for the motivational hypotheses of the JD-R. The findings indicate that in some cases positive job outcomes like work engagement, job performance, commitment to the workplace and job satisfaction are enhanced when job demands are low and job resources are high. However, in some situations the same outcomes are best achieved when both job demands and job resources are high, supporting the boosting hypothesis of job resources where they influence motivation and work engagement better when job demands are high (Bakker & Demerouti, 2014; Buitendach, Bobat & Muzvidziwa, 2016). However, the buffering effect was not supported for the interactions that were not significant and not reported. A possible explanation is that it depends on the specific job resources and job demands variables. This may also be true for the differences found above, for example, with certain variables, job performance or work engagement were highest when both job demands and job resources were high whilst for some variables job performance and work engagement were highest when job demands were low and job resources high. This could be because some job resources aim to improve certain observed weaknesses, for example enhancing skills through training or possibilities for development, and these job resources may not provide the coping mechanisms to deal with other demands (van Woerkom, Bakker &

Nishii, 2016). It should be kept in mind that support for the interaction hypotheses of the JD-R is still weak in the literature (Schaufeli, 2017; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009).

5.10 Limitations

Despite the contributions of this study to the literature in African countries and recommendations for enhancing employee health and organisational performance. There are several limitations that should be noted. Firstly, the study used a cross sectional design therefore we cannot infer causality of any of the variables. The relationships and nature of the variables were true at the time of the study since these were not explored over time (Metin et al., 2016). However, the direction of most of the relationships are consistent with those reported in the literature as discussed earlier.

The study did not take into account other factors that have the potential to influence the relationship between the study variables, for example, personal characteristics like resilience, optimism and self-efficacy can influence the extent to which some people become stressed with work and how they can cope (Bakker & Sanz-Vergel, 2013; Dicke et al., 2014). They can even influence work attitudes. For example, personal resources are also key in positively influencing work engagement (Bakker & Albrecht, 2018). There are also other demands and resources, which are equally important for our purposes which were left out, for example, work load and cognitive demands. However, it is not possible to study all possible variables at one time, future studies can consider using other factors. In addition, we did not distinguish between hindrance and challenging job demands given their different effects on work attitudes, job performance and health (Rai, 2018). Work pace could have acted as a challenge demand based on its positive relationships with work engagement and job performance in this study.

There were limited available norms for most of the measures to compare the scores against regarding the relationship between the COPSOQ II scales and criteria including general well-being, commitment to the workplace and work engagement notwithstanding the fact that the UWES-9 has been used in Zimbabwe before. This is because the literature in Zimbabwe and Africa is still scarce and inconclusive. There is vast knowledge about the relationships investigated in this study in developed countries, which are now advanced in terms of what is being investigated now, but it

was imperative to examine these issues in Zimbabwe as the information available is very limited, especially in the banking sector. The study did not assess the factors emanating from the type of bank, for example whether it is a private or public bank. Some researchers found job satisfaction to differ between types of banks, specifically between the public and private sectors, although this was contrary to other studies (George & Zakkariya, 2015).

The study could have been susceptible to common method bias because self-report measures where utilised where the same participants provided information for all variables. However, the researcher made a deliberate decision to obtain information on subjective perceptions from the individuals affected as their perceptions influence behaviour, work outcomes and individual health. The other problem could be the potential risk of people responding in a socially desirable manner. In this study, significant interactions of some variables were obtained, which could have been difficult if common method bias was an issue (Breevaart & Bakker (2018).

Another limitation is that the sample was obtained from only five banks which makes it difficult to generalise the results. Only banks that accepted to take part in the study participated. Although information on positions was collected, this was not included in the study. The level that a person occupies can influence the amount of pressure that they are exposed to and the job resources that are availed to them. One reason why the positions were not included is that there were some positions that are easily identifiable for example, bank examiners that are only found at the central bank. Anonymising the positions was thought of but decided against in order to protect the participants since it would be difficult for some positions. Although it would be interesting to find out which levels are prone to stress this was not done at this stage.

5.11 Conclusion

The current study looked at the relationships between job demands (work family conflict, quantitative demands, emotional demands and work pace), job resources (possibilities for development, quality of leadership, social support from supervisors, social support from colleagues and influence at work) with general well-being. The relationship between job resources and job demands with work engagement, job

satisfaction, job performance and commitment to the workplace was also explored. In addition, interactions between all variables were assessed. The results largely supported the hypotheses. Job demands were negatively related to commitment to the workplace, job satisfaction, well-being, job performance and work engagement, except for work pace which was positively related to job performance, general well-being and work engagement. Job resources had positive relationships with general well-being, job performance, job satisfaction, commitment to the workplace and work engagement. The study also found some support for the interaction hypothesis between job demands and job resources. The study extended support for the validity of the job demands-resources theory and suggests that job demands should be managed, reduced where possible, and the availability of job resources should be ensured in order to safeguard the health of workers and to enhance organisational effectiveness. When job demands are high, management must ensure that job resources are provided. Work family conflict should be prevented as much as possible. The study also suggests consideration of the job resources that are most important for workers in the specific context of the banking sector in Zimbabwe.

The final chapter of this thesis will present an overall discussion of findings, and overall limitations and directions for future research.

Chapter 6: Discussion, Limitations and Implications

Considering the lack of research and information on the relationship between psychosocial factors and health (individual and organisational) in developing countries, this research sought to explore the perceptions of key stakeholders regarding the relationship between psychosocial factors, individual and organisational health. In addition, the relationship between psychosocial factors, individual and organisational health was investigated in the banking sector of Zimbabwe. In order to achieve the overall aims of this research, a mixed method design was applied. Perceptions and understanding of psychosocial factors by key stakeholders were explored based on a qualitative approach using semi-structured interviews. A quantitative study was considered to be more appropriate to investigate relationships between psychosocial factors, individual and organisational health in the banking sector since a large number of participants was targeted and the variables to be tested were many. In that regard, numerical data was more relevant (Denscombe, 2003). The research pursued the following objectives:

1. Understand the level of awareness of key stakeholders on the nature and relationship of psychosocial factors with individual and organisational health.
2. Establish the relationship between job demands (quantitative demands, emotional demands, work family conflict and work pace) and job resources (social support from supervisors, social support from colleagues, quality of leadership, possibilities for development and influence at work) with general well-being.
3. Establish the relationship between job demands and job resources with organisational health outcomes of work engagement, job satisfaction, commitment to the workplace and job performance.
4. .Examine how different levels of job demands and job resources influence general well-being.
5. Examine how different levels of job demands and job resources influence organisational outcomes (commitment to the workplace, job satisfaction, job performance and work engagement).

This chapter will discuss major findings of the qualitative and quantitative studies and present a theoretical model based on these findings. One of the important quality criteria for mixed methods is the bringing together of findings, this brings about the “mixing” part of the methodology. As discussed in Chapter 3, this study adopted a “connection” strategy of mixed methods whereby the qualitative study informed the quantitative study (Creswell, Plano Clark, 2007). Both studies were considered equal in importance. Although some limitations of the quantitative study have been discussed in Chapter 5, this chapter will discuss limitations of both studies and implications of the findings in terms of application since this is an applied research study oriented at both policy and practice development. The chapter will end with directions for future research and a conclusion.

6.1 Research Model

The job demands-resources theory was selected as the theoretical model underpinning this study having considered its flexibility and applicability in the Zimbabwean environment. One of Its major strength is that it can accommodate all job demands and job resources (Carballo-Penela, Varela & Bande, 2018).

The qualitative study explored key stakeholder perceptions and provided key insights in relation to some job demands and resources that were included in the analytic model for example, the issue of targets was captured by quantitative demands and work pace variables. Issues to do with work family conflict and emotional demands were also included in the model. Some key stakeholders observed that some workers even cry at work and that most workers were exposed to long working hours which encroach into other family and social time. There was consensus that workers are stressed therefore the quantitative study also investigated general well-being of bank employees. Other key stakeholders noted that training and development opportunities are limited for most organisations. Some managerial behaviours like poor communication were also noted, consequently, possibilities for development and quality of leadership were incorporated as job resources. Furthermore, social support from colleagues and supervisors were considered as key resources especially in a challenging economic and working environment that was prevailing at the time. Key stakeholders noted that sometimes workers are not involved in decisions that affect them and they have little control of their work

processes which resulted in including influence at work as another job resource. As discussed earlier, these factors have also been found to affect bank employees and the research supporting them was discussed in detail in Chapters 2 and 5.

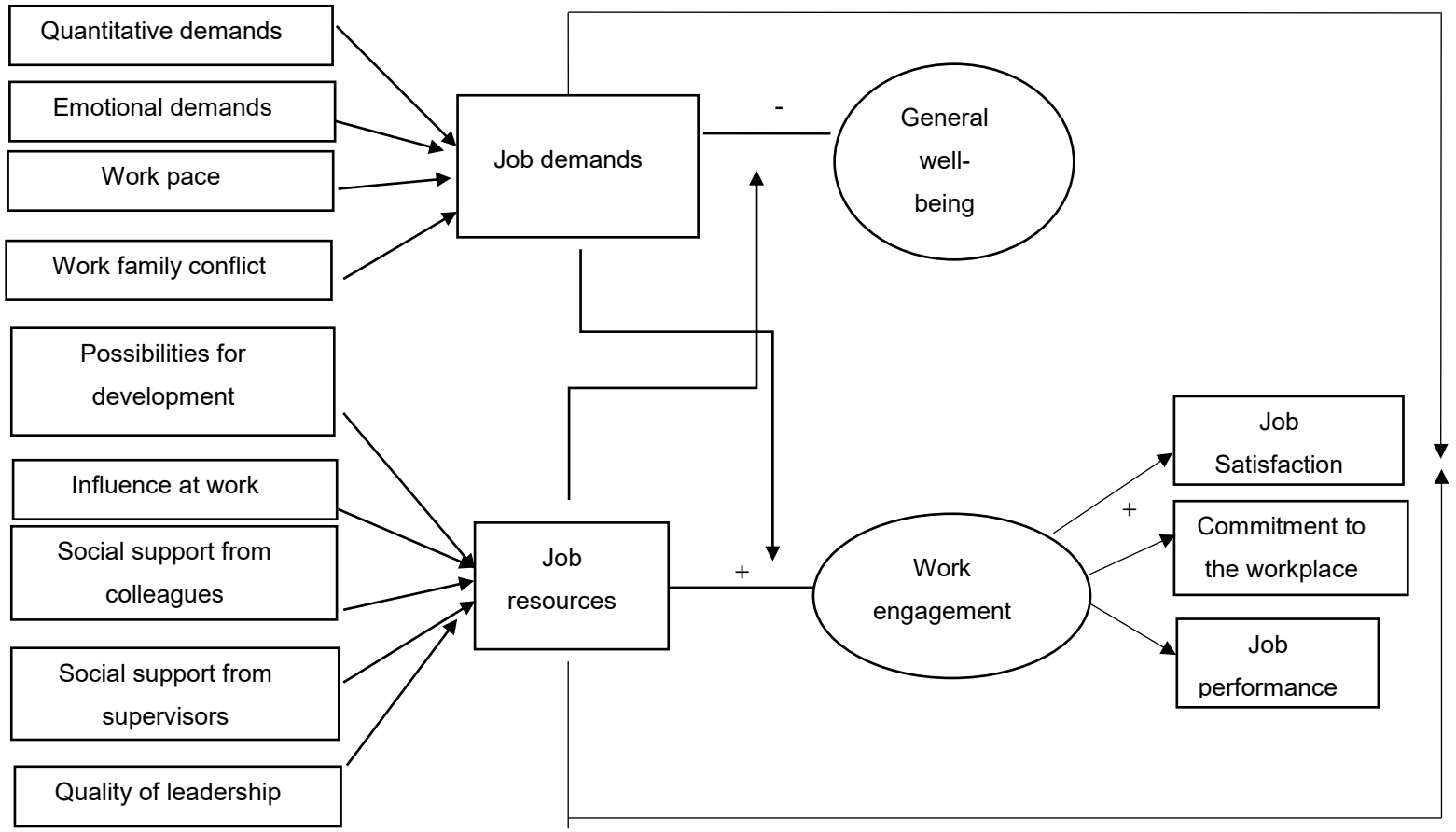
The regression results confirmed that job demands were negatively related to commitment to the workplace, job satisfaction, general well-being, work engagement and job performance. However, work pace had a positive relationship with job performance, work engagement and had a negative relationship with poor general well-being. Job resources were positively related to general well-being and organisational criteria.

Interaction results showed that certain job resources can reduce the effects of specific job demands on general well-being, job satisfaction, work engagement, job performance and commitment to the workplace. The presence of high job demands can also weaken some of these relationships, whilst in some cases the presence of high job demands and high job resources concurrently results in the best work outcomes as in the case of high emotional demands, high influence at work and work engagement or when the best performance was achieved when both quantitative demands and influence at work were reported to be high.

A summary of the results is depicted visually in the model below and discussed in the following sections.

Figure 6.1

Research Model



6.2 General Discussion

This section presents a discussion of the qualitative and quantitative studies which make up this thesis.

6.2.1 The Policy and Legislative Context

Key stakeholders acknowledged the absence of legislation on psychosocial risks and work-related stress in Zimbabwe. However, the effort of the recent Occupational Safety and Health policy of 2014 in including some aspects of psychosocial factors was appreciated although there was consensus that the coverage was inadequate even to inform on how psychosocial factors can be identified or managed. The Labour Act chapter 18:04 was considered to cover some aspects of the psychosocial work environment like working hours and could be used to enforce compliance in those areas. The lack of legislation means that management of psychosocial risks cannot be enforced as a hard rule but moral suasion can be employed, appealing to the ethical and moral conscience of employers as part of their corporate social responsibility (Jain, Leka & Zwetsloot, 2011).

However, it is important for employers to safeguard the rights of workers regarding their health and safety as stipulated by Labour Act 28:01. The lack of legislation on psychosocial risks can be attributed to an over focus on management of physical hazards that has been common in most developing countries (Akpinar-Eki et al., 2017). These hazards still pose a challenge as evidenced by an increase in work related injuries and fatalities that was reported in Zimbabwe (NSSA, ON Guard, 2019). The efforts made towards addressing other non-communicable diseases was noted as well as making use of the ILO Conventions that Zimbabwe has ratified to enhance the health of workers. The benefits of including psychosocial risks in legislation has been discussed in detail and includes raising awareness and prevention of ill health emanating from them (ILO, 2016).

6.2.2 Awareness

Most key stakeholders were of the opinion that there is awareness of the relationship between psychosocial factors and individual and organisational health. They were able to articulate some of the stressors in the country which include targets, long working hours, job insecurity and inadequate resources and equipment.

Manifestations of stress were described in terms of both physical symptoms like headaches, backache and blood pressure as well as psychological symptoms including lack of attention. In addition, behavioural manifestations of risky behaviours, irritability and being rough were noted. They also appreciated the impact of psychosocial factors on organisational health aspects which include sickness absenteeism, work engagement, commitment, motivation and poor job performance. The identified stressors and manifestations are consistent with those reported in the literature as discussed in detail in Chapter 4, for example, Mabiza, Iaeng, Conduah and Mbohwa (2017) found physical symptoms of stress that included high blood pressure and headaches. However, notwithstanding this reported level of knowledge, a few stakeholders felt that the level of knowledge on the nature and effects of psychosocial factors is superficial and not deep enough. This implies that some interventions need to be put in place to raise awareness and to provide training on the nature, effects and management of psychosocial hazards. Key stakeholders also stressed the need for proper guidelines on psychosocial risk management.

6.2.3 Socioeconomic Environment

Zimbabwe has been going through economic challenges as discussed previously which has negatively influenced the operating environment and some working conditions. It has also affected Occupational Safety and Health (OSH) funding and performance. Most companies are cost cutting in order to remain viable. The lack of OSH funding is not peculiar to Zimbabwe and other developing countries but has also been reported even in developed countries (Irastorza, Milczarek & Cockburn, 2016). Several key stakeholders complained that the operating environment is stressing workers. Salaries have been affected with some companies failing to pay their workers resulting in other social problems especially when they borrow and fail to repay. This situation also affects the ability for workers to concentrate at work. However, the banking sector was not affected by inability to pay salaries. The effects of nonpayment of salaries on the development of stress was discussed. For example, Donovan (2018) observed that low and stagnant salaries contributed to work stress. Furthermore, Zimbabwe has a high unemployment rate, which makes workers vulnerable and may accept poor working conditions since there are limited alternative employment opportunities (Okada, 2019). They are motivated to retain their jobs, therefore they are less likely to complain about their working conditions. These findings support earlier

research which identified the importance of considering factors outside the workplace which influence the employment conditions and relationship (Kortum & Leka, 2014), macroeconomic factors affecting a country must be taken into consideration when trying to understand the psychosocial environment of a nation.

6.2.4 Barriers

Despite the proclaimed awareness by key stakeholders, there was no evidence of significant interventions aimed at managing psychosocial risks in Zimbabwe. Some barriers were identified which will be briefly discussed below as they have been discussed in detail earlier. The socioeconomic environment was considered to be a major barrier as it influences OSH funding and provision of adequate equipment and protective clothing. However, it is important to bear in mind that there are some interventions for psychosocial risk management that may need very little or no money. Some guidelines are available free of charge. However, some aspects of work organisation may just need training which can attract minimal costs. The socioeconomic environment is related to the lack of prioritisation of psychosocial management and the perception of it as a luxury and a cost as organisations have other needs that require more urgent attention like payment of wages. The lack of statistics and research may influence prioritisation as relevant people may not be aware of the extent and costs of a poor psychosocial environment on the health of workers and on organisational performance. If the picture is painted clearly that workers are stressed as suggested by key stakeholders and how stress is related to other life threatening diseases like cardiovascular diseases, this may force organisations and key stakeholders to act.

6.2.5 Priorities

Priorities for action were also identified which include training on occupational safety and health and identification of the health problems emanating from work. When relevant people are equipped with the knowledge of what psychosocial risks are, what causes them, their effects and how they can be prevented and managed, it will be easier to manage them at the workplace level and to even come up with relevant occupational safety and health policies that are inclusive and comprehensive. Occupational health training has also been identified as a priority in West Africa (Sanyang et al., 2017). Determination of the extent or prevalence of problems associated with psychosocial risks was considered to be one of the key priorities. The

statistics are not only relevant for reporting, but they also help to raise awareness. In addition, the stakeholders recommended to include risk management concepts to manage psychosocial risks. Developed countries have embraced and applied this psychosocial risk management approach, i.e. PRIMA (Bergh, Hinna, Leka & Zwetsloot, 2016).

6.2.6 Opportunities

Key stakeholders identified opportunities that can be taken advantage of in trying to manage psychosocial risks in Zimbabwe. The review of legislation presents a major opportunity to include psychosocial risk management and to come up with guidelines on how this can be implemented. Furthermore, organisations are becoming more concerned with the wellness of workers although most of the interventions are biased on physical health. These wellness programmes could be enhanced to become more inclusive in their efforts to improve workers' health. Another opportunity that was identified by key stakeholders is for Trade Unions and other policy makers to utilise their current structures to promote awareness of psychosocial risks and the costs associated with them. This will also assist in the inclusion of psychosocial risks in legislation. Provision of statistics can also help in that regard, although currently there is lack of statistical information as discussed above. The government supports occupational safety and health which is another big opportunity. The enhanced regulatory inspections were noted by a few stakeholders and they present another opportunity. However, inspectors could expand their hazard identification to include psychosocial risk assessments and move beyond the physical focus on inspections. Similarly, as mentioned earlier, Kyaw-Mynt et al. (2017) found that only about 5% of inspections included some aspects of psychosocial risks in south east Australia. This shows that the comprehensiveness of inspections is still a problem even in some developed countries.

6.2.7 Job Demands, Job Resources and Commitment to the Workplace

The banking environment is highly competitive and as such it needs employees who are really committed and who are satisfied with their jobs. Commitment to the workplace has been found to positively influence job performance in banks (Hafiz, 2017). The hypothesis that job resources will be positively related to commitment to the workplace and job demands will be negatively related to commitment to the workplace was partly supported. These findings were unexpected as only possibilities

for development and quantitative demands were significantly related to commitment to the workplace. A possible explanation of why possibilities for development could have been important for bank employees is that the jobs of bank employees are continuously facing changes and require updating of skills and knowledge to remain relevant, responsive and competitive. This calls for continuous learning. A bank that provides development opportunities becomes attractive and enhances commitment to the workplace. As discussed earlier the acquired skills will be useful to the employee for the rest of their lives. Quantitative demands in their very nature are taxing and they cost energy which affects commitment to the workplace negatively (Llorens, Bakker, Schaufeli & Salanova, 2006). Additionally, work load has been reported to have increased in the service sector in the last decades (Geisler, Berthelsen & Muhonen, 2019). In contrast, Anthun and Innstrand (2016) found a positive relationship between role overload and organisational commitment for the middle age group of 30 to 49 years in Norway. When a worker is faced with quantitative demands, their commitment levels may be affected through various mechanisms. One of which could be an individual assessment of the ability to deliver on those demands. For example, Bogler and Nir (2015) found that perceptions of a fit between a person's job demands and their abilities predicted both organisational and professional commitment in a sample of teachers. Commitment is an important work attitude as it was found to be positively related with job performance in the banking sector of Lahore (Hafiz, 2017). Interestingly, age was tested as a control variable and had a positive relationship with commitment to the workplace. Similarly, Anthun and Innstrand (2016) also found that older workers reported higher levels of organisational commitment. This may be due to older workers having accepted their roles in the organisation and coming to terms with it and some could be content having risen the corporate ladder. The hypotheses on commitment to the workplace were based on the dual process of the job demands-resources theory. The motivational process was weakly supported as only possibilities for development had a positive relationship with commitment to the workplace. The results are more consistent with the health impairment process where job demands are not expected to be very important predictors of commitment to the workplace. The health impairment process connects job demands with health outcomes through burnout. Consistent with other research, which reported a negative relationship between job demands and commitment, quantitative demands were negatively related

to commitment to the workplace (Bakker, Demerouti, de Boer & Schaufeli, 2003; Shim, 2018; Wang et al., 2020).

6.2.8 Job Demands, Job Resources and Job Satisfaction

The hypotheses that job demands will be negatively related to job satisfaction whilst job resources will be positively related to job satisfaction was partially supported. Quantitative demands and emotional demands were the most important variables for job satisfaction. Work family conflict and work pace had non-significant relationships in this study. In contrast, Taheri (2017) found a negative relationship between work family conflict and job satisfaction. Quantitative demands significantly predicted commitment to the workplace. This implies that high quantitative demands negatively affect job attitudes of commitment and job satisfaction. Bank employees are susceptible to emotional demands due to their constant interaction with customers. They are not expected to express their emotions to customers but to maintain professionalism at all times. Stressful interactions with customers when they are frequent will result in workers not enjoying their work, and they might end up perceiving all aspects of their job in a negative way. Possibilities for development and quality of leadership had significant relationships with job satisfaction. As mentioned above, bank employees seem to value the opportunity of being developed as the nature of their jobs requires continuous learning and updating of skills to keep up with constant changes affecting the sector, which brings about new challenges. Good leadership makes work enjoyable as workers feel they can talk to their leaders and get support. This is consistent with previous research for example, which found a positive relationship between quality of leadership and job satisfaction. Engelbrecht and Bester (2009) found that workload and lack of communication with management were some of the major determinants of job satisfaction in the Free State province of South Africa. Moreover, Quality of leadership was found to positively influence job satisfaction in South Africa (Sojane, Klopper & Coetzee, 2016). Quality of leadership may also influence the availability of opportunities for development for staff. Emotional demands have been suggested to negatively affect job satisfaction through emotional exhaustion (Wang, Yin & Huang, 2015). These findings provide partial support for the health impairment and motivational processes of the job demands-resources theory and support earlier studies which reported a positive relationship between job

resources and job satisfaction whilst job demands were found to negatively influence job satisfaction (Yeh, 2015; Zito et al., 2018).

6.2.9 Job Demands Job Resources and General Well-Being

As predicted in the research hypotheses, all job demands variables had negative relationships with general well-being except for work pace which had a positive relationship with good general well-being. Unexpectedly, only social support from supervisors was significantly related to general well-being. The qualitative study highlighted that generally workers are stressed in Zimbabwe. As explained earlier, the job demands resources theory postulates two independent processes i.e. health impairment and motivational processes (Bipp, Kleingeld & Ebert, 2019). Research has supported the health impairment process where job demands have been found to be the most important predictors of general well-being whilst job resources are more relevant for the motivational process by their influence on work engagement (Bakker, Demerouti & Scahuefeli, 2003). Therefore, job demands were more important for general well-being rather than job resources, which might explain why most of the job resources did not significantly influence general well-being. Wolter et al. (2019) found that job demands were significant predictors of emotional exhaustion whilst job resources had a negative relationship with emotional exhaustion. This research fully support the health impairment process suggested by the second proposition of the job demands-resources theory. Continuous exposure to job demands will eventually affect health through various mechanisms some of which have been discussed for example, burnout and work related stress. Job demands cost energy and as the worker tries to cope with these demands they may fall ill (Mette et al., 2018). Social support from supervisors can enhance well-being as supervisors can influence workload and facilitates dialogue between supervisor and subordinate. Workers may be more comfortable talking to their supervisor who is usually easier to approach as their level is not too high as that of director or deputy director. Other scholars found a positive relationship between social support from supervisors and general well-being (Somers, Birnbaum & Casak, 2018).

6.2.10 Job Demands, Job Resources and Work Engagement

The hypotheses that job demands will be negatively related to work engagement and that job resources will be positively related to work engagement was testing the motivational hypothesis of the job demands-resources model, which is a central aspect

of the theory. The findings of this study provided partial support for this proposition. As expected, job demands had a significant negative relationship with work engagement except for emotional demands. Work pace had a positive relationship with work engagement. Several studies have supported this negative relationship (Besieux, Baillien, Verbeke and Euwema, 2018; Breevart & Bakker, 2018). The results regarding emotional demands were not expected and are inconsistent with the literature. Emotional demands can also act as a challenge demand in certain situations as it relates with work engagement. For example, Moloney, Boxall, Parsons and Cheung found a positive relationship between emotional demands and work engagement. Riedl and Thomas (2019) also reported a positive relationship between situational emotional demands and work engagement. Social support from supervisors, possibilities for development and influence at work were positively related to work engagement. Similar findings have been reported for the positive relationship between social support from supervisors and work engagement (Rai, Ghosh, Chauhan & Mehta, 2017). Unexpectedly, social support from colleagues and quality of leadership did not have significant relationships with work engagement providing partial support for the hypotheses regarding the relationship between job demands, job resources and work engagement. Interestingly, the job resources that were significant were more related to work engagement than job demands as shown by the effect sizes, providing support for the notion that job resources are more important for work engagement than job demands as discussed above. These findings show that when bank employees are faced with high demands their engagement levels decrease. This implies that the job demands tested in this study were perceived as hindering demands. Efforts should be made to avail job resources to enhance work engagement considering its positive effects on task performance, creativity and organisational citizenship behaviour (Bakker & Albrecht, 2018).

6.2.11 Job Demands, Job Resources and Job Performance

The findings provided partial support for the hypotheses that job demands will be negatively related to job performance whilst job resources will have a positive relationship with job performance as postulated by proposition 6 of the JD-R theory. Work pace and work family conflict had significant relationships with job performance. Interestingly, work pace had a positive relationship with job performance whilst work family conflict influenced job performance negatively. This could be explained by the

long working hours that are common among bank employees. They may not get enough time to rest and attend to other social demands. As explained earlier, this may leave them with less energy to handle work tasks effectively thereby affecting their performance. Similar findings were found on the negative relationship between work family conflict and project performance (Wu, Wu, Li & Dan, 2018). Furthermore, Soomro, Breitenecker and Shar (2018) found contrasting results where work family conflict had a positive influence on job performance, this may be attributed to the fact that more effort and time will be expended on the job task at the expense of the family and consequently job performance will improve. Work pace could have acted as a challenge demand, which facilitates job performance (Lepine, Podsakoff & Lepin, 2005). Another possible explanation is that a high work pace implies that tasks are also completed quickly which may arguably enhance job performance. In contrast, work pace which involves time pressure (job demand) could negatively affect job performance through its adverse relationship with cognitive capacity (Gaillard, 2018). The results that job resources did not have a significant relationship with job performance were not expected. Bank employees reported fairly high levels of job performance. As discussed, a possible explanation could be that good performance is demanded and expected even if job characteristics are not conducive. The implications of not performing are self-defeating. This is in light of the high unemployment rate in the country, the financial sector is also facing retrenchments so there is job insecurity. Most bank employees can easily be replaced so this forces workers to perform. Another possible explanation is that job resources influence job performance indirectly through work engagement. The motivational premise of job resources was not supported in this research. The negative relationship between work family conflict and job performance partially supported the notion that job demands negatively influence job performance through strain (Bakker & Demerouti, 2017). Work pace acting as a challenge demand may have supported the motivational proposition of the JD-R theory.

6.2.12 Interactions Between Job Demands, Job Resources and General Well-Being.

The relationship between job demands, job resources, general well-being and organisational criteria is complex to an extent that variables can interact with each other to influence behaviour, work attitudes and health. The following section

discusses findings of hypotheses which were testing the buffering or interaction hypothesis. The buffering hypothesis suggests that job resources minimize the negative effect of job demands on health.

This study tested the interaction between job demands, job resources and general well-being. The only significant interactions were found when influence at work moderated the relationship between emotional demands and general well-being and between work pace and general well-being. In addition, possibilities for development also moderated the relationship between work family conflict and general well-being. As alluded to, influence at work could have moderated the impact of emotional demands and work pace on general well-being because it involves control. When one has control they can work up to a level that they are comfortable with beyond which they can negotiate a reduction of the workload or work pace or they can even ask for help or more resources. This protects their well-being. Without influence at work, an employee just follows orders and cannot complain that they are failing to cope with the workload or pace or emotional demands. They just continue to work in the face of emotional demands or a very fast work pace. If this is continual, it will negatively affect their well-being. This study highlighted that high job resources and low job demands will result in better well-being. This is indicated by the best well-being which was experienced when influence at work was high and work pace or emotional demands were low. Similarly, when possibilities for development were high and work family conflict was low general well-being was at its best. These findings do not necessarily support the buffering hypothesis since the best well-being was not experienced when both job resources and job demands were high but suggests that a reduction in job demands and an increase in job resources influences general well-being positively. The results are consistent with the findings from the qualitative study where some key stakeholders stressed the need for training and development.

6.2.13 Interactions Between Job Demands, Job Resources and Commitment to the Workplace

The other interaction hypothesis proposed that the relationship between job resources and organisational health outcomes will be weaker when they are high job demands, with job demands acting as the moderator variables. Emotional demands were a significant moderator of possibilities for development and commitment to the workplace whilst quantitative demands significantly moderated the relationship

between influence at work and commitment to the workplace. Additionally, work family conflict moderated the relationship between influence at work and commitment to the workplace whilst work pace moderated the relationship between influence at work and commitment to the workplace. In all situations, the highest levels of commitment to the workplace were reported when job demands were low and job resources were high. Again, these findings did not fully support the buffering hypothesis but indicate that highest levels of commitment were reported when job demands were low and job resources high. This situation may not be common in real life where job demands are always high. The job resources that were most important for commitment to the workplace were influence at work and possibilities for development, whilst work pace, emotional demands and quantitative demands were the most relevant job demands. The presence of job resources is still beneficial when bank employees are faced with high demands as shown by relatively high levels of commitment to the workplace when both job demands and job resources were high. However, the most commitment to the workplace was experienced when job demands were lower and job resources were high. Quantitative demands and work pace can be related to the issue of targets and workload which was raised by key stakeholders. They also noted that commitment levels were decreasing.

6.2.14 Interactions Between Job Demands, Job Resources and Job Performance

Job performance was reported to be the best in situations when both quantitative demands and quality of leadership or influence at work were high. Job performance was worse when quantitative demands were high and influence at work or quality of leadership were low. These findings provide support for the boosting hypothesis where job resources become more beneficial when needed, i.e. when job demands are high (Breevaart & Bakker, 2018; Hobfoll, 2001). Fletcher et al. (2020) considered the boosting hypothesis as the fourth proposition of the job demands-resources theory. However, this relationship is not as simple as it seems since it appears that the boosting hypothesis depends on the type of job resources or job demands in question. For example, job performance was also reported to be highest when job demands were low and job resources were high and decreased when job demands were high and job resources were low. This was experienced on the relationship between quantitative demands, social support from colleagues, and job performance. Job performance was also highest when work family conflict was low and

quality of leadership was high and on the interaction between work family conflict, influence at work and job performance. In this case the job resources that were more important for job performance were social support from colleagues, good quality of leadership and influence at work. Increasing these job resources and reducing quantitative demands and work family conflict enhanced job performance. These results are consistent with some of the literature as discussed above where a negative relationship between work family conflict and job performance was reported (Ashfaq, Mahmood & Ahmed, 2013). Job resources enhance work motivation through the motivational premise of the JD-R theory. Janssen (2001) observed that moderate rather than high or low quantitative demands are more beneficial for job performance based on activation theory but these findings provided mixed results. The relationship between work motivation and job performance was established a long time ago. Motivated employees focus all their attention on the work task and are greatly motivated after task accomplishment. Many theories have been postulated to explain the relationship between work motivation and job performance one of which is goal setting theory (Locke & Latham, 2002). Quality of leadership was one of the job resources that influenced job performance positively, a good leader sets challenging goals with their subordinates and if these are considered challenging but achievable, performance will be greatly enhanced. This implies that there is need to understand the various mechanisms in which job resources influence motivation and work engagement and ultimately job performance. This calls for more research in this area.

6.2.15 Interactions Between Job Demands, Job Resources and Job Satisfaction

The significant interactions with job satisfaction were observed between work family conflict and social support from colleagues, emotional demands and influence at work, work pace and influence at work and quantitative demands and influence at work. The job resources variables that were important for job satisfaction were social support from colleagues and influence at work. Influence at work positively influenced job satisfaction as workers with high influence are able to solicit help from others and they may be able to influence a manageable workload. Social support from colleagues helps especially when an employee is getting assistance on how to carry out a certain task. Job satisfaction was highest mostly when job demands (work family conflict, emotional demands and quantitative demands) were low and job resources were high (influence at work and social support from colleagues), however, job satisfaction was

also highest when both work pace and influence at work were high. This supports the boosting hypothesis. Another possible explanation could be that work pace was acting as a challenging job demand which positively influenced job satisfaction. This implies that reducing job demands may increase job satisfaction in some cases depending on the particular job demand or job resource and in some cases it will reduce job satisfaction. The presence of job demands coupled with job resources increased job satisfaction. The Zimbabwean situation is stressful at the moment because of ongoing economic pressures. As explained in the qualitative study workers face a lot of pressures and job demands, getting support from co-workers may help them to cope with these stressors at the workplace, in this way social support from colleagues becomes a valuable job resource which facilitates job satisfaction.

6.2.16 Interactions Between Job Demands, Job Resources and Work Engagement

Work engagement is an important element of the job demands-resources model as it is one of the mechanisms that influences organisational outcomes. As discussed before, very few studies have been conducted on work engagement in Zimbabwe. For example, Buitendach, Bobat, Muzvidziwa and Kanengoni (2016) reported a positive relationship between job resources and work engagement. Key stakeholders noted the adverse effect of job demands on work engagement. However, the relationship may not be direct as work engagement may be influenced by other factors which may interact with each other to influence outcomes. In this study, interactions of job demands, job resources and work engagement supported the boosting hypothesis when work engagement was found to be highest in situations when emotional demands and influence at work were both high and also when work pace and influence at work were high. Lowest levels were found when influence at work was low and work pace or emotional demands were high. The results suggest that providing bank employees with high influence when faced with emotional demands or a high work pace will help to increase their work engagement, denying them will reduce work engagement. Work engagement was also reported to be highest when influence at work was high and quantitative demands low. This shows that the relationship is complex, in one situation high influence at work increased work engagement when certain job demands were high but in this case it increased work engagement when quantitative demands were low. As discussed before, the type of job demand may

determine how work engagement could be increased. Another theoretical contribution that this research has made is that it is important to differentiate between challenge and hindrance demands to clarify these relationships (Ventura, Salanova & Llorens, 2015).

6.3 Limitations and Suggestions for Future Studies

This section presents limitations of the two studies and suggest ways of mitigating some of them in future studies.

Despite efforts to ensure that the research studies have been conducted with rigour as guided by best research practice, several limitations need to be highlighted.

A possible limitation for the qualitative study is the sample size of 13 key stakeholders which might be considered as small. However, a sample size of 12 has been considered to be adequate for semi-structured interviews (Rowley, 2012). Further, Guest, Bunce and Johnson (2006) found that 12 interviews managed to elicit all themes and 92.2. % of codes during thematic analysis. Additionally, Kortum and Leka (2014) noted that sometimes increasing interview participants beyond a certain level may not result in new information being elicited.

Another limitation is the use of a purposive sample. The purposive sampling procedure was preferred because it enables the selection of participants who possess certain qualities and knowledge about an area of interest. Another advantage of the purposive sampling procedure is that it does not require a set number of participants but places importance on saturation (Etikan, Musa & Alkassim, 2016). It is important to note that the key stakeholders that took part in this study may not have reflected the true knowledge levels of the organisations and professions that they represent but just their own as they were selected by virtue of belonging to a certain organisation and profession. The assumption was that because of the nature of their work they are most likely to be the people who have knowledge about psychosocial factors.Therefore, interpretations of the research findings should not be generalized since the sample was not randomized and may not have been representative of the population in terms of psychosocial knowledge. However, Sharma (2017) suggested that with convincing justification, generalisations from a purposive sample could be made although it is

difficult to convince that similar results will be obtained if different people had been chosen to participate. Another group of experts could display different levels of understanding of psychosocial factors and their relationships with health since it is relatively a new area in the literature in Zimbabwe (Kortum, Leka & Cox, 2010).

Moreover, purposive samples can be prone to researcher biases since they have the sole decision to select participants (Etikan, Musa & Alkassim, 2016). This was mitigated by having a clear criterion for selection and a list of relevant professions and organisations to draw the sample from. Additionally, the study anticipated biases and deliberately recruited a heterogeneous sample in terms of professions and experience. In addition, qualitative studies place importance on individual interpretations and perceptions based on a unique context. In that regard, the diversity of expertise in the sample enabled diverse views on the topic to be elicited and reduced any potential professional biases (Langenhan, Leka & Jain, 2013).

Despite these limitations, the qualitative study has provided key information which can motivate further research in this understudied area and highlight the awareness levels of key stakeholders pertaining to psychosocial factors, their effects and management. Future studies can consider increasing the sample size by including more people from each organisation taking into consideration the saturation principle. Where possible, two people from one organisation were included in this study.

The timing of the research could have presented a potential limitation for both studies as the country is facing socioeconomic challenges which is affecting organisations and individuals. This could have resulted in exaggerated job demands and the perception of the economic environment as a barrier to occupational safety and health. Stress levels emanating from the economic hardships could confound those from the workplace. However, it is still important to understand the context of the psychosocial environment.

The quantitative study also had some limitations which are discussed next. The major limitation was the use of a cross sectional design which makes it impossible to establish trends, sequence and suggest causal relationships (Levin, 2006). Cross sectional studies are only limited to discussing relationships between variables (Sedgwick, 2014). Further, there is no determination of recent critical incidents at the

workplace, which might have influenced the findings (Ilic, Arandjelovic', Jovanovic' & Nesic, 2017). The cross sectional nature of the study poses a challenge in terms of assessing reversed causation as in the case of "gain spirals" (Schaufeli & Taris, 2014). For example, an employee who is a high performer can become more satisfied with their job and attract more job resources, which will increase work engagement. However, a cross sectional study was considered relevant because of the time that was available for the study and the associated costs as it is less expensive (Levin, 2006). The study managed to shed light on the relationships between psychosocial factors and health outcomes. Future studies may consider the use of longitudinal studies to determine the nature of the relationships over time. Results may be different if investigated at a different time.

Another limitation is the use of self-report measures for all the independent and outcome variables. Although self-report measures are common in occupational stress research, they are prone to biases like response sets, an example is the possibility of socially desirable responding by participants in order to portray a certain impression either deliberately or unconsciously. Socially desirable responding may threaten reliability and validity since it may be influenced by the participant's attitude or interests (Yu, Jiang & Shen, 2016). Moreover, common method bias may overestimate relationships between variables (Metin et al., 2016). Self-report measures were considered because of the nature of the research purpose, which involved exploring individual perceptions on attitudinal variables like commitment to the workplace and job satisfaction (Razavi, 2001). These perceptions influence behaviour and ill health. Future research can benefit from using some objective measures especially in measuring variables like job performance through company performance ratings. However, the measures used have been well validated across different countries and found to be reliable as discussed previously. It is important to consider that other "objective measures" like supervisor ratings may also be susceptible to response biases. Moreover, Conway and Lance (2010) observed that the effects of potentially biasing factors like social desirability were not strong and consistent.

Job satisfaction was assessed using a single-item measure which has been criticised by some scholars in terms of psychometric properties (Wanous, Reichers & Judy, 1997). However, the single- item measures of job satisfaction were found to have good psychometric properties even after assessments of minimum reliability and

correlations with multiple-item job satisfaction measures (Dolbier, Webster, Maccalister & Mallon, 2005). In addition, where a construct is well known by the respondents like job satisfaction, using a single-item measure can reliably elicit the construct under investigation especially when it has good face validity (Allisey, Noblet, Lamontagne & Houdmont, 2014). The single-item measure of job satisfaction assisted in reducing the length of the questionnaire. Future research can consider using a scale with more items, which will make it easier to assess the construct validity through component or factor analysis.

There are other factors that influence the relationship between psychosocial factors and health that were not studied in this research. For example, personal resources like self-esteem and resilience have been found to be important moderators or mediators of the relationship between job demands and ill health (Iweins de Wavrans & Casini, 2018; Taris & Schaufeli, 2016). Other variables could also have provided information on the psychosocial environment for example cognitive demands or lack of management recognition. Future studies can investigate the relationship of different job demands and job resources and include personal resources to get a clearer picture since workers can be exposed to various demands. In addition, this study did not specify whether job demands were hindrance or challenge demands as these influence organisational outcomes differently. Work pace had a positive relationship with job performance implying that it could have been perceived as a challenge demand.

Another possible limitation is the fact that the researcher used measures that were all developed in developed countries. This is common in most studies conducted in developing countries. Developed and developing countries have different cultures especially from African cultures. This may influence the type of stressors and how occupational stress is manifested, not withstanding the common stressors and effects that are found in both environments. However, the psychometric properties of the measures were favourable reflecting good construct validity. Future studies may consider developing and utilising those local measures that are psychometrically sound.

The online survey that was used is only limited to workers who have access to a computer and internet and have basic computer literacy (Lefever, Dal & Matthiasdottir,

2007). It left out those workers who cannot use the computer and have no access. This may not be common in developed countries but in developing countries, not everyone has access to internet and a computer. There are some lower level positions where tasks do not involve frequent use of a computer.The online survey could have influenced the response rate negatively. The flexibility where participants can decide to complete the survey at different times may result in cases where a participant forgets to finish the survey or becomes too busy which leads to incomplete responses. This study had 19 returned questionnaires 12 of which had incomplete responses. Online surveys sent through email can be mistakenly treated as junk mail and deleted. (Lefever, Dal & Matthiasdottir, 2007).

The length of the survey could present another limitation that influenced the response rate. It had 75 items that could be considered long. Another potential limitation is non-response bias, potential participants who were not interested in taking part in the study may differ in important ways that are not representative of the population and from those that agreed to participate. For example, they could have been too stressed to participate or had too much work to do (Sedgwick, 2014; Wolter et al., 2019).

The study did not have local norms for the variables to use as a benchmark and for comparison purposes. This is attributed to the scarcity of research in this field in developing countries like Zimbabwe. However, the research was guided by relevant literature.

6.4 Study Implications

Workers are able to take care of their families because of the financial benefits that they get from their jobs. They also get other psychological benefits that include a sense of belonging, a sense of purpose and a sense of identity. Similarly, organisations are able to achieve their objectives, become effective and survive because of people who work in those organisations. The role that is played by the human capital is enormous and workers are only able to perform when they are healthy. If workers are made ill as a result of work the costs are unbearable, people may die and that loss cannot be replaced especially where the family is concerned.

This study has provided additional support for the applicability and validity of the job demands-resources theory in an African developing country. It has shown that job demands are associated with poor well-being, and this is not a new finding as discussed when reviewing the literature also in this context. Prolonged exposure to work demands without job resources has been shown to influence health negatively. The study showed that all job demands variables were negatively related to general well-being, with work-family conflict having the strongest relationship. This has implications to management who have control over work design and work organisation. They can come up with policies that prevent work-family conflict and allow for better management of working hours and flexibility where possible. They should ensure that work is accomplished during the specified working hours except in exceptional cases where the need is apparent. Workers should be given time off where possible and this is a legal requirement based on the Labour Act chapter 28:01. Managers might be prone to this risk since most of their contracts specify that as a manager they will be required to work extra hours. This is abused in some organisations and workers are left with no time or energy to perform other family and social roles, they do not get enough time to recuperate and hence they become stressed and susceptible to burnout. There may be need to reduce other job demands where feasible to promote well-being. Interaction results for general well-being also supported that best well-being is obtained when job demands are low and job resources are high. However, this may not be very practical in most situations. In those circumstances, management need to increase job resources for example, influence at work reduced the influence of emotional demands and work pace on general well-being.

Organisations are urged to invest in the development of their staff. This should be a top management strategic agenda. This study indicated that possibilities for development reduced the effect of work family conflict on general well-being. In addition, it was the only job resource that was important for commitment to the workplace. It also influenced job satisfaction positively together with quality of leadership. Financial constraints could be a hindrance in some situations but organisations can utilise their internal resources for example the experts in those organisations can provide training and coaching to other employees. Additionally,

management should provide influence and social support to their subordinates as much as possible.

In line with previous research, this study highlighted that job resources enhance positive work attitudes. These must be availed for the organisation to realise good performance. Unexpectedly, work pace had a positive relationship with job performance, however, the pace of work has to be monitored to ensure that it does not impact negatively on the health of workers. The interaction results have also suggested the combinations that are most beneficial for job performance, job satisfaction, work engagement and work commitment. These conditions when important job outcomes and individual health can be maximised should inform job design interventions. It is important to note that in some situations there is need to reduce job demands if that is possible to enhance well-being and commitment to the workplace. In some situations this can also work to enhance job performance and work engagement. However, in other situations job performance, job satisfaction and work engagement can be improved when both job demands and job resources are high, for example, the combination of high social support from colleagues and high quantitative demands resulted in highest levels of job performance. High emotional demands and high influence increased work engagement levels. Providing influence at work can enhance job satisfaction when working at a high work pace in banks. This also highlights the importance of social support from colleagues for job performance. There should be a deliberate effort to ensure that teams work together well. It is therefore important to determine the specific job resources that will work well with certain job demands, for example, emotional demands from customers can be difficult to reduce except when the causes are very clear that the management can avoid them. However, emotional demands from co-workers can be managed through training on conflict resolution or other interventions having established the causes.

Human resources professionals should monitor quantitative demands and their relationship with work attitudes. This study highlighted the negative association of quantitative demands with job satisfaction and commitment to the workplace. There is need to determine the type of quantitative demands that are of concern and what is causing them and then try to manage from the source of the problem. Managers can establish whether it is lack of skills or a work organisation problem and address it. Where possible they can be reduced by sharing the work. It is hoped that

psychologists, human resource managers, policy makers can take advantage of these results to enhance employee well-being and job performance through action and for other academics, through further research since this was an exploratory study.

Psychosocial factors are still not receiving the attention that they deserve in Zimbabwe as more focus is still biased towards physical hazards (Asumeng, Acquah-Coleman & Dadzie, 2015). Training can be provided to organisations as we are aware of the risk factors to look out for in this important area. Equipped with that knowledge, organisations can conduct risk assessments for work-related stress as they do with physical demands. This approach has been found to work in other countries (Potter et al., 2019). The knowledge levels of key stakeholders must be enhanced so that they can even spearhead training in their constituents. Inspectors must also be trained to enable them to include risk assessments for psychosocial hazards in their inspections. Meanwhile available free guidelines can be tailor made to suit the context and psychologists who are trained in this area should play a role in prevention efforts. The Zimbabwe Psychological Association must also play a key role in terms of raising awareness in Zimbabwe.

This calls for policy makers, especially the National Social Security Authority (NSSA) and the social partners, employers and workers' representatives, to look seriously into these issues as they are real. While it is appreciated that psychosocial issues are mentioned in the recent Occupational Safety and Health Policy of 2014 (although not in a comprehensive manner but it is commendable), implementation is required now as there is evidence on the factors that pose a risk to the health of workers. As has been highlighted in this study, the health of workers is not only affected by physical and chemical hazards but also psychosocial hazards, which need to be understood, and managed with a preventative agenda. The focus should not be on the individual worker alone although workers can be provided with appropriate training. Dealing with coping mechanisms alone is reactionary and inadequate, and preventive measures should target the source of the problem which is anchored on how work is organised, managed and designed.

Key stakeholders can consider including psychosocial risks in legislation since it is being reviewed. This will enhance awareness and assist in safeguarding employee health by improving working conditions. At the moment there is no enforcement due to

the absence of legislation. However, other countries especially in Europe have benefitted from legislating psychosocial risk management, which has immense organisational, individual and societal benefits. Psychosocial risk inspections by the regulator can only be possible if this is legislated (Potter et al., 2019). The need for coming up with comprehensive guidelines cannot be overemphasised, these should provide proper guidance in terms of terminology, risk factors, how prevention will be carried out and what good standards look like. This information must be included in legislation or policies so that organisations are well informed.

This research contributed to the scarce literature on the relationship between psychosocial risks, individual and organisational health in Africa using various variables and interactions of job demands and resources and has shed light on the most important job demands and resources to consider when crafting interventions in the banking sector. Notwithstanding, the sectorial nature of the research these findings can be tested in other organisations from different sectors, as both the qualitative and quantitative studies indicated that most workers in Zimbabwe are stressed. They should also be verified in other developing countries.

6.5 Future Research

There is need to establish the role that work pace plays on individual and organisational health. Work pace was considered as a job demand in this study. Unexpectedly, work pace was positively related to good well-being, work engagement, and job performance. These findings should be explored further to investigate if it should be considered as a challenge demand. The threshold for the pace of work which will be the baseline beyond which it will pose a risk to the health of workers should be known, taking into consideration the different types of work and job positions. This study did not differentiate between challenge and hindrance demands. Future research should try and indicate which demands are challenge demands and the ones which are hindrance demands as they influence health outcomes in different ways.

Information on job positions was gathered but not analysed in the current research. Future studies can classify jobs according to job positions for example,

clerical, managerial or executive levels and investigate these relationships. Psychosocial factors can vary according to the level that one occupies making other positions more susceptible to work-related stress. The demands that are faced by a clerical worker may affect health in different ways than those faced by a head of department. Interventions may also be pitched at different levels depending on the job position. For example, a clerk may benefit from technical training to manage work related issues which may not be appropriate for an executive. In addition, gender differences can also be investigated in Zimbabwe as Fernandes and Mekoth (2009) found that women in banks were more stressed than their male counterparts since they have other gender related roles that they assume, especially in patriarchal societies like Zimbabwe. Future work can consider targeting a much larger sample of employees from more banks. This will enable the participants to be more representative of the population. There are 13 commercial banks and the current study only managed to obtain participants from five banks.

The current research has managed to highlight the relationships between psychosocial factors, general well-being, commitment to the workplace, work engagement, job satisfaction and job performance based on a cross sectional design. The study can be replicated using a longitudinal study where possible in order to make inference about causal relationships. Collecting data at different periods will enable an analysis of trends and any reciprocal relationships between job demands, job resources, individual and organisational health criteria or any critical incidence which may influence the relationships. Furthermore, since the study utilised self report measures, future research may consider obtaining data from multiple sources of information, for example, from supervisors and colleagues. Utilising objective data from company records may mitigate potential biases associated with self report measures.

The study can also be extended to other industries since the qualitative study showed that generally workers in Zimbabwe are stressed and not only in the banking sector. This will assist in establishing the current position on the effects of psychososcial factors on health at a national level based on information from different sectors. Key stakeholders identified the need to establish the health problems emanating from work and the extent of the problem as one of the key priorities. They also stressed the importance of monitoring these health issues. They noted the lack of statistics and baseline data on psychosocial issues in Zimbabwe. Sectorial statistics

are needed, for example establishing the number of hours lost through stress related absenteeism, health costs and impact on productivity. Sectorial statistics and their psychosocial concerns will be valuable in informing decision making. Lack of research on psychososcial factors and their relationship with health were considered to be a barrier to managing these risks. In that regard, it is important for future research to focus on this urgent priority in Zimbabwe and other developing countries. Such research will inform the current status of psychosocial risks and their effect on health.

The flexibility of the job demands-resources theory implies that any work characteristics can be classified into job demands and job resources. There are other variables that can influence individual and organisational health that were not included in this study. For example, cognitive demands and job insecurity. Personal resources like self efficacy can also be explored in addition to the job demands and resources to see if certain people are more prone to experiencing work-related stress and work engagement (Opie & Henn, 2013; Roczniewska & Bakker, 2016). Personality profiles can also be considered to understand if other people are more likely to perceive their work as stressful or as satisfying, for example the five factor model of personality (Macrae & Costa, 1989).

Previous research highlighted that the levels of work engagement can fluctuate within the same individual even in one day. In that regard, variations of work engagement, commitment and performance within an individual can also be explored to see what activities are associated with the expression of these variables and at what point (Bakker, 2014). This can be studied in relation to changes in the availability of job resources and the presence of job demands.

The findings on the relationship between job demands, job resources and commitment to the workplace were unxpected. Quantitative demands and possibilities for development were the only variables that were related to commitment to the workplace. It will be interesting for future studies to establish which variables are more important for commitment to the workplace. Could it be resources at the organisational level, team or task level.

Social support from supervisiors was the only job resource which was relevant for general well-being. All job demands were negatively related to general well-being

consistent with the health impairment hypothesis except for work pace which had a positive relationship with general well-being. There is need to provide additional evidence on the role of job resources on well-being. As discussed, job resources are more relevant for organisational health outcomes through engagement whilst job demands are more important for health outcomes through burnout. If workers are faced with high job demands should the organisation provide more job resources or just try to minimise the job demands where possible? which job resources should be availed? in this study social support from supervisors was found to be more important for general well-being. What factors influence the relationship between job resources and general well-being and what are the path ways.

The finding that job resources were not related to job performance was unexpected and inconsistent with proposition 6 of the JD-R. Future research can explore this relationship further by using different job resources and clarify whether different types of job resources influence job performance differently in the banking sector.

The qualitative sample consisted of very few representatives from relevant organisations and professions. It will be interesting to note if the level of awareness of key stakeholders will be mantained if more key stakeholders are interviewed. This can be followed up by a focus group discussion to probe and understand the depth of their knowledge regarding psychosocial issues and its relationship with health factors. This will clarify whether a significant number of key stakeholders are aware as raised by a few stakeholders who thought that the level of awareness was not adequate. As this was an exploratory study it is important to confirm the level of awareness and knowledge of key stakeholders inorder to suggest relevant interventions to raise awareness where there is need. Future research can also consider extending the research on perceptions of key stakeholders and include more stakeholders even from a regional perspective utilising current Southern African Development Community (SADC) structures to initiate a regional intervention for psychosocial risk management before considering a continental one. This research could also be decentralised to organisations to investigate how psychosocial factors are perceived and understood in organisations. Looking at key stakeholders like the employer, management and worker representatives, this might assist in coming up with interventions at the organisational

level. Research in this area should be coordinated and take advantage of collaboration of experts.

The interaction results suggest that there is still need for more research to be conducted in order to understand how job demands and job resources interact with each other to influence organisational health outcomes in developing countries. As mentioned earlier previous research also observed that the findings on interactions are still not conclusive (Schaufeli, 2017). Moreover, there is need for more clarity on which situations should job demands be reduced or when they should be complemented by job resources, i.e. occasions when high job demands and high job resources are beneficial or when high job resources and low job demands are preferred. For example, high job demands and low job resources resulted in the best general well-being and commitment to the workplace. There are situations when both high job demands and high job resources resulted in the best job performance, job satisfaction and work engagement. Does it depend with a specific job resource or job demand? For example, influence at work seemed to increase its motivational power when combined with quantitative demands and influenced job performance and job satisfaction positively. It also resulted in the highest work engagement when emotional demands or work pace were high. Although other job resources like possibilities for development managed to boost motivation there is need to establish the role of influence at work as it appeared to be an important job resource to banking employees in this study.

6.6 Conclusion and Next Steps

This thesis was motivated by the need to safeguard the health of workers after having appreciated the costs of psychosocial risks to individuals, organisations and society at large. It offers a unique contribution to theory and practice by combining an exploration of perceptions of key stakeholders who play a very critical role in managing safety and health in Zimbabwe. Findings from the qualitative study revealed that key stakeholders have some knowledge of the relationship between psychosocial risks and individual and organisational health. However, distal macroeconomic factors play an important role in occupational safety and health performance. They affect prioritisation of important issues like psychosocial risks. There is need to raise awareness

especially on the benefits of managing psychosocial risks in Zimbabwe and the real costs associated with not managing them. There was consensus in this research that workers in Zimbabwe are stressed. The thesis contributed to the call for research on psychosocial risks in developing countries and managed to highlight the job demands, job resources and their interactions that are more important for individual and organisational health in the banking sector. The researcher is not aware of any study that has studied the variables included in this research together with all their interactions in Africa. Areas that need further investigation have been highlighted. There is need to come up with comprehensive policies and guidelines on psychosocial risk management in Zimbabwe. There is also need to consider including psychosocial risks in legislation. Serious awareness campaigns should be developed by the key stakeholders who participated in this study or their representatives. This thesis also provided further support for the applicability of the job demands-resources theory in developing countries.

References

Abel, T. (2008). Cultural capital and social inequality in health. *Journal of Epidemiology & Community Health*, *62*(7), e13. https://doi.org/10.1136/jech.2007.066159

Abraham, K. G., Haltiwanger, J. C., Sandusky, K., & Spletzer, J. R. (2018). *Measuring the gig economy: Current knowledge and open issues* (No. w24950). National Bureau of Economic Research.

Adams, J., Khan, H. T., & Raeside, R. (2014). *Research Methods for Business and Social Science Students*. SAGE Publications India.

Adhabi, E., & Anozie, C. B. (2017). Literature review for the type of interview in qualitative research. *International Journal of Education*, *9*(3), 86-97.

Åhlin, J. K., Westerlund, H., Griep, Y., & Magnusson Hanson, L. L. (2017). Trajectories of job demands and control: Risk for subsequent symptoms of major depression in the nationally representative Swedish longitudinal occupational survey of health (SLOSH). *International Archives of Occupational and Environmental Health*, *91*(3), 263-272. https://doi.org/10.1007/s00420-017-1277-0

Ahmad, A., Hussain, A., Mughal, M. P., Mufti, N. A., & Saleem, M. Q. (2018). Effects of workplace stress on managers of textile industries of developing countries: A case study from Pakistan. *Advances in Intelligent Systems and Computing*, 500-507. https://doi.org/10.1007/978-3-319-94709-9_49

Ahmed, U., Shah, M. H., Siddiqui, B. A., Shah, S. A., Dahri, A. S., & Qureshi, M. A. (2017). Troubling job demands at work: Examining the deleterious impact of workload and emotional demands on work engagement. *International Journal of Academic Research in Business and Social Sciences*, *7*(6), 96-106. https://doi.org/10.1007/s00420-017-1277-0

Ajayi, S. (2018). Effect of stress on employee performance and job satisfaction: A case study of Nigerian banking industry. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3160620

Akhtar, A., Naheed, K., Akhtar, S., & Farooq, U. (2018). Impact of Job Stress on Employees'Job Satisfaction: An Empirical Study of Private Banksof Pakistan *Pakistan Journal of Social Sciences (PJSS)*, *38*(1), 137–151. https://en.oxforddictionaries.com/definition/stress

Akpinar-Elci, M., Nguyen, M., Randall, M., Bidaisee, S., Elci, O., Olayinka, O., & Rodriguez Guzman, J. (2017). Assessment of current occupational safety and health regulations and legislation in the Caribbean. *Revista Panamericana de Salud Publica/Pan American Journal of Public Health*, Vol. 41. https://doi.org/10.26633/RPSP.2017.26

Al-Ali, W., Ameen, A., Isaac, O., Khalifa, G. S., & Shibami, A. H. (2019). The mediating effect of job happiness on the relationship between job satisfaction and employee performance and turnover intentions: A case study on the oil and gas industry in the United Arab Emirates. *Journal of Business & Retail Management Research*, *13*(04). https://doi.org/10.24052/jbrmr/v13is04/art-09

Albertsen, K., Rugulies, R., Garde, A. H., & Burr, H. (2009). The effect of the work environment and performance-based self-esteem on cognitive stress symptoms among Danish knowledge workers. *Scandinavian Journal of Public Health*, *38*(3_suppl), 81-89. https://doi.org/10.1177/1403494809352104

Albrecht, S. L. (2012). The influence of job, team and organizational level resources on employee well-being, engagement, commitment and extra-role performance: Test of a model. *International Journal of Manpower*, *33*(7), 840-853.

Albright, J. J., & Park, H. M. (2009). *Confirmatory factor analysis using Amos, LISREL, Mplus, SAS/STAT CALIS. University Information Technology Services (UITS) Center for Statistical and Mathematical Computing Indiana University*. Working Paper. http://www. indiana. edu/~ statmath/stat/all/cfa/ind ex. html.

Al-dalahmeh, M., Masa'deh, R., Abu Khalaf, R. K., & Obeidat, B. Y. (2018). The Effect of Employee Engagement on Organizational Performance Via the Mediating Role of Job Satisfaction: The Case of IT Employees in Jordanian Banking Sector. *Modern Applied Science*, *12*(6), 17. https://doi.org/10.5539/mas.v12n6p17

Alegre, I., Mas-Machuca, M., & Berbegal-Mirabent, J. (2016). Antecedents of employee job satisfaction: Do they matter? *Journal of Business Research*, *69*(4), 1390-1395.

Al-Homayan, A. M., Shamsudin, F. M., Subramaniam, C., & Islam, R. (2013). Impacts of job performance level on nurses in public sector hospitals. *American Journal of Applied Sciences*, *10*(9), 1115-1123.

Ali, N., & Miralam, M. (2019). The effect of job stress and need deficiency on performance. *Management Science Letters*, *9*(6), 945-956.

Allisey, A. F., Noblet, A. J., Lamontagne, A. D., & Houdmont, J. (2014). Testing a model of officer intentions to quit: the mediating effects of job stress and job satisfaction. *Criminal Justice and Behavior*, *41*(6), 751-771.

Alman, D. (2010). *Organizational health: Improving organizational performance and employee well-being*. https://en.calameo.com/read/001450934ea0ea13fcaa4

Al-Saadi, H. (2014). *Demystifying Ontology and Epistemology in research methods*. [Unpublished doctoral research thesis], University of Sheffield, UK.

Alvarado, L. E., & Bretones, F. D. (2018). New working conditions and well-being of elementary teachers in Ecuador. *Teaching and Teacher Education*, *69*, 234-242.

Alvi, U. (2017). The Effect of Psychological Wellbeing on Employee Job Performance: Comparison between the Employees of Projectized and Non-Projectized Organizations. *Journal of Entrepreneurship & Organization Management*, *06*(01), 8–12. https://doi.org/10.4172/2169-026x.1000206

Al-Yateem, N. (2012). The effect of interview recording on quality of data obtained: a methodological reflection. *Nurse Researcher, 19*(4), 31–35.

Amigo, I., Asensio, E., Menéndez, I., Redondo, S., & Ledesma, J. a. (2014). Working in direct contact with the public as a predictor of burnout in the banking sector. *Psicothema*, *26*(2), 222–226. https://doi.org/10.7334/psicothema2013.282

Amiri, D., Sann, L. M., Adon, M. Y., Mukhtar, H. F., Idris, K., Kuhn, K., & Kamari, A. A. (2015). Relationship of psychosocial safety climate and workplace psychosocial risks: A randomized trail among personnel of an oil and gas company in Iran. *Asian Social Science, 11*(12), 69-83.https://doi.org/10.5539/ass.v11n12p69

Amponsah-Tawiah, K., Jain, A., Leka, S., Hollis, D., & Cox, T. (2013). Examining psychosocial and physical hazards in the Ghanaian mining industry and their implications for employees' safety experience. *Journal of Safety Research*, *45*, 75-84.

Amponsah-Tawiah, K., & Mensah, J. (2016). Occupational Health and Safety and Organizational Commitment: Evidence from the Ghanaian Mining Industry. *Safety and Health at Work*, *7*(3), 225–230. https://doi.org/10.1016/j.shaw.2016.01.002

Amponsah-Tawiah, K., Leka, S., Jain, A., Hollis, D., & Cox, T. (2014). The impact of physical and psychosocial risks on employee well-being and quality of life: The case of the mining industry in Ghana. *Safety Science*, *65*, 28–35. https://doi.org/10.1016/j.ssci.2013.12.002

Anderson, S., Stuckey, R., & Oakman, J. (2018). Work-related musculoskeletal injuries in prosthetists and orthotists in Australia. International Journal of Occupational Safety and Ergonomics, 1–6. doi: 10.1080/10803548.2018.1485335

Anthun, K. S., & Innstrand, S. T. (2016). The predictive value of job demands and resources on the meaning of work and organisational commitment across different age groups in the higher education sector. *Journal of Higher Education Policy and Management*, *38*(1), 53–67. https://doi.org/10.1080/1360080X.2015.1126890

Aronsson, G., Theorell, T., Grape, T., Hammarström, A., Hogstedt, C., Marteinsdottir, I., Skoog, I., Träskman-Bendz, L., & Hall, C. (2017). A systematic review including meta-analysis of work environment and burnout symptoms. *BMC Public Health, 17*(1). https://doi.org/10.1186/s12889-017-4153-7

Arunika, M. M. A., & Kottawatta, H. (2015). The Effect of Work Life Balance on Employee Job Satisfaction among Non Executives in the Public Banking Sector in Colombo District. *Human Resource Management Journal*, *3*(01), 60.

Aryan, R., & Kathuria, D. (2017). Psychological Wellbeing at Workplace:-An Analytical Study on It Sector. *International Journal of Advanced Research in Computer Science and Software Engineering*, *7*(6), 223–228. https://doi.org/10.23956/ijarcsse/v7i6/0150

Ashfaq, S., Mahmood, Z., & Ahmad, M. (2013). Impact of work-life conflict and work over load on employee performance in banking sector of Pakistan. *Middle-East Journal of Scientific Research*, *14*(5), 688-695.

Ashill, N. J., Rod, M., & Gibbs, T. (2015). Coping with stress: A study of retail banking service workers in Russia. *Journal of Retailing and Consumer Services*, *23*(0), 58–69. https://doi.org/http://dx.doi.org/10.1016/j.jretconser.2014.12.006

Asif, F., Javed, U., & Janjua, S. Y. (2018). The job demand-control-support model and employee wellbeing: A meta-analysis of previous research. *Pakistan Journal of Psychological Research*, *33*(1), 203–221.

Asumeng, M. A., Acquah-Coleman, R., & Dadzie, J. J. (2015). Addressing psychosocial hazards and improving employee psychological wellbeing in the Ghanaian banking industry: Application of Organization Development Intervention using Action Research Model. *American Journal of Applied Psychology*, *4*(5), 120-128.

Atilola, O. (2012). Partaking in the global movement for occupational mental health: what challenges and ways forward for sub-Sahara Africa? *International Journal of Mental Health Systems*, *6*, 1–10. https://doi.org/10.1186/1752-4458-6-15

Avey, J. B., Luthans, F., Smith, R. M., & Palmer, N. F. (2010). Impact of positive psychological capital on employee well-being over time. *Journal of Occupational Health Psychology*, *15*(1), 17–28. https://doi.org/10.1037/a0016998

Awang, Z. (2015). Validating the measurement model: Confirmatory factor analysis. In Z. Awang (Ed.), *A handbook on SEM* (2nd ed., pp. 54–74). Kuala Terengganu, Malaysia: Universiti Sultan Zainal Abidin (UniSZA).

Babakus, E., Yavas, U., & Karatepe, O. M. (2017). Work engagement and turnover intentions: Correlates and customer orientation as a moderator. *International Journal of Contemporary Hospitality Management*, *29*(6), 1580-1598.

Babbie, E., Mouton, J., Vorster, P., & Prozesky, B. (2001). *The Practice of Social Research*. Oxford University Press, South Africa

Babones, S. (2016). Interpretive quantitative methods for the social sciences. *Sociology*, *50*(3), 453-469

Backé, E. M., Seidler, A., Latza, U., Rossnagel, K., & Schumann, B. (2012). The role of psychosocial stress at work for the development of cardiovascular diseases: a systematic review. *International Archives of Occupational and Environmental Health*, *85*(1), 67-79.

Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The Meaning, Antecedents and Outcomes of Employee Engagement: A Narrative Synthesis. *International Journal of Management Reviews*, *19*(1), 31–53. https://doi.org/10.1111/ijmr.12077

Baka, L. (2018). Types of job demands make a difference. Testing the job demand-control-support model among Polish police officers. *International Journal of Human Resource Management*, *5192*, 1–24. https://doi.org/10.1080/09585192.2018.1443962

Bakker, A. B. (2014). Daily fluctuations in work engagement. *European Psychologist*, *19*(4), 227-236. https://doi.org/10.1027/1016-9040/a000160

Bakker, A. B., & Albrecht, S. (2018). Work engagement: current trends. *Career Development International*, *23*(1), 4–11. https://doi.org/10.1108/CDI-11-2017-0207

Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology, 83*(1), 189-206.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309-328.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, *13*(3), 209-223.

Bakker, A. B., & Demerouti, E. (2014). Job demands–resources theory. In P. Chen & C. Cooper (Eds.), *Wellbeing: A complete reference guide* (pp.37-64). Chichester, UK: Wiley-Blackwell.1-28.

Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, *22*(3), 273–285. https://doi.org/10.1037/ocp0000056

Bakker, A. B., & Demerouti, E. (2018). Multiple levels in job demands-resources theory: Implications for employee well-being and performance. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being.* Salt Lake City, UT: DEF Publishers. DOI: nobascholar.com.

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, *10*(2), 170.

Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, *62*(2), 341–356. https://doi.org/10.1016/S0001-8791(02)00030-1

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: the JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 389-411.

Bakker, A.B., Demerouti, E., & Schaufeli, W. (2003). Dual processes at work in a call centre: An application of the job demands–resources model. *European Journal of Work and Organizational Psychology*, *12*(4), 393-417.

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, *43*(1), 83-104. https://doi.org/10.1002/hrm.20004

Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology, 99*(2), 274-284.https://doi.org/10.1037/0022-0663.99.2.274

Bakker, A. B., & Sanz-Vergel, A. I. (2013). Weekly work engagement and flourishing: The role of hindrance and challenge job demands. *Journal of Vocational Behavior*, *83*(3), 397-409.

Bakker, A. B., Van Emmerik, H., & Van Riet, P. (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. *Anxiety, Stress, & Coping*, *21*(3), 309-324.

Bakker, A. B., van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control model. *Journal of Personnel Psychology*, *9*(1), 3-16.

Bal, P. M., & De Lange, A. H. (2015). From flexibility human resource management to employee engagement and perceived job performance across the lifespan: A multisample study. *Journal of Occupational and Organizational Psychology*, *88*(1), 126-154.

Baloch, M. A., Meng, F., Xu, Z., Cepeda-Carrion, I., & Bari, M. W. (2017). Dark Triad, Perceptions of Organizational Politics and Counterproductive Work Behaviors: The Moderating Effect of Political Skills. *Frontiers in Psychology*, *8*, 1972. https://doi.org/10.3389/fpsyg.2017.01972

Balogun, A. G., & Afolabi, O. A. (2018). Examining the moderating roles of job demands and resources on the relation between work engagement and work–

family conflict. *South African Journal of Psychology*, *49*(4), 479-490. https://doi.org/10.1177/0081246318818382

Bamgbose, A. O. (2014). Influence of Work Environment on Organizational Commitment Among Electronic Media Practitioners in South West, Nigeria. *Journal of Social and Behavioural Sciences*, *3*(2), 171-184.

Banerjee, S., & Mehta, P. (2016). Determining the Antecedents of Job Stress and Their Impact on Job Performance: A Study Among Faculty Members. *IUP Journal of Organizational Behavior*, *15*(2), 7.

Barken, R., Denton, M., Sayin, F. K., Brookman, C., Davies, S., & Zeytinoglu, I. U. (2018). The influence of autonomy on personal support workers' job satisfaction, capacity to care, and intention to stay. *Home Health Care Services Quarterly*, *37*(4), 294-312. https://doi.org/10.1080/01621424.2018.1493014

Barkhordari, A., Malmir, B., & Malakoutikhah, M. (2019). An Analysis of Individual and Social Factors Affecting Occupational Accidents. *Safety and Health at Work*, *10*(2), 205-212.

Bashir, U., & Ramay, M. I. (2010). Impact of stress on employees job performance a study on banking sector of Pakistan. *International Journal of Marketing Studies*, *2*(1). 122-126. https://doi.org/10.5539/ijms.v2n1p122

Begat, I., Ellefsen, B., & Severinsson, E. (2005). Nurses' satisfaction with their work environment and the outcomes of clinical nursing supervision on nurses' experiences of well-being–a Norwegian study. *Journal of Nursing Management*, *13*(3), 221-230.

Belias, D., Koustelios, A., Sdrolias, L., & Aspridis, G. (2015). Job satisfaction, role conflict and autonomy of employees in the Greek banking organization. *Procedia-Social and Behavioral Sciences*, *175*, 324-333.

BeLue, R., Okoror, T. A., Iwelunmor, J., Taylor, K. D., Degboe, A. N., Agyemang, C., & Ogedegbe, G. (2009). An overview of cardiovascular risk factor burden in sub-

Saharan African countries: a socio-cultural perspective. *Globalization and Health*, *5*(1), 10.

Bergh, L. I. V., Hinna, S., Leka, S., & Zwetsloot, G. I. (2016). Developing and testing an internal audit tool of the psychosocial work environment in the oil and gas industry. *Safety Science*, *88*, 232-241.

Bergh, L. I. V., Leka, S., & Zwetsloot, G. I. J. M. (2018). Tailoring Psychosocial Risk Assessment in the Oil and Gas Industry by Exploring Specific and Common Psychosocial Risks. *Safety and Health at Work*, *9*(1), 63–70. https://doi.org/10.1016/j.shaw.2017.05.001

Bernards, N. (2019). Placing African labour in global capitalism: the politics of irregular work. *Review of African Political Economy*, *46*(160), 294-303.

Berthelsen, H., Hakanen, J. J., & Westerlund, H. (2018). Copenhagen psychosocial questionnaire-a validation study using the job demand-resources model. *PLoS ONE*, *13*(4), Article e0196450.

Besieux, T., Baillien, E., Verbeke, A. L., & Euwema, M. C. (2018). What goes around comes around: The mediation of corporate social responsibility in the relationship between transformational leadership and employee engagement. *Economic and Industrial Democracy*, *39*(2), 249-271.

Bhatti, M. H., Bhatti, M. H., Akram, M. U., Hashim, M., & Akram, Z. (2016). Relationship between job stress and organizational commitment: An empirical study of banking sector. *E3 Journal of Business Management and Economics*, *7*(1), 029-037.

Bhatti, M. A., Mat, N., & Juhari, A. S. (2018). Effects of job resources factors on nurses job performance (mediating role of work engagement). *International Journal of Health Care Quality Assurance*, *31*(8), 1000-1013. https://doi.org/10.1108/ijhcqa-07-2017-0129

Bhavsar, V., & Bhugra, D. (2008). Globalization: Mental health and social economic factors. *Global Social Policy*, *8*(3), 378-396.

Bhugra, D., & Mastrogianni, A. (2004). Globalisation and mental disorders: overview with relation to depression. *The British Journal of Psychiatry*, *184*(1), 10-20.

Bigirimana, S., Sibanda, E. N., & Masengu, R. (2016). The impact of working conditions on academic staff turnover at Africa University, Mutare, Zimbabwe. *Asian Journal of Social Sciences and Management Studies*, *3*(2), 91-98.

Bigna, J. J., & Noubiap, J. J. (2019). The rising burden of non-communicable diseases in sub-Saharan Africa. *The Lancet Global Health*, *7*(10), e1295-e1296.

Bipp, T., Kleingeld, A., & Ebert, T. (2019). Core self-evaluations as a personal resource at work for motivation and health. *Personality and Individual Differences*, *151*, 109556.

Birtch, T. A., Chiang, F. F. T., & Van Esch, E. (2016). A social exchange theory framework for understanding the job characteristics–job outcomes relationship: the mediating role of psychological contract fulfillment. *International Journal of Human Resource Management*, *27*(11), 1217–1236. https://doi.org/10.1080/09585192.2015.1069752

Bliese, P. D., Edwards, J. R., & Sonnentag, S. (2017). Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology*, *102*(3), 389.

Blustein, D. L., Kenny, M. E., Di Fabio, A., & Guichard, J. (2019). Expanding the impact of the psychology of working: Engaging psychology in the struggle for decent work and human rights. *Journal of Career Assessment*, *27*(1), 3-28.

Boahin, P. (2018). The changing nature of work and employability skills development in Higher Education Institutions in Ghana. *Eur. J. Educ. Dev. Psychol*, *6*(3), 21-32.

Bogler, R., & Nir, A. E. (2015). The contribution of perceived fit between job demands and abilities to teachers' commitment and job satisfaction. *Educational Management Administration and Leadership*, *43*(4), 541–560. https://doi.org/10.1177/1741143214535736

Boyatzis, R. E. (1998). *Thematic analysis and code development: Transforming qualitative information*. SAGE.

Boyd, C. M., Bakker, A. B., Pignata, S., Winefield, A. H., Gillespie, N., & Stough, C. (2011). A longitudinal test of the job demands-resources model among Australian university academics. *Applied Psychology*, *60*(1), 112-140.

Brannen, J. (2005). Time and the negotiation of work–family boundaries: Autonomy or illusion?. *Time & Society*, *14*(1), 113-131.

Brannen, J. (Ed.). (1992). *Mixing Methods: Quantitative and Qualitatitive Research*. Avebury.

Brauchli, R., Bauer, G. F., & Hämmig, O. (2011). Relationship Between Time-Based Work-Life Conflict and Burnout. *Swiss Journal of Psychology*, *70*(3), 165–174. https://doi.org/10.1024/1421-0185/a000052

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Braun, V. & Clarke, V. (2012) Thematic analysis. In Cooper, H. (Ed.), *The Handbook of Research Methods in Psychology*. Washington, DC: American Psychological Association

Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? *International Journal of Qualitative Studies on Health and Well-being*, *9*(1), 26152. https://doi.org/10.3402/qhw.v9.26152

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589-597. https://doi.org/10.1080/2159676x.2019.1628806

Braun, V., Clarke, V., & Hayfield, N. (2019). 'A starting point for your journey, not a map': Nikki hayfield in conversation with Virginia braun and Victoria Clarke about thematic analysis. *Qualitative Research in Psychology*, 1-22. https://doi.org/10.1080/14780887.2019.1670765

Braun, V., Clarke, V. & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191-205). London: Routledge

Breevaart, K., & Bakker, A. B. (2018). Daily job demands and employee work engagement: The role of daily transformational leadership behavior. *Journal of Occupational Health Psychology*, *23*(3), 338.

Briscoe, J. P., & Finkelstein, L. M. (2009). The “new career” and organizational commitment: do boundaryless and protean attitudes make a difference?. *Career Development International*, *14*(3), 242-260.

Bromley P., Lerch J. (2018) Human Rights as Cultural Globalisation: The Rise of Human Rights in Textbooks, 1890–2013. In: E. Fuchs & A. Bock (Eds.), *The Palgrave Handbook of Textbook Studies*. Palgrave Macmillan, New York

Brough, P., & Frame, R. (2004). Predicting police job satisfaction and turnover intentions: The role of social support and police organisational variables. *New Zealand Journal of Psychology*, *33*(1), 8-18.

Brough, P., & Pears, J. (2004). Evaluating the influence of the type of social support on job satisfaction and work related psychological well-being. *International Journal of Organisational Behaviour*, *8*(2), 472-485.

Brownhill, S., Wilhelm, K., Barclay, L., & Parker, G. (2002). Detecting depression in men: A matter of guesswork. *International Journal of Men's Health*, *1*(3), 259-280. https://doi.org/10.3149/jmh.0103.259

Bryman, A. (2017). Quantitative and qualitative research: further reflections on their integration. In Mixing methods: *Qualitative and quantitative research* (pp. 57-78). Routledge.

Bryman, A., Becker, S., & Sempik, J. (2008). Quality criteria for quantitative, qualitative and mixed methods research: A view from social policy. *International Journal of Social Research Methodology*, *11*(4), 261-276.

Buchanan, E. A., & Hvizdak, E. E. (2009). Online survey tools: Ethical and methodological concerns of human research ethics committees. *Journal of Empirical Research on Human Research Ethics*, *4*(2), 37-48.

Buitendach, J. H., Bobat, S., Muzvidziwa, R. F., & Kanengoni, H. (2016). Work Engagement and Its Relationship with Various Dimensions of Work-related Well-being in the Public Transport Industry. *Psychology and Developing Societies*, *28*(1), 50–72. https://doi.org/10.1177/0971333615622895

Bulut, C., & Culha, O. (2010). The effects of organizational training on organizational commitment. *International Journal of Training and Development*, *14*(4), 309-322.

Bumhira, W., Musara, M., & Nzonzo, J. C. (2017). Moderating effect of employee wellness on the relationship between work-life balance and job satisfaction among teachers in Zimbabwe. *International Journal of Learning and Intellectual Capital*, *14*(3), 220-233.

Bushra, F., Ahmad, U., & Naveed, A. (2011). Effect of transformational leadership on employees' job satisfaction and organizational commitment in banking sector of Lahore (Pakistan). *International Journal of Business and Social Science*, *2(*18).

Callea, A., Lo Presti, A., Mauno, S., & Urbini, F. (2019). The associations of quantitative/qualitative job insecurity and well-being: The role of self-esteem. *International Journal of Stress Management*, *26*(1), 46-56. https://doi.org/10.1037/str0000091

Can, S. H., Hendy, H. M., & Camlibel, D. A. (2018). Comparison of police stressors and negative psychosocial outcomes for officers in departments with and without community conflict directed toward them. *The Police Journal*, *91*(3), 239-248.

Carballo-Penela, A., Varela, J., & Bande, B. (2018). The direct and indirect effects of self-efficacy on salespeople's emotional exhaustion and work-family conflict: A study using the job demands-resources model. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration*, *36*(3), 363-376. https://doi.org/10.1002/cjas.1503

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology*, *85*(1), 65.

Cedillo, L., Lippel, K., & Nakache, D. (2019). Factors influencing the health and safety of temporary foreign workers in skilled and low-skilled occupations in Canada. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*, *29*(3), 422-458. https://doi.org/10.1177/1048291119867757

Chamik, T., Viswanathan, B., Gedeon, J., & Bovet, P. (2018). Associations between psychological stress and smoking, drinking, obesity, and high blood pressure in an upper middle-income country in the African region. *Stress and Health*, *34*(1), 93-101.

Chapman, A. R. (2009). Globalization, human rights, and the social determinants of health. *Bioethics*, *23*(2), 97-111.

Charmaz, K. (2003). Grounded theory. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods*. SAGE.

Charoensukmongkol, P., Moqbel, M., & Gutierrez-Wirsching, S. (2016). The role of co-worker and supervisor support on job burnout and job satisfaction. *Journal of Advances in Management Research*, *13*(1), 4-22.

Chauvet-Gelinier, J. C., & Bonin, B. (2017). Stress, anxiety and depression in heart disease patients: A major challenge for cardiac rehabilitation. *Annals of Physical and Rehabilitation Medicine*, *60*(1), 6-12.

Cheng, Y., Chen, I., Burr, H., Chen, C., & Chiang, T. (2013). Changes in psychosocial work conditions in Taiwanese employees by gender and age from 2001 to 2010. *Journal of Occupational Health, 55*(5), 323-332. https://doi.org/10.1539/joh.12-0286-oa

Chernyak-Hai, L., & Rabenu, E. (2018). The new era workplace relationships: Is social exchange theory still relevant? *Industrial and Organizational Psychology*, *11*(3), 456-481. https://doi.org/10.1017/iop.2018.5

Cheung, L., Wong, E., Ng, P., & Wong, K. (2018). Assessing the impact of globalisation: Lessons from Hong Kong. *BIS Papers*, (100i),139-147.

Chiang, F. F. T., Birtch, T. A., & Kwan, H. K. (2010). The moderating roles of job control and work-life balance practices on employee stress in the hotel and catering industry. *International Journal of Hospitality Management*, *29*(1), 25–32. https://doi.org/10.1016/j.ijhm.2009.04.005

Chigome, J. (2015). The effect of common currency on bilateral trade between Zimbabwe and its anchor countries (2009-2013). *International Journal of Economics, Commerce and Management*, *3*(8), 115-128.

Chimamise, C., Gombe, N. T., Tshimanga, M., Chadambuka, A., Shambira, G., & Chimusoro, A. (2013). Factors associated with severe occupational injuries at mining company in Zimbabwe, 2010: a cross-sectional study. *Pan African Medical Journal*, *14*(1).

Chingarande, G. R., & Bekezela, N. (2013). The prevalence and antecedents of occupational stress among radiographers in Zimbabwe: Interplay of economics and culture. *International Journal of Medical Research & Health Sciences*, *2*(2), 233. https://doi.org/10.5958/j.2319-5886.2.2.030

Chipunza, C., Samuel, M. O., & Mariri, T. (2011). Leadership style, employee motivation and commitment: Empirical evidence from a consolidated retail bank operating in a depressed economy. *African Journal of Business Management*, *5*(20), 8337.

Chirico, F., Heponiemi, T., Pavlova, M., Zaffina, S., & Magnavita, N. (2019). Psychosocial risk prevention in a global occupational health perspective. A descriptive analysis. *International Journal of Environmental Research and Public Health*, *16*(14). https://doi.org/10.3390/ijerph16142470

Cho, S. S., Kim, H., Lee, J. W., Lim, S., & Jeong, W. C. (2019). Combined exposure of emotional labor and job insecurity on depressive symptoms among female call-center workers: A cross-sectional study. *Medicine*, *98*(12), e14894. https://doi.org/10.1097/MD.0000000000014894

Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *IOSR Journal of Humanities and Social Science*, *19*(4), 99-104.

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, *64*(1), 89-136.

Chung, N. G., & Angeline, T. (2010). Does work engagement mediate the relationship between job resources and job performance of employees?. *African Journal of Business Management*, *4*(9), 1837-1843.

Ciminelli, G., Duval, M. A., & Furceri, D. (2018). *Employment Protection Deregulation and Labor Shares in Advanced Economies* (WP/18/186). International Monetary Fund.

Clarke, V., & Braun, V. (2014). Thematic Analysis. In A. C. Michalos (Ed.), *Encyclopedia of quality of life and well-being research*. Springer.

Collins, A. M., Hislop, D., & Cartwright, S. (2016). Social support in the workplace between teleworkers, office-based colleagues and supervisors. *New Technology, Work and Employment*, *31*(2), 161-175.

Condon, M. J., & Edwards, J. B. (2018). A Healthy Workforce: How Workers' Compensation and Wellness Programs Go Together. *Professional Safety*, *63*(03), 32-37.

Constitution of Zimbabwe, Amendment No 20, Act, 2013 https://zimlii.org/zw/legislation/act/2013/amendment-no-20-constitution-zimbabwe. Government of Zimbabwe (GOZ). (2013). Constitution of Zimbabwe Amendment (20) Act 2013.

Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, *25*(3), 325-334. https://doi.org/10.1007/s10869-010-9181-6

Cook, R. D. (1977). Detection of influential observation in linear regression. *Technometrics*, *19*(1), 15-18.

Cooke, D. K., Brant, K. K., & Woods, J. M. (2019). The Role of Public Service Motivation in Employee Work Engagement: A Test of the Job Demands-Resources Model. *International Journal of Public Administration*, *42*(9), 765–775 https://doi.org/10.1080/01900692.2018.1517265

Coolican, H. (2009). *Research Methods and Statistics in Psychology*. Routledge.

Cooper, B., Wang, J., Bartram, T., & Cooke, F. L. (2019). Well-being-oriented human resource management practices and employee performance in the Chinese banking sector: The role of social climate and resilience. *Human Resource Management*, *58*(1), 85-97.

Cooper, F. (2001). What is the concept of globalization good for? An African historian's perspective. *African Affairs*, *100*(399), 189-213. https://doi.org/10.1093/afraf/100.399.189

Cooper-Thomas, H. D., Xu, J., & M. Saks, A. (2018). The differential value of resources in predicting employee engagement. *Journal of Managerial Psychology*, *33*(4/5), 326-344.

Coopmans, J. (2010). *Stress related causes of presenteeism amongst South African managers* [Doctoral dissertation, University of Pretoria].

Corin, L., & Björk, L. (2016). Job demands and job resources in human service managerial work an external assessment through work content analysis. *Nordic Journal of Working Life Studies*, *6*(4), 3. https://doi.org/10.19154/njwls.v6i4.5610

Coronado, J. I. C., Chandola, T., & Steptoe, A. (2018). Allostatic load and effort-reward imbalance: Associations over the working-career. *International Journal of Environmental Research and Public Health*, *15*(2). https://doi.org/10.3390/ijerph15020191

Corrigall, J., Plagerson, S., Lund, C., & Myers, J. (2008). Global trade and mental health. *Global Social Policy*, *8*(3), 335-358.

Cotrim, T., Carvalhais, J., Neto, C., Teles, J., Noriega, P., & Rebelo, F. (2017). Determinants of sleepiness at work among railway control workers. *Applied Ergonomics*, *58*, 293-300. https://doi.org/10.1016/j.apergo.2016.07.006

Cousineau, D., & Chartier, S. (2010). Outliers detection and treatment: a review. *International Journal of Psychological Research*, *3*(1), 58-67.

Cox, T., & Griffiths, A. (2005). The nature and measurement of work-related stress: theory and practice. In J.R. Wilson & N. Corlett (Eds.), *Evaluation of Human Work* (3rd ed., pp. 553-571). London: CRS Press. https://doi.org/10.1201/9781420055948.ch19

Cox, T., Oliver, A., Rial-González, E., Tomás, J. M., Griffiths, A., & Thompson, L. (2006). The development of a Spanish language version of the Worn Out Scale of the General Well-Being Questionnaire (GWBQ). *The Spanish Journal of Psychology*, *9*(1), 94-102.

Cox, T., Thirlaway, M., Gotts, G., & Cox, S. (1983). The nature and assessment of general well-being. *Journal of Psychosomatic Research*, *27*(5), 353–359. https://doi.org/10.1016/0022-3999(83)90066-1

Cox, K., & Van Gorp, A. (2018). Qualitative data analysis and grounded theory. In J. Hofman & A. Sutherland (Eds.), *Evaluating interventions that prevent or counter violent extremism: A practical guide* (p. 121). Rand Corporation, UK.

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. *Journal of Applied Psychology*, *95*(5), 834.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE.

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative Research Designs: Selection and Implementation. *The Counseling Psychologist*, *35*(2), 236–264. https://doi.org/10.1177/0011000006287390

Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, *88*(1), 160.

Crum, A. J., Akinola, M., Martin, A., & Fath, S. (2017). The role of stress mindset in shaping cognitive, emotional, and physiological responses to challenging and threatening stress. *Anxiety, Stress, & Coping*, *30*(4), 379-395.

Daly, A., Carey, R. N., Darcey, E., Chih, H., LaMontagne, A. D., Milner, A., & Reid, A. (2019). Using three cross-sectional surveys to compare workplace psychosocial stressors and associated mental health status in six migrant groups working in Australia compared with Australian-born workers. *International Journal of Environmental Research and Public Health*, *16*(5), 735.

Daniels, K., & Harris, C. (2000). Work, psychological well-being and performance. *Occupational Medicine*, *50*(5), 304–309. https://doi.org/10.1093/occmed/50.5.304

Darmawan, D., Mardikaningsih, R., & Hadi, S. (2017). The Effect of Service Quality, Customer Satisfaction and Corporate Image on Customer Loyalty in the banking sector in Indonesia. *IOSR Journal of Business Management*, *19*(11), 46-51.

Dartey-Baah, K., & Yaw Ampofo, E. (2015). Examining the Influence of Transformational and Transactional Leadership Styles on Perceived Job Stress among Ghanaian Banking Employees. *International Journal of Business and Management*, *10*(8), 161–170. https://doi.org/10.5539/ijbm.v10n8p161

Das, A. (2016). Causes and effects of stress among working women in banking sector, Bangladesh. *Mediscope*, *3*(1), 1-7. https://doi.org/10.3329/mediscope.v3i1.29729

Datta, A. (2018). Mobile Banking and Financial Inclusion in India. *Research Journal of Social Sciences*, *9*(11).

Dawson, K. M., O'Brien, K. E., & Beehr, T. A. (2016). The role of hindrance stressors in the job demand-control-support model of occupational stress: A proposed theory revision. *Journal of Organizational Behavior*, *37*(3), 397–415. https://doi.org/10.1002/job.2049

De Beer, L., Rothmann Jr, S., & Pienaar, J. (2012). A confirmatory investigation of a job demands-resources model using a categorical estimator. *Psychological Reports*, *111*(2), 528-544.

de Bruin, G. P., & Henn, C. M. (2013). Dimensionality of the 9-item Utrecht work engagement scale (UWES-9). *Psychological Reports*, *112*(3), 788–799. https://doi.org/10.2466/01.03.PR0.112.3.788-799

De Cooman, R., Stynen, D., Van den Broeck, A., Sels, L., & De Witte, H. (2013). How job characteristics relate to need satisfaction and autonomous motivation: Implications for work effort. *Journal of Applied Social Psychology*, *43*(6), 1342-1352.

De Jonge, J., & Dormann, C. (2006). Stressors, resources, and strain at work: A longitudinal test of the triple-match principle. *Journal of Applied Psychology*, *91*(6), 1359.

De Witte, H., Pienaar, J., & De Cuyper, N. (2016). Review of 30 years of longitudinal studies on the association between job insecurity and health and well-being: is there causal evidence?. *Australian Psychologist*, *51*(1), 18-31.

Dediu, V., Leka, S., & Jain, A. (2018). Job demands, job resources and innovative work behaviour: a European Union study. *European Journal of Work and Organizational Psychology*, *27*(3), 310-323.

Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology*, *37*(2), 01-09.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, *86*(3), 499.

Demerouti, E., Bouwman, K., & Sanz-Vergel, A. I. (2011). Job resources buffer the impact of work-family conflict on absenteeism in female employees. *Journal of Personnel Psychology*.

Denhere, C., Ngobeli, T. D., & Kutame, A. P. (2010). A mini-review of literature on teacher occupational stress. *Journal of Educational Studies*, *9*(2), 166-181.

Denscombe, M. (2003). *The good research guide*. Maidenhead.

Denton, M., Zeytinoglu, I. U., Brookman, C., Davies, S., & Boucher, P. (2018). Personal support workers' perception of safety in a changing world of work. *Safety in Health*, *4*(1), 2.

Desouky, D., & Allam, H. (2017). Occupational stress, anxiety and depression among Egyptian teachers. *Journal of Epidemiology and Global Health*, *7*(3), 191–198. https://doi.org/10.1016/j.jegh.2017.06.002

Desrumaux, P., Lapointe, D., Ntsame Sima, M., Boudrias, J., Savoie, A., & Brunet, L. (2015). The impact of job demands, climate, and optimism on well-being and distress at work: What are the mediating effects of basic psychological need satisfaction? *European Review of Applied Psychology*, *65*(4), 179-188. https://doi.org/10.1016/j.erap.2015.06.003

Detragiache, E., Tressel, T., & Gupta, P. (2008). Foreign banks in poor countries: theory and evidence. *The Journal of Finance*, *63*(5), 2123-2160.

Dharamdass, S., & Fernando, Y. (2018). Contact centre service excellence: a proposed conceptual framework. *International Journal of Services and Operations Management*, *29*(1), 18. https://doi.org/10.1504/ijsom.2018.088470

Di Fabio, A., & Kenny, M. (2018). Intrapreneurial self-capital: A key resource for promoting well-being in a shifting work landscape. *Sustainability*, *10*(9), 3035.

Di Tecco, C., Jain, A., Valenti, A., Iavicoli, S., & Leka, S. (2017). An evaluation of the impact of a policy-level intervention to address psychosocial risks on

organisational action in Italy. *Safety Science*, *100*, 103-109. https://doi.org/10.1016/j.ssci.2017.05.015

Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. (2014). Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology*, *106*(2), 569.

Dicke, T., Stebner, F., Linninger, C., Kunter, M., & Leutner, D. (2018). A longitudinal study of teachers' occupational well-being: Applying the job demands-resources model. *Journal of Occupational Health Psychology*, *23*(2), 262.

Dlamini, C. S., Okeke, C. I., & Mammen, K. J. (2014). An investigation of work-related stress among high school teachers in the Hhohho region of Swaziland. *Mediterranean Journal of Social Sciences*, *5*(15), 575.

Dolbier, C. L., Webster, J. A., McCalister, K. T., Mallon, M. W., & Steinhardt, M. A. (2005). Reliability and validity of a single-item measure of job satisfaction. *American Journal of Health Promotion*, *19*(3), 194-198. https://doi.org/10.4278/0890-1171-19.3.194

Dollard, M. F., & Neser, D. Y. (2013). Worker health is good for the economy: Union density and psychosocial safety climate as determinants of country differences in worker health and productivity in 31 European countries. *Social Science & Medicine*, *92*, 114-123. https://doi.org/10.1016/j.socscimed.2013.04.028

Dong, Y., Firth, M., Hou, W., & Yang, W. (2016). Evaluating the performance of Chinese commercial banks: A comparative analysis of different types of banks. *European Journal of Operational Research*, *252*(1), 280–295. https://doi.org/10.1016/j.ejor.2015.12.038

Dormann, C. F., Elith, J., Bacher, S., Buchmann, C., Carl, G., Carré, G., Marquéz, J. R., Gruber, B., Lafourcade, B., Leitão, P. J., Münkemüller, T., McClean, C., Osborne, P. E., Reineking, B., Schröder, B., Skidmore, A. K., Zurell, D., & Lautenbach, S. (2012). Collinearity: A review of methods to deal with

it and a simulation study evaluating their performance. *Ecography*, *36*(1), 27-46. https://doi.org/10.1111/j.1600-0587.2012.07348.x

Dragano, N., Siegrist, J., Nyberg, S. T., Lunau, T., Fransson, E. I., Alfredsson, L., Bjorner, J. B., Borritz, M., Burr, H., Erbel, R., Fahlén, G., Goldberg, M., Hamer, M., Heikkilä, K., Jöckel, K., Knutsson, A., Madsen, I. E., Nielsen, M. L., Nordin, M., … Kivimäki, M. (2017). Effort–reward imbalance at work and incident coronary heart disease. *Epidemiology*, *28*(4), 619-626. https://doi.org/10.1097/ede.0000000000000666

Drummond, S., O'Driscoll, M. P., Brough, P., Kalliath, T., Siu, O., Timms, C., Riley, D., Sit, C., & Lo, D. (2016). The relationship of social support with well-being outcomes via work–family conflict: Moderating effects of gender, dependants and nationality. *Human Relations*, *70*(5), 544-565. https://doi.org/10.1177/0018726716662696

Dubbelt, L., Demerouti, E., & Rispens, S. (2019). The value of job crafting for work engagement, task performance, and career satisfaction: longitudinal and quasi-experimental evidence. *European Journal of Work and Organizational Psychology*,*28*(3), 300–314. https://doi.org/10.1080/1359432X.2019.1576632

Dugdill, L. (2000). Developing a holistic understanding of workplace health: the case of bank workers. *Ergonomics*, *43*(10), 1738–1749. https://doi.org/10.1080/001401300750004140

Dumitraşcu-Băldău, I., & Dumitraşcu, D. D. (2017). Occupational emerging risks affecting international virtual project Team Results. In *MATEC Web of Conferences 121,* 07003.

Duxbury, L., & Halinski, M. (2018). It's not all about guns and gangs: role overload as a source of stress for male and female police officers. *Policing and Society*, *28*(8), 930-946.

Eatough, E. M., Way, J. D., & Chang, C. H. (2012). Understanding the link between psychosocial work stressors and work-related musculoskeletal complaints. *Applied Ergonomics*, *43*(3), 554-563.

Economic and Social Council. (2009). *Ministerial Declaration—2009 High level segment: Implementing the internationally agreed goals and commitments in regard to global public health.* Geneva: United Nations Economic and Social Council. https://www.un.org/en/ecosoc/docs/declarations/ministerial_declaration-2009.pdf

Eddy, P., Wertheim, E. H., Kingsley, M., & Wright, B. J. (2017). Associations between the effort-reward imbalance model of workplace stress and indices of cardiovascular health: A systematic review and meta-analysis. *Neuroscience and Biobehavioral Reviews*, *83*(November), 252–266. https://doi.org/10.1016/j.neubiorev.2017.10.025

Edmond, M., & Elizabeth, M. (2015). Strategies for enhancing 21st Century Global Literacy with Zimbabwe in mind the 2013 Global Literacy Rate. *International Journal of Advances in Management and Economics*, *4*(3), 125–131.

Edwards, J., Anderson, K. K., & Stranges, S. (2019). Migrant mental health, Hickam's dictum, and the dangers of oversimplification. *International Journal of Public Health, 64*(4), 477-478. https://doi.org/10.1007/s00038-018-1194-3

El-Maghrabi, M. H., Gable, S., Rodarte, I. O., & Verbeek, J. (2018). *Sustainable development goals diagnostics: An application of network theory and complexity measures to set country priorities*. The World Bank.

Emmanuel, A. O., & Collins, A. (2016). Relationship between Occupational Stress and Demographic Variables: A Study of Employees in a Commercial Bank in Ghana. *British Journal of Applied Science & Technology*, *12*(2), 1.

Engelbrecht, M. C., & Bester, C. L. (2009). Job satisfaction and dissatisfaction of professional nurses in primary health care facilities in the Free State Province of South Africa. *Africa Journal of Nursing and Midwifery*, *11*(1), 104-117.

Ertel, M., Stilijanow, U., Iavicoli, S., Natali, E., Jain, A., & Leka, S. (2010). European social dialogue on psychosocial risks at work: Benefits and challenges. *European Journal of Industrial Relations*, *16*(2), 169–183. https://doi.org/10.1177/0959680110364830

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4.

EU-OSHA, European Agency for Safety and Health at Work (2010). *European Survey of Enterprises on New and Emerging Risks. Managing safety and health at work*. https://osha.europa.eu/en/publications/european-survey-enterprises-new-and-emerging-risks-managing-safety-and-health-work/view

Eurofound and EU-OSHA (2014). *Psychosocial risks in Europe: Prevalence and strategies for prevention*. Publications Office of the European Union, Luxembourg.

European Agency for Safety and Health at Work. (2012). *Drivers and barriers for psychosocial risk management: An analysis of the findings of the European survey of enterprises on new and emerging risks (ESENER): Report*. Office for Official Publications of the European Communities.

Evans, J. R., & Mathur, A. (2005). The value of online surveys. *Internet Research*, *15*(2), 195-219.

Farradinna, S., & Halim, F. W. (2016). The consequences of work-family conflict, burnout and organizational commitment among women in Indonesia. *Procedia-Social and Behavioral Sciences*, *219*, 241-247.

Fernandes, C. F., & Mekoth, N. (2009). Gender differences in stress among bank officers of private and public sectors. *The ICFAI University Journal of Organizational Behavior*, *8*(2), 63-69.

Fernandez-Crehuet, J. M., Gimenez-Nadal, J. I., & Recio, L. E. R. (2016). The National Work–Life Balance Index©: The European Case. *Social Indicators Research*, *128*(1), 341-359.

Fetters, M. D., & Molina-Azorin, J. F. (2017). The Journal of Mixed Methods Research Starts a New Decade: Principles for Bringing in the New and Divesting of the Old Language of the Field. *Journal of Mixed Methods Research*, *11*(1), 3–10. https://doi.org/10.1177/1558689816682092

Field, A. (2005). *Discovering statistics using SPSS: (and sex, drugs and Rock'n'roll)*. SAGE.

Field, A. (2006). Reliability analysis. *Research methods II*, 1-7. http://statisticshell.com/docs/reliability.pdf

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. SAGE.

Fischer, F. M., Silva-Costa, A., Griep, R. H., Smolensky, M. H., Bohle, P., & Rotenberg, L. (2019). Working Time Society consensus statements: Psychosocial stressors relevant to the health and wellbeing of night and shift workers. *Industrial Health*, *57*(2), 175-183.

Fletcher, L., Bailey, C., Alfes, K., & Madden, A. (2020). Mind the context gap: A critical review of engagement within the public sector and an agenda for future research. *The International Journal of Human Resource Management*, *31*(1), 6-46. https://doi.org/10.1080/09585192.2019.1674358

Foster, W. M., Hassard, J. S., Morris, J., & Wolfram Cox, J. (2019). The changing nature of managerial work: The effects of corporate restructuring on management jobs and careers. *Human Relations*, *72*(3), 473-504. https://doi.org/10.1177/0018726719828439

Frenkel, S. (2018). Globalisation and workProcesses, practices and consequences. In A. Wilkinson, T. Dundon, J. Donaghey, & A. Colvin (Eds.), *The Routledge companion to employment relations*. (pp. 321-341). Routledge.

Frone, M. R. (2018). Organizational downsizing and alcohol use: A national study of US workers during the Great Recession. *Addictive Behaviors*, *77*, 107-113. https://doi.org/10.1016/j.addbeh.2017.09.016

Fuss, I., Nübling, M., Hasselhorn, H. M., Schwappach, D., & Rieger, M. A. (2008). Working conditions and Work-Family Conflict in German hospital physicians: psychosocial and organisational predictors and consequences. *BMC Public Health*, *8*(1), 353.

Gaillard, A. W. K. (2018). Concentration, stress and performance. In J. L. Szalma & P. A. Hancock (Eds.), *Performance Under Stress* (pp. 59-75). London: CRC Press

Gallie, D. (2019). Research on work values in a changing economic and social context. *The ANNALS of the American Academy of Political and Social Science*, *682*(1), 26-42.

Ganster, D. C., & Fusilier, M. R. (1989). Control in the workplace. *International Review of Industrial and Organizational Psychology*, *4*, 235-280.

Gao, Y., Shi, J., Niu, Q., & Wang, L. (2013). Work–family conflict and job satisfaction: Emotional intelligence as a moderator. *Stress and Health*, *29*(3), 222-228.

Garwe, E. C., & Thondhlana, J. (2019). Encyclopedia of International Higher Education Systems and Institutions. *Encyclopedia of International Higher Education Systems and Institutions*, (November). https://doi.org/10.1007/978-94-017-9553-1

Geldenhuys, M., Laba, K., & Venter, C. M. (2014). Meaningful work, work engagement and organisational commitment. *SA Journal of Industrial Psychology*, *40*(1), 01-10.

George, E., & Zakkariya, K. A. (2015). The Relationship between Demographic Variables and Job-Related Stress among Bank Employees. *Asian Journal of Management*, *6*(3), 169-175.

Geraghty, S., Speelman, C., & Bayes, S. (2019). Fighting a losing battle: Midwives experiences of workplace stress. *Women and Birth*, *32*(3), e297-e306.

Ghobrial, G. B., El-din, S. A., & Shenouda, M. S. Work-Related Stress among Petroleum Company Employees at their Workplace in Egypt. *Med. J. Cairo Univ*, *83*(1), 187-199.

Giannoccaro, I. (2018). Centralized vs. decentralized supply chains: The importance of decision maker's cognitive ability and resistance to change. *Industrial Marketing Management*, *73*, 59-69.

Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2019). Stress and turnover intents in international organizations: social support and work–life balance as resources. *The International Journal of Human Resource Management*, *30*(5), 879-901.

Giga, I. S., & Hoel, H. (2003). *Violence and Stress at Work in Financial Services*. (Working paper, 210). International Labour Office, Geneva.

Giorgi, G., Arcangeli, G., Ariza-Montes, A., Rapisarda, V., & Mucci, N. (2019). Work-related stress in the Italian banking population and its association with recovery experience. *International Journal of Occupational Medicine and Environmental Health*, *32*(2), 255-265.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, *8*(4), 597-606.

Goldstein, G., Helmer, R., & Fingercut, M. (2001, December). Mobilizing to protect worker health: The WHO global strategy on OHS globalization. *African Newsletter on Occupational Health and Safety, 11*(3), 56-60.

Gorgievski, M. J., Van der Heijden, B. I. J. M., & Bakker, A. B. (2019). Effort-reward imbalance and work-home interference: a two-wave study among European male nurses. *Work and Stress*, *33*(4), 315–333. https://doi.org/10.1080/02678373.2018.1503358

Goromonzi, W. O. (2016). Organizational culture, strategy implementation and commercial bank performance in Zimbabwe. *International Review of Management and Marketing*, *6*(2), 307-316.

Goswami, T. G. (2015). Job stress and its effect on employee performance in banking sector. *Indian Journal of Commerce and Management studies*, *6*(2), 51-56

Government of Zimbabwe. (2014). *Zimbabwe National Occupational Safety and Health Policy*. Harare.

Graneheim, U. H., Lindgren, B., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, *56*, 29-34. https://doi.org/10.1016/j.nedt.2017.06.002

Gray, S. E., & Collie, A. (2018). Comparing time off work after work-related mental health conditions across Australian workers' compensation systems: a retrospective cohort study. *Psychiatry, Psychology and Law*, *25*(5), 675–692. https://doi.org/10.1080/13218719.2018.1473176

Green, S. B. (1991). How many subjects does it take to do a regression analysis. *Multivariate Behavioral Research*, 26(3), 499-510. https://doi.org/10.1207/s15327906mbr2603_7

Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human Resource Management Journal*, *27*(1), 22-38.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods*, *18*(1), 59-82. https://doi.org/10.1177/1525822x05279903

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *The Annals of Family Medicine*, *13*(6), 554-561.

Gukurume, S. (2018). Navigating precarious livelihoods: Youth in the SME sector in Zimbabwe. *IDS Bulletin*, 49(5). https://doi.org/10.19088/1968-2018.176

Gupta, V., Agarwal, U. A., & Khatri, N. (2016). The relationships between perceived organizational support, affective commitment, psychological contract breach, organizational citizenship behaviour and work engagement. *Journal of Advanced Nursing*, *72*(11), 2806–2817. https://doi.org/10.1111/jan.13043

Györkös, C., Becker, J., Massoudi, K., de Bruin, G. P., & Rossier, J. (2012). The impact of personality and culture on the job demands-controlmodel of job stress. *Swiss Journal of Psychology*, *71*(1), 21–28. https://doi.org/10.1024/1421-0185/a000065

Hadžibajramović, E., Ahlborg, G., & Grimby-Ekman, A. (2019). Concurrent and lagged effects of psychosocial job stressors on symptoms of burnout. *International Archives of Occupational and Environmental Health*, *92*(7), 1013–1021. https://doi.org/10.1007/s00420-019-01437-0

Hafiz, A. Z. (2017). Relationship between organizational commitment and employee's performance evidence from banking sector of Lahore. *Arabian Journal of Business and Management Review*, *7*(2), 1-7.

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, *43*(6), 495-513.

Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, *22*(3), 224-241.

Hammersley, M. (2017). Deconstructing the qualitative-quantitative divide 1. In J. Brannen (Ed.), *Mixing methods: Qualitative and quantitative research*. Routledge.

Hämmig, O. (2017). Health and well-being at work: The key role of supervisor support. *SSM-Population Health*, *3*, 393-402.

Hammoud, J., Bizri, R. M., & El Baba, I. (2018). The impact of e-banking service quality on customer satisfaction: Evidence from the Lebanese banking sector. *SAGE Open*, *8*(3), https://doi.org/10.1177/2158244018790633

Han, J., Yin, H., Wang, J., & Bai, Y. (2019). Challenge job demands and job resources to university teacher well-being: the mediation of teacher efficacy. *Studies in Higher Education*, 1-15.

Hancock, C., & Cooper, K. (2017). The case for linking employee wellbeing and productivity. *Occupational Health & Wellbeing*, *69*(11), 14-15.

Hardy, W., Lewandowski, P., Park, A., & Yang, D. (2018). *The Global Distribution of Routine and Non-Routine Work* (pp. 1-32). IBS Working Paper.

Harvey, S. B., Modini, M., Joyce, S., Milligan-Saville, J. S., Tan, L., Mykletun, A., Mitchell, P. B. (2017). Can work make you mentally ill? A systematic meta-review of work-related risk factors for common mental health problems. *Occupational and Environmental Medicine*, *74*(4), 301–310.

Hassard, J., Teoh, K. R., Visockaite, G., Dewe, P., & Cox, T. (2018). The cost of work-related stress to society: A systematic review. *Journal of Occupational Health Psychology*, *23*(1), 1.

Häusser, J. A., Mojzisch, A., Niesel, M., & Schulz-Hardt, S. (2010). Ten years on: A review of recent research on the Job Demand–Control (-Support) model and psychological well-being. *Work & Stress*, *24*(1), 1-35.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Hayes, A. F. (2017*). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. (2nd ed.).Guilford Publications.

Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy*, *98*, 39-57.

Health and Safety Executive (2019). *Work related stress, anxiety or depression statistics in Great Britain 2019.* https://www.hse.gov.uk/statistics/causdis/stress.pdf

Hecker, T., Goessmann, K., Nkuba, M., & Hermenau, K. (2018). Teachers' stress intensifies violent disciplining in Tanzanian secondary schools. *Child Abuse & Neglect*, *76*, 173-183.

Heinrichs, K., Angerer, P., Li, J., Loerbroks, A., Weigl, M., & Müller, A. (2019). Changes in the association between job decision latitude and work engagement at different levels of work experience: A 10-year longitudinal study. *Work and Stress*, *0*(0), 1–16. https://doi.org/10.1080/02678373.2019.1577310

Hidayah Ibrahim, S. N., Suan, C. L., & Karatepe, O. M. (2019). The effects of supervisor support and self-efficacy on call center employees' work engagement and quitting intentions. *International Journal of Manpower*, *40*(4), 688–703. https://doi.org/10.1108/IJM-12-2017-0320

Hlatywayo, C. K., Zingwe, T., Mhlanga, T. S., & Mpofu, B. D. (2014). Precursors of emotional stability, stress, and work-family conflict among female bank employees. *International Business & Economics Research Journal (IBER)*, *13*(4), 861-866.

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, *50*(3), 337-421.

Holtz, P., & Odağ, Ö. (2018). Popper was not a Positivist: Why Critical Rationalism Could be an Epistemology for Qualitative as well as Quantitative Social Scientific Research. *Qualitative Research in Psychology*, 1-24.

Hopf, C. (2004). Qualitative Interviews: An Overview. In U. Flick, E. v. Kardoff, & I. Steinke (Eds.), *A Companion to Qualitative Research*. SAGE.

Hosking, D. M., & Anderson, N. (Eds.). (2018). *Organizational Change and Innovation: Psychological perspectives and practices in Europe*. Routledge.

Houdmont, J., Kerr, R., & Addley, K. (2012). Psychosocial factors and economic recession: the Stormont Study. *Occupational Medicine*, *62*(2), 98-104.

Houdmont, J., Zhou, J., & Hassard, J. (2011). Overtime and psychological well-being among Chinese office workers. *Occupational Medicine*, *61*(4), 270-273.

Houtman, I., Jettinghof, K., Cedillo, L., & World Health Organization. (2007*). Raising awareness of stress at work in developing countries: a modern hazard in a traditional working environment:Advice to employers and worker representatives*. (Protecting Workers' Health Series No. 6). Geneva: WHO; 2007. https://doi.org/10.5089/9781484370087.001

Hu, Q., & Schaufeli, W. B. (2011). Job insecurity and remuneration in Chinese family-owned business workers. *Career Development International*, *16*(1), 6-19.

Hu, Q., Schaufeli, W. B., & Taris, T. W. (2016). Extending the job demands-resources model with guanxi exchange. *Journal of Managerial Psychology*, *31*(1), 127-140.

Hupkes, L., & Kodden, B. (2019). Organizational Environment, Personal Resources and Work Engagement as Predictors of Coaching Performance. *Journal of Management Policy and Practice*, *20*(3).

Hurley, A. E., Scandura, T. A., Schriesheim, C. A., Brannick, M. T., Seers, A., Vandenberg, R. J., & Williams, L. J. (1997). Exploratory and confirmatory factor analysis: Guidelines, issues, and alternatives. *Journal of Organizational Behavior*, *18*(6), 667–683.

Husam, R., Naser, S. S. A., El Talla, S. A., & Al Shobaki, M. J. (2018). Information Technology Role in Determining Communication Style Prevalent Among Al-Azhar University Administrative Staff. *International Journal of Information Technology and Electrical Engineering*, *7*(4), 21-43.

Hussein, A. (2009). The use of triangulation in social sciences research: Can qualitative and quantitative methods be combined. *Journal of Comparative Social Work*, *1*(8), 1-12.

Hutcheson, G. D., & Sofroniou, N. (1999). *The multivariate social scientist: Introductory statistics using generalized linear models*. SAGE.

Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal*, *3*(2), 82-90.

Iavicoli, S., Natali, E., Deitinger, P., Rondinone, B. M., Ertel, M., Jain, A., & Leka, S. (2011). Occupational health and safety policy and psychosocial risks in Europe: the role of stakeholders' perceptions. *Health Policy*, *101*(1), 87-94.

Iavicoli, S., Rondinone, B., Marinaccio, A., & FINGERHUT, M. (2006). Research priorities in occupational safety and health: a review. *Industrial Health*, *44*(1), 169-178.

Iavicoli, S., Valenti, A., Gagliardi, D., & Rantanen, J. (2018). Ethics and occupational health in the contemporary world of work. *International Journal of Environmental Research and Public Health*, *15*(8), 1713. https://doi.org/10.3390/ijerph15081713

Idris, M. A., Dollard, M. F., & Winefield, A. H. (2011). The effect of globalization on employee psychological health and job satisfaction in Malaysian workplaces. *Journal of Occupational Health*, *53*, 447–454. https://doi.org/10.1539/joh.11-0035-FS

Idubor, E. E., & Oisamoje, M. D. (2013). An exploration of health and safety management issues in Nigeria's effort to industrialize. *European Scientific Journal*, *9*(12).

Ilić, I., Arandjelović, M., Jovanović, J., & Nešić, M. (2017). Relationships of work-related psychosocial risks,stress, individual factors and burnout – Questionnaire survey among emergency physicians and nurses. *Medycyna Pracy*. https://doi.org/10.13075/mp.5893.00516

ILO Global Database on Occupational Safety and Health Legislation (LEGOSH). (2013). *Description of National OSH Regulatory Framework*: International Labour Organization: Geneva. https://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0:NO:1100:P1100_ISO_CODE3,P1100_Subcode_Code,P1100_Year:ZWE,,2013:NO

ILO/WHO Joint Committee on Occupational Health. & International Labour Office. (1986). *Psychosocial factors at work: Recognition and control.* Geneva: International Labour Office.

International Labour Office (2019). *Safety and Health at the Heart of the future of work: Building on 100 years of experience*. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_678357.pdf

International Labour Organisation. (2016). *Workplace Stress: A Collective Challenge*. *World Day for Safety and Health at Work*. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_466547.pdf

International Monetary Fund. Asia and Pacific Department. (2014). *Nepal: Staff report for the 2014 article IV consultation.*

Irastorza, X., Milczarek, M., & Cockburn, W. (2016). *Second European Survey of Enterprises on New and Emerging Risks (ESENER-2): Overview Report: Managing Safety and Health at Work*. Publications Office of the European Union.

Ismail, H. N., Iqbal, A., & Nasr, L. (2019). Employee engagement and job performance in Lebanon: the mediating role of creativity. *International Journal of Productivity and Performance Management*, *68*(3), 506–523. https://doi.org/10.1108/IJPPM-02-2018-0052

Itani, O. S., & Inyang, A. E. (2015). The effects of empathy and listening of salespeople on relationship quality in the retail banking industry: The moderating role of felt stress. *International Journal of Bank Marketing*, *33*(6), 692-716.

Iweins de Wavrans, C., & Casini, A. (2018, August 21-25). *The association between job-related demands, individual resources and 4 types of exhaustion* [Poster presentation]. 32nd EHPS Annual Conference Health Psychology Across the Lifespan: Uniting Research, Practice and Policy. Galway, Ireland.

Jackson, L. T., Rothmann, S., & Van de Vijver, F. J. (2006). A model of work-related well-being for educators in South Africa. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *22*(4), 263-274.

Jain, A., & Leka, S. (2019). The Changing World of Work. In C. Llewellyn, S. Ayers, C. McManus, S. Newman, K. J. Petrie, T. A. Revenson, & J. Weinman (Eds.), *Cambridge Handbook of Psychology, Health and Medicine*. Cambridge University Press.

Jain, A., Leka, S., & Zwetsloot, G. (2011). Corporate social responsibility and psychosocial risk management in Europe. *Journal of Business Ethics*, *101*(4), 619-633.

Jain, A., Leka, S., & Zwetsloot, G. I. (2018). *Managing Health, Safety and Well-Being: Ethics, Responsibility and Sustainability*. Springer.

Jain, A., Saeed, K., Arnaout, S., & Kortum, E. (2012). 325 the psychosocial environment at work: An assessment of the World Health Organization regional office for the Eastern Mediterranean. *Eastern Mediterranean Health Journal*, 18(4), 325-331. https://doi.org/10.26719/2012.18.4.325

Jang, Y., Lee, A. A., Zadrozny, M., Bae, S. H., Kim, M. T., & Marti, N. C. (2017). Determinants of Job Satisfaction and Turnover Intent in Home Health Workers: The Role of Job Demands and Resources. *Journal of Applied Gerontology*, *36*(1), 56–70.

Janse van Rensburg, Y., Boonzaier, M., & Boonzaier, B. (2013). The job demands-resources model of work engagement in South African call centres. *SA Journal of Human Resource Management*, *11*(1), 1-13.

Janssen, O. (2001). Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job performance and job satisfaction. *Academy of Management Journal*, *44*(5), 1039-1050.

Javadi, M., & Zarea, K. (2016). Understanding thematic analysis and its pitfall. *Journal of Client Care*, *1*(1), 33-39.

Javaid, M. U., Isha, A. S. N., & Ghazali, Z. (2017). Brief communication on psychosocial work environment and wellbeing in relation to job demands-resources: a study on Malaysian public health perspective. *Pertanika Journal of Social Science and Humanities (JSSH)*, *25*(1), 39-44.

Javaid, M. U., Isha, A. S. N., Ghazali, Z., Nubling, M., & Mirza, M. Z. (2017). Human factors in context to occupational health and wellbeing. *Handbook of Research on*

Organizational Culture and Diversity in the Modern Workforce, 60–77. https://doi.org/10.4018/978-1-5225-2250-8.ch004

Jerie, S. (2012). Occupational health and safety problems among workers in the wood processing industries in Mutare, Zimbabwe. *Journal of Emerging Trends in Economics and Management Sciences*, *3*(3), 278–285.

Jerie, S. (2017). An Assessment of the Application of Occupational Ergonomics Principles in the Informal Sector of Harare and Mutare in Zimbabwe. *Review of Social Sciences*, *2*(7), 01-06.

Jick, T. D. (1979). Mixing Qualitative and Quantitative methods: Triangulation in action. *Administrative Science Quarterly*, *24*(4), 602-611.

Joffe, H. (2012). Thematic Analysis. In D. Harper & A. R. Thompson (Eds.), *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners*. John Wiley & Sons.

Johnson, J. V., & Hall, E. M. (1988). Job strain, workplace social support, and cardiovascular disease: a cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health*, *78*(10), 1336-1342.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, *1*(2), 112-133.

Johnson, R. B., Onwuegbuzie, A. J., Tucker, S. A., & Icenogle, M. L. (2014). *Conducting mixed methods research: Using dialectical pluralism and social psychological strategies.* In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (p. 557–578). Oxford University Press.

Johnson, P., & Szamosi, L. T. (2018). HRM in changing organizational contexts. In D. G. Collings, G. T. Wood, & L. T. Szamosi (Eds.), *Human Resource Management: A Critical Approach* (2nd ed.). Routledge.

Jonasson, C., Lauring, J., Selmer, J., & Trembath, J. L. (2017). Job resources and demands for expatriate academics: Linking teacher-student relations, intercultural adjustment, and job satisfaction. *Journal of Global Mobility: The Home of Expatriate Management Research*, *5*(1), 5-21.

Jong, J., & Ford, M. T. (2016). The lagged effects of job demands and resources on organizational commitment in federal government agencies: A multi-level analysis. *Journal of Public Administration Research and Theory*, *26*(3), 475-492.

Jönsson, S. (2012). Psychosocial work environment and prediction of job satisfaction among Swedish registered nurses and physicians – a follow-up study. *Scandinavian Journal of Caring Sciences*, *26*(2), 236–244. https://doi.org/doi:10.1111/j.1471-6712.2011.00924.x

Juárez-García, A. (2018). 1705b Psychosocial factors at work in latin-american region: state of the art. *Occupational and Environmental Medicine*, *75*(Suppl_2).

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, *86*(1), 80.

Jun, D., O'Leary, S., McPhail, S. M., & Johnston, V. (2019). Job strain and psychological distress in office workers: The role of coping. *Work, 64*(1), 55-65. https://doi.org/10.3233/pwor-192968

Juvani, A., La Oksanen, T., Virtanen, M., Salo, P., Pentti, J., Kivimäki, M., & Vahtera, J. (2018). Clustering of job strain, effort−reward imbalance, and organizational injustice and the risk of work disability: A cohort study. *Scandinavian Journal of Work, Environment & Health*, *44*(5), 485-495. https://doi.org/10.5271/sjweh.3736

Kabonga, I. (2020). Reflections on the 'Zimbabwean crisis 2000–2008' and the survival strategies: The sustainable livelihoods framework (SLF) analysis. *Africa Review*, 1-21. https://doi.org/10.1080/09744053.2020.1755093

Kain, J., & Jex, S. (2010). Karasek's (1979) job demands-control model: A summary of current issues and recommendations for future research. In D. C. Ganster & P. L. Perrewe (Eds.), *New developments in theoretical and conceptual approaches to job stress* (pp. 237-268). Emerald Group Publishing.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, *39*(1), 31-36.

Kakkos, N., & Trivellas, P. (2011, July 10-12). *Investigating the link between motivation, work stress and job performance. Evidence from the banking industry*. [Paper presentation] 8*th* International Conference on enterprise systems, accounting and logistics (pp. 408-428). Thassos, Greece.

Kallio, H., Pietilä, A., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing, 72*(12), 2954-2965. https://doi.org/10.1111/jan.13031

Kanis, H. (2004). The quantitative-qualitative research dichotomy revisited. *Theoretical Issues in Ergonomics Science*, *5*(6), 507-516.

Kannan, K. S., & Manoj, K. (2015). Outlier detection in multivariate data. *Applied Mathematical Sciences*, *47*, 2317-2324.

Karanika-Murray, M., Michaelides, G., & Wood, S. J. (2017). Job demands, job control, psychological climate, and job satisfaction: A cognitive dissonance perspective. *Journal of Organizational Effectiveness: People and Performance*, *4*(3), 238-255.

Karanikas, N., Melis, D. J., & Kourousis, K. I. (2018). The balance between safety and productivity and its relationship with human factors and safety awareness and communication in aircraft manufacturing. *Safety and Health at Work*, *9*(3), 257-264.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*(2), 285-308 https://doi.org/10.2307/2392498

Karasek, R. A. (1989). Control in the workplace and its health-related aspects. In S. L. Sauter, J. J. Hurrell, Jr., & C. L. Cooper (Eds.), *Job control and worker health* (pp. 129-159). New York: Wiley.

Karatepe, O. M., Ozturk, A., & Kim, T. T. (2019). The effects of nonwork and personal resources on frontline bank employees' work engagement and critical job outcomes. *International Journal of Bank Marketing*, *37*(3), 858-879.

Karatepe, O. M., & Tekinkus, M. (2006). The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*, *24*(3), 173-193.

Karatepe, O. M., Yavas, U., Babakus, E., & Deitz, G. D. (2018). The effects of organizational and personal resources on stress, engagement, and job outcomes. *International Journal of Hospitality Management*, Vol. 74, pp. 147–161. https://doi.org/10.1016/j.ijhm.2018.04.005

Kaseke, N., & Charira, A. (2012). Virtual Banking Adoption And Customers' Satisfaction In Zimbabwe. *International Journal of Economic Development Research and Investment*, *3*(1), 66-81.

Kashif, M., Abdur Rehman, M., & Pileliene, L. (2016). Customer perceived service quality and loyalty in Islamic banks: A collectivist cultural perspective. *The TQM Journal*, *28*(1), 62-78.

Kasparova, E. (2017). Digitization and its impact on employment in globalized world. *Paradigmata Poznání, 4*(4), 24-29. https://doi.org/10.24045/pp.2017.4.4

Katsuro, P., Gadzirayi, C. T., Taruwona, M., & Mupararano, S. (2010). Impact of occupational health and safety on worker productivity: A case of Zimbabwe food industry. *African Journal of Business Management 4*(13), 2644-2651.Kaur, J. (2013). Role of Psychological Well Being and Its Impact on the. *International Journal of Advanced Research in Management and Social Sciences*, *2*(6), 43–51.

Kengatharan, N. (2016). Exploring nature of work family conflict: An exploratory study in the banking sector. *Journal of Business Studies, 3*(2), 100. https://doi.org/10.4038/jbs.v3i2.7

Khamisa, N., Peltzer, K., Ilic, D., & Oldenburg, B. (2016). Work related stress, burnout, job satisfaction and general health of nurses: A follow-up study. *International Journal of Nursing Practice*, *22*(6), 538-545.

Khan, M. U., & Hanif, M. N. (2018). Empirical evaluation of 'structure-conduct-performance' and 'efficient-structure' paradigms in banking sector of Pakistan. *International Review of Applied Economics, 33*(5), 682-696. https://doi.org/10.1080/02692171.2018.1518411

Kim, W. (2017). Examining mediation effects of work engagement among job resources, job performance, and turnover intention. *Performance Improvement Quarterly*, *29*(4), 407-425.

Kim, W., Kim, J., Woo, H., Park, J., Jo, J., Park, S. H., & Lim, S. Y. (2017). The relationship between work engagement and organizational commitment: Proposing research agendas through a review of empirical literature. *Human Resource Development Review*, *16*(4), 350-376.

Kimber, S., & Gardner, D. H. (2016). Relationships between workplace well-being, job demands and resources in a sample of veterinary nurses in New Zealand. *New Zealand Veterinary Journal*, *64*(4), 224-229.

Kimura, K., Nagata, T., Ohtani, M., Mori, K., Nagata, M., Kajiki, S., Fujino, Y., & Matsuda, S. (2018). 486 Total burden of presenteeism, absenteeism and medical/pharmaceutical cost by health risks. *Epidemiology*. https://doi.org/10.1136/oemed-2018-icohabstracts.377

Kinman, G. (2019). Effort-reward imbalance in academic employees: Examining different reward systems. *International Journal of Stress Management*, *26*(2), 184.

Kinzl, J. F., Knotzer, H., Traweger, C., Lederer, W., Heidegger, T., and Benzer, A. (2005). Influence of working conditions on job satisfaction in anaesthetists. *British Journal of Anaesthesia,* 94(2), 211-215.

Kirsten, W. (2010). Making the Link between Health and Productivity at the Workplace A Global Perspective. *Industrial Health*, *48*, 251–255. https://doi.org/10.2486/indhealth.48.251

Kivimäki, M., & Kawachi, I. (2015). Work stress as a risk factor for cardiovascular disease. *Current Cardiology Reports*, *17*(9), 74.

Kivimäki, M., & Siegrist, J. (2016). Work Stress and Cardiovascular Disease: Reviewing Research Evidence with a Focus on Effort-Reward Imbalance at Work. In *Work Stress and Health in a Globalized Economy* (pp. 89-101). Springer, Cham.

Klenke, K. (2016). *Qualitative research in the study of leadership* (2nd ed.). Emerald Group Publishing Limited.

Kline, P. (1993). *The handbook of psychological testing*. Psychology Press.

Knaub, J. R. (2007). Heteroscedasticity and Homoscedasticity. In N. J. Salkind (Ed.), *Encyclopedia of measurement and statistics*. SAGE.

Koch, P., Schablon, A., Latza, U., & Nienhaus, A. (2014). Musculoskeletal pain and effort-reward imbalance-a systematic review. *BMC Public Health*, *14*(1), 37.

Kollmann, T., Stöckmann, C., & Kensbock, J. M. (2019). I can't get no sleep—The differential impact of entrepreneurial stressors on work-home interference and insomnia among experienced versus novice entrepreneurs. *Journal of Business Venturing*, *34*(4), 692-708.

Kortum, E. (2012). A need to broaden our perspective to address workers' health effectively in the 21st century. *Industrial Health*, *50*(2), 71-72.

Kortum, E., & Leka, S. (2014). Tackling psychosocial risks and work-related stress in developing countries: The need for a multilevel intervention framework.

International Journal of Stress Management, *21*(1), 7–26. https://doi.org/10.1037/a0035033

Kortum, E., Leka, S., & Cox, T. (2010). Psychosocial risks and work-related stress in developing countries: Health impact, priorities, barriers and solutions. *International Journal of Occupational Medicine and Environmental Health, 23*(3). https://doi.org/10.2478/v10001-010-0024-5

Kortum, E., Leka, S., & Cox, T. (2011). Perceptions of psychosocial hazards, work-related stress and workplace priority risks in developing countries. *Journal of Occupational Health*, *53*(2), 144–155. https://doi.org/10.1539/joh.O10016

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Kovács, A., Kiss, D., Kassai, S., Pados, E., Kaló, Z., & Rácz, J. (2019). Mapping qualitative research in psychology across five Central-Eastern European countries: Contemporary trends: A paradigm analysis. *Qualitative Research in Psychology*, *16*(3), 354-374.

Krishantha, P. D. D. M. (2018). Employee Wellbeing - Effectiveness on Motivation and Organizational Performance. *International Journal of Advancements in Research and Technology*, *7*(7), 23–40. https://doi.org/10.14299/ijoart.07.07.006

Kristensen, T. S., & Borg, V. (2003). Copenhagen Psychosocial Questionnaire. *Mental Health*, *5*(5), 5. https://doi.org/10.1177/1403494809353652

Kumar, A., & Arain, G. A. (2014). Testing Main and Interactive Effect of Personal Coping and Social Support on Work Family conflict. *Sukkur IBA Journal of Management and Business*, *1*(1), 87-101.

Kumar, R. (2011). Research Methodology: *A Step-by-Step Guide for Beginners*. SAGE.

Kumar, R. M. M., Karthick, R. B., Bhuvaneswari, V., & Nandhini, N. (2017). Study on Occupational Health and Diseases in Oil Industry. *International Research Journal of Engineering and Technology (IRJET)*, *4*(12), 954–958.

Kunte, M., & RungRuang, P. (2019). Longitudinal study of antecedents of work engagement in Thailand. *Evidence-based HRM: a Global Forum for Empirical Scholarship, 7*(2), 143-160. https://doi.org/10.1108/ebhrm-03-2018-0021

Kurebwa, J. (2011). Organisational downsizing and its impact on leavers and survivors: The case of the Reserve Bank of Zimbabwe. *Journal of Emerging Trends in Economics and Management Sciences*, *2*(4), 264-269.

Kwak, S. G., & Kim, J. H. (2017). Central limit theorem: the cornerstone of modern statistics. *Korean Journal of Anesthesiology*, *70*(2), 144.

Kyaw-Myint, S. M., Strazdins, L., Clements, M., Butterworth, P., & Gallagher, L. (2017). A method of identifying health-based benchmarks for psychosocial risks at work: A tool for risk assessment. *Safety Science*, *93*, 143-151.

Labonté, R. (2018). Reprising the globalization dimensions of international health. *Globalization and Health, 14*(1). https://doi.org/10.1186/s12992-018-0368-3

Labour Relations Act of 1996, Labour Act [Chapter 28:01] https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/1850/76997/F2029058807/ZWE1850%202005.pdf

Lambert, E. G., Minor, K. I., Wells, J. B., & Hogan, N. L. (2016). Social support's relationship to correctional staff job stress, job involvement, job satisfaction, and organizational commitment. *The Social Science Journal*, *53*(1), 22-32.

LaMontagne, A., Sanderson, K., & Cocker, F. (2011). Estimating the economic benefits of eliminating job strain as a risk factor for depression. *Occupational and Environmental Medicine*, *68*, (Suppl_1), A3–A3. https://doi.org/10.1136/oemed-2011-100382.9

Landsbergis, P. A., Choi, B., Dobson, M., Sembajwe, G., Slatin, C., Delp, L., Siqueira, C. E., Schnall, P., & Baron, S. (2018). The key role of work in population health inequities. *American Journal of Public Health*, *108*(3), 296-297. https://doi.org/10.2105/ajph.2017.304288

Langenhan, M. K., Leka, S., & Jain, A. (2013). Psychosocial risks: Is risk management strategic enough in business and policy making? *Safety and Health at Work*, *4*(2), 87–94. https://doi.org/10.1016/j.shaw.2013.04.003

Largo-Wight, E., Chen, W. W., Dodd, V., & Weiler, R. (2011). Healthy workplaces: The effects of nature contact at work on employee stress and health. *Public Health Reports*, *126*(1_suppl), 124-130.

Larsen, L. B., Ramstrand, N., & Fransson, E. I. (2019). Psychosocial job demand and control: multi-site musculoskeletal pain in Swedish police. *Scandinavian Journal of Public Health*, *47*(3), 318–325. https://doi.org/10.1177/1403494818801507

Lazauskaite-Zabielske, J., Urbanaviciute, I., & Rekasiute Balsiene, R. (2018). From psychosocial working environment to good performance: the role of work engagement. *Baltic Journal of Management*, *13*(2), 236-249.

Lee, C., Huang, G. H., & Ashford, S. J. (2018). Job insecurity and the changing workplace: Recent developments and the future trends in job insecurity research. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*, 335-359.

Lefever, S., Dal, M., & Matthíasdóttir, Á. (2007). Online data collection in academic research: Advantages and limitations. *British Journal of Educational Technology*, *38*(4), 574-582. https://doi.org/10.1111/j.1467-8535.2006.00638.x

Leka, S. (2016). Psychosocial risk management: Calamity or opportunity? *Occupational Medicine*, *66*(2), 89–91. https://doi.org/10.1093/occmed/kqv173

Leka, S., Griffiths, A., & Cox, T. (2004). *Work Organisation and Stress: for employers, managers* and trade unions representatives. (Protecting Workers' Health Series 3), Geneva: World Health Organisation

Leka, S. & Jain, A. (2010). *Health Impact of Psychosocial Hazards at Work: An overview*. World Health Organization: Geneva.

Leka, S., & Jain, A. (2016). *Psychosocial Factors at Work in the Asia Pacific*. 23–43. https://doi.org/10.1007/978-3-319-44400-0

Leka, S., Jain, A., Widerszal-Bazyl, M., Żołnierczyk-Zreda, D., & Zwetsloot, G. (2011). Developing a standard for psychosocial risk management: PAS 1010. *Safety Science*, *49*(7), 1047-1057.

Leka, S., Jain, A., Iavicoli, S., & Di Tecco, C. (2015). An evaluation of the policy context on psychosocial risks and mental health in the workplace in the European Union: Achievements, challenges, and the future. *BioMed Research International*, *2015*, 1-18. https://doi.org/10.1155/2015/213089

Leka, S., Jain, A., Zwetsloot, G., & Cox, T. (2010). Policy-level interventions and work-related psychosocial risk management in the European Union. *Work & Stress*, *24*(3), 298-307.

Leka, S., & Iavicoli, S. (2017). The psychosocial work environment in times of change: society and the workplace. *Safety Science*, *100*, 1-3. https://doi.org/10.1016/j.ssci.2017.07.013

Leka, S., Van Wassenhove, W., & Jain, A. (2015). Is psychosocial risk prevention possible? Deconstructing common presumptions. *Safety Science*, *71*, 61-67.

LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge Stressor-hindrance stressor framework: An explanation for inconsistent relationships among Stressors and performance. *Academy of Management Journal*, *48*(5), 764–775. https://doi.org/10.5465/AMJ.2005.18803921

Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work and Stress*, *33*(1), 76–103. https://doi.org/10.1080/02678373.2018.1529065

Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-based Dentistry*, *7*(1), 24.

Levine, H., & D'Agostino, M. J. (2018). A Global Comparison of Women In The Workforce. In M. J. D'Agostino & M. M. Rubin (Eds.), *Governing in a global world: Women in public service* (pp. 19-32). Routledge.

Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA publications and communications board task force report. *American Psychologist*, *73*(1), 26-46. https://doi.org/10.1037/amp0000151

Levy, O., & Reiche, B. S. (2018). The politics of cultural capital: Social hierarchy and organizational architecture in the multinational corporation. *Human Relations*, *71*(6), 867-894.

Lewis, R., & Zibarras, L. (Eds.). (2013). *Work and Occupational Psychology: Integrating Theory and Practice*. SAGE.

Li, C. H. (2016). Confirmatory factor analysis with ordinal data: Comparing robust maximum likelihood and diagonally weighted least squares. *Behavior Research Methods*, *48*(3), 936-949.

Li, J., Loerbroks, A., Bosma, H., & Angerer, P. (2016). Work stress and cardiovascular disease: a life course perspective. *Journal of Occupational Health*, 15-0326.

Li, X., Kan, D., Liu, L., Shi, M., Wang, Y., Yang, X., Wang, J., Wang, L., & Wu, H. (2015). The mediating role of psychological capital on the association between occupational stress and job burnout among bank employees in China. *International Journal of Environmental Research and Public Health*, *12*(3), 2984-3001. https://doi.org/10.3390/ijerph120302984

Li, Y., Liu, H., & Cheng, Y. (2019). P.3.16 The associations between psychosocial work conditions and work sustainability: Findings from a national survey of working people in Taiwan. *Occupational and Environmental Medicine*, *76*(Suppl 1), A100.2-A100. https://doi.org/10.1136/oem-2019-epi.275

Liang, Y., Chu, X., Meng, S., Zhang, J., Wu, L., & Yan, Y. (2018). Relationship between stress-related psychosocial work factors and suboptimal health among

Chinese medical staff: A cross-sectional study. *BMJ Open*, *8*(3), e018485. https://doi.org/10.1136/bmjopen-2017-018485

Liao, S. H., Chang, W. J., Hu, D. C., & Yueh, Y. L. (2012). Relationships among organizational culture, knowledge acquisition, organizational learning, and organizational innovation in Taiwan's banking and insurance industries. *The International Journal of Human Resource Management*, *23*(1), 52-70.

Listau, K., Christensen, M., & Innstrand, S. T. (2017). Work Engagement: A Double-Edged Sword? A Study of the Relationship between Work Engagement and the Work-Home Interaction Using the ARK Research Platform. *Scandinavian Journal of Work and Organizational Psychology*, *2*(1), 1–13. https://doi.org/10.16993/sjwop.20

Litchfield, P., Cooper, C., Hancock, C., & Watt, P. (2016). Work and wellbeing in the 21st century. *International Journal of Environmental Research and Public Health*, *13*(11). https://doi.org/10.3390/ijerph13111065

Llorens, S., Bakker, A. B., Schaufeli, W., & Salanova, M. (2006). Testing the robustness of the job demands-resources model. *International Journal of Stress Management*, *13*(3), 378–391. https://doi.org/10.1037/1072-5245.13.3.378

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705.

Loewenson, R. H. (1998). Health impact of occupational risks in the informal sector in Zimbabwe. *International Journal of Occupational and Environmental Health*, *4*(4), 264-274.

Loewenson, R. (2001). Globalization and occupational health: a perspective from southern Africa. *Bulletin of the World Health Organization*, *79*, 863-868.

Loh, M. Y., Idris, M. A., Dollard, M. F., & Isahak, M. (2018). Psychosocial safety climate as a moderator of the moderators: Contextualizing JDR models and

emotional demands effects. *Journal of Occupational and Organizational Psychology*, *91*(3), 620–644. https://doi.org/10.1111/joop.12211

Longhurst, R. (2009). Interviews: In-depth, semi-structured. In R. Kitchin & N. Thrift (Eds.), *International Encyclopedia of Human Geography: H-I* (pp. 580-584). Elsevier.

Lopes, H., Lagoa, S., & Calapez, T. (2014). Work autonomy, work pressure, and job satisfaction: An analysis of European Union countries. *The Economic and Labour Relations Review*, *25*(2), 306-326.

López-Valcárcel, A. (2001). New challenges and oppurtunities for occupational safety and health (OSH) in a globalized world. *African Newsletter on Occupational Health and Safety*, *11*(3), 61-63.

Lu, C. Y., Tsai, M. C., Muo, C. H., Kuo, Y. H., Sung, F. C., & Wu, C. C. (2018). Personal, psychosocial and environmental factors related to sick building syndrome in official employees of Taiwan. *International Journal of Environmental Research and Public health*, *15*(1), 7.

Luebker, M. (2008). *Employment, unemployment, and informality in Zimbabwe: Concepts and data coherent policy-making* (Issues paper 32 and Integration Working Paper 90). ILO South-E Eam.

Lumley, T., Diehr, P., Emerson, S., & Chen, L. (2002). a Ssumption in L Arge P Ublic H Ealth D Ata S Ets. *Annual Review of Public Health*, *23*(1), 151–169. https://doi.org/10.1146/annurev.publheath.23.100901.140546

Maakip, I., Keegel, T., & Oakman, J. (2015). Workstyle and musculoskeletal discomfort (MSD): Exploring the influence of work culture in Malaysia. *Journal of Occupational Rehabilitation*, *25*(4), 696-706.

Mabiza, J., Conduah, J., & Mbohwa, C. (2017). Occupational Role Stress on Employee Performance and the Resulting Impact: A South African Bank Perspective. In *Proceedings of the International Multi Conference of Engineers and Computer Scientists*.

Mache, S., Bernburg, M., Vitzthum, K., Groneberg, D. A., Klapp, B. F., & Danzer, G. (2015). Managing work-family conflict in the medical profession: Working conditions and individual resources as related factors. *BMJ Open*, *5*(4), e006871-e006871. https://doi.org/10.1136/bmjopen-2014-006871

Madsen, I. E., Nyberg, S. T., Magnusson Hanson, L. L., Ferrie, J. E., Ahola, K., Alfredsson, L., Batty, G. D., Bjorner, J. B., Borritz, M., Burr, H., Chastang, J., De Graaf, R., Dragano, N., Hamer, M., Jokela, M., Knutsson, A., Koskenvuo, M., Koskinen, A., & Leineweber, C. (2017). Job strain as a risk factor for clinical depression: Systematic review and meta-analysis with additional individual participant data. *Psychological Medicine*, *47*(8), 1342-1356. https://doi.org/10.1017/s003329171600355x

Makoni, M. K., & Mutanana, N. (2016). Effective management of occupational stress as perceived by workers at a manufacturing company in Zimbabwe. *International Journal of Research*, *45*.

Malik, N. (2011). A study on occupational stress experienced by private and public banks employees in Quetta City. *African Journal of Business Management*, *5*(8), 3063.

Mangoma, J. F., Chimbari, M. J., & Dhlomo, E. (2008). An enumeration of orphans and analysis of the problems and wishes of orphans: The case of Kariba, Zimbabwe. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, *5*(3), 120-128. https://doi.org/10.1080/17290376.2008.9724910

Mannocci, A., Marchini, L., Scognamiglio, A., Sinopoli, A., De Sio, S., Sernia, S., & La Torre, G. (2018). Are bank employees stressed? Job perception and positivity in the banking sector: An Italian observational study. *International Journal of Environmental Research and Public Health*, *15*(4), 707.

Mapfumo, J. S., Chitsiko, N., & Chireshe, R. (2012). Teaching practice generated stressors and coping mechanisms among student teachers in Zimbabwe. *South African Journal of Education*, *32*(2), 155-166.

Mapfumo, J., Mukwidzwa, F., & Chireshe, R. (2014). Sources and levels of stress among mainstream and special needs education teachers in Mutare urban in Zimbabwe. *International Journal of Educational Sciences*, *6*(2), 187-195. https://doi.org/10.1080/09751122.2014.11890131

Marchand, A., Haines, V. Y., & Dextras-Gauthier, J. (2013). Quantitative analysis of organizational culture in occupational health research: a theory-based validation in 30 workplaces of the organizational culture profile instrument. *BMC Public Health*, *13*(1), 443. https://doi.org/10.1186/1471-2458-13-443

Marmot, M. (2006). Health in an unequal world. *The Lancet*, *368*(9552), 2081-2094.

Marumbwa, J. (2014). Exploring the Moderating Effects of Socio-Demographic Variables on Consumer Acceptance and Use of Mobile Money Transfer Services (MMTs) in Southern Zimbabwe. *American Journal of Industrial and Business Management*, *04*(02), 71–79. https://doi.org/10.4236/ajibm.2014.42011

Masa'deh, R. E., Obeidat, B. Y., & Tarhini, A. (2016). A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation modelling approach. *Journal of Management Development*, *35*(5), 681-705.

Mas-Machuca, M., Berbegal-Mirabent, J., & Alegre, I. (2016). Work-life balance and its relationship with organizational pride and job satisfaction. *Journal of Managerial Psychology*, *31*(2), 586-602.

Masuku, S., & Muchemwa, S. (2015). Occupational stress among university lecturers: A case of Zimbabwe. *US-China Education Review*, *5*(4), 258-266.

Masvaure, P., Ruggunan, S., & Maharaj, A. (2014). Work engagement, intrinsic motivation and job satisfaction among employees of a diamond mining company in Zimbabwe. *Journal of Economics and Behavioral Studies*, *6*(6), 488.

Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior*, *70*(1), 149-171.

Mawanza, W., Santu, T. C., & Mdlongwa, S. (2018). Corporate Governance Compliance Model: The Extent to Which Financial Institutions have Complied with the Reserve Bank of Zimbabwe (RBZ) Corporate Governance Guideline No. 01-2004/BSD of 2004. *International Review of Management and Marketing*, *8*(2), 74-80.

Mazikana, A. T., Peku, T., Sifile, O., & Mudziso, R. (2019). The nexus between educated youth unemployment and youth's capacity to contribute towards wealth creation in Zimbabwe. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3411663

McCrae, R. R., & Costa, P. T., Jr. (1989). More reasons to adopt the five-factor model. *American Psychologist, 44*(2), 451–452. https://doi.org/10.1037/0003-066X.44.2.451

McCulloch, J. (2008). Surviving blue asbestos: Mining and occupational disease in South Africa and Australia. *Transformation: Critical Perspectives on Southern Africa*, *65*(1), 68-93. https://doi.org/10.1353/trn.2008.0010

McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, *30*(7), 537-542.

McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global Qualitative Nursing Research*, *2*, 233339361559767. https://doi.org/10.1177/2333393615597674

McVicar, A. (2016). Scoping the common antecedents of job stress and job satisfaction for nurses (2000–2013) using the job demands–resources model of stress. *Journal of Nursing Management*, *24*(2), E112-E136.

Memon, S. B., Soomro, S. B., & Kumar, S. (2018). Assessing the work engagement, work practices and work performance in banks. *Journal of Administrative and Business Studies*, *4*(3). https://doi.org/10.20474/jabs-4.3.5

Meswani, H. R. (2008). Safety and occupational health: challenges and opportunities in emerging economies. *Indian Journal of Occupational and Environmental Medicine*, *12*(1), 3.

Metin, U. B., Taris, T. W., Peeters, M. C., van Beek, I., & Van den Bosch, R. (2016). Authenticity at work–a job-demands resources perspective. *Journal of Managerial Psychology*, *31*(2), 483-499.

Mette, J., Garrido, M. V., Preisser, A. M., Harth, V., & Mache, S. (2018). Linking quantitative demands to offshore wind workers' stress: do personal and job resources matter? A structural equation modelling approach. *BMC Public Health*, *18*(1), 934.

Milczarek, M., & Xabier, I. (2012). *Drivers and barriers for psychosocial risk management: An analysis of the findings of the European survey of enterprises on new and emerging risks (ESENER): Report*.

Milner, A., & LaMontagne, A. D. (2018). Suicide prevalence and suicide prevention in the workplace. In R. J. Burke & C. L. Cooper (Eds.), *Suicide prevalence and suicide prevention in the workplace* (pp. 59-76). Routledge.

Moeller, J., Ivcevic, Z., White, A. E., Menges, J. I., & Brackett, M. A. (2018). Highly engaged but burned out: intra-individual profiles in the US workforce. *Career Development International*, *23*(1), 86-105.

Moideenkutty, U., Blau, G., Kumar, R., & Nalakath, A. (2001). Perceived Organisational Support as a Mediator of the Relationship of Perceived Situational Factors to Affective Organisational Commitment. *Applied Psychology*, *50*(4), 615–634. https://doi.org/10.1111/1464-0597.00076

Moloney, W., Boxall, P., Parsons, M., & Cheung, G. (2018). Factors predicting Registered Nurses' intentions to leave their organization and profession: A job demands-resources framework. *Journal of Advanced Nursing*, *74*(4), 864–875. https://doi.org/doi:10.1111/jan.13497

Moncada, S., Utzet, M., Molinero, E., Llorens, C., Moreno, N., Galtés, A., & Navarro, A. (2014). The Copenhagen psychosocial questionnaire II (COPSOQ II) in Spain-A tool for psychosocial risk assessment at the workplace. *American Journal of Industrial Medicine*, *57*(1), 97–107. https://doi.org/10.1002/ajim.22238

Monteith, W., & Giesbert, L. (2017). 'When the stomach is full we look for respect': perceptions of 'good work' in the urban informal sectors of three developing countries. *Work, Employment and Society*, *31*(5), 816–833. https://doi.org/10.1177/0950017016650606

Monyau, M. M., & Bandara, A. (2015). *Zimbabwe. African Economic Outlook.* African Development Bank, Organisation for Economic Co-operation and Development, United Nations Development Program

Moreno-Jiménez, B., Rodríguez-Muñoz, A., Pastor, J. C., Sanz-Vergel, A. I., & Garrosa, E. (2009). The moderating effects of psychological detachment and thoughts of revenge in workplace bullying. *Personality and Individual Differences*, *46*(3), 359-364.

Mouza, A. M., & Souchamvali, D. (2016). Effect of Greece's new reforms and unplanned organizational changes on the stress levels of primary school teachers. *Social Indicators Research*, *128*(3), 981-994.

Moyo, R., & Salawu, A. (2019). A survey of communication media preferred by smallholder farmers in the Gweru District of Zimbabwe. *Journal of Rural Studies*, *66*(August 2018), 112–118. https://doi.org/10.1016/j.jrurstud.2018.12.013

Mudavanhu, N., Zhou, T., & Dzomba, P. (2014). An assessment of small and medium enterprise owners' occupational safety and health efforts: the case of Southerton, Harare, Zimbabwe. *Journal of Scientific Research and Reports*, 407-418.

Mudrak, J., Zabrodska, K., Kveton, P., Jelinek, M., Blatny, M., Solcova, I., & Machovcova, K. (2018). Occupational well-being among university faculty: A job demands-resources model. *Research in Higher Education*, *59*(3), 325-348.

Mudzimu, P. T. V. (2012). *Work Stress, Work-home Intereference and Organisational Culture of Insurance Employees in Zimbabwe* [Doctoral dissertation, University of South Africa].

Mughal, F., Ahmad, M., Gondal, A. M., Awan, T. M., & Chaudhry, I. G. (2010). Repercussions of stressors on employee work-life balance: Analysing the banking industry of Pakistan. *J. for Global Business Advancement*, *3*(4), 325. https://doi.org/10.1504/jgba.2010.036037

Mujeyi, K., & Sadomba, W. Z. (2018). Unemployment and Informal Entrepreneurship in Zimbabwe: Implications for Regional Integration. In S. O. Oloruntoba & M. Muchie (Eds.), *Innovation, regional integration, and development in Africa: Rethinking theories, institutions, and policies* (pp. 251-266). Springer.

Mullan, K., & Wajcman, J. (2019). Have mobile devices changed working patterns in the 21st century? A time-diary analysis of work extension in the UK. *Work, Employment and Society*, *33*(1), 3-20.

Munusamy, A., & Assim, M. I. S. A. (2019). Psychology hardiness and psychology well-being of banking sector employees and moderating role of coping strategy. *E-Bangi*, *16*(1).

Mutetwa, B., Dozva, R., & Mahembe, K. (2015). *Value addition of occupational safety and health to business*, National Social Security Authority (NSSA), Harare.https://www.nssa.org.zw/occupational-safety-health/research-development/research-reports/

Muzvidziwa, R. F. (2012). *Work Engagement Among Bus Drivers in Zimbabwe: The Role of Employee Well-being, Job Demands and Resources* [Doctoral dissertation, University of KwaZulu-Natal, Durban].

Mwakiwa, E., Maparara, T., Tatsvarei, S., & Muzamhindo, N. (2018). Is community management of resources by urban households, feasible? Lessons from community gardens in Gweru, Zimbabwe. *Urban Forestry & Urban Greening*, *34*, 97-104.

Nagami, M., Tsutsumi, A., Tsuchiya, M., & Morimoto, K. (2010). Job control and coworker support improve employee job performance. *Industrial Health*, *48*(6), 845-851. https://doi.org/10.2486/indhealth.ms1162

Naseem, K. (2018). Job stress, happiness and life satisfaction: The moderating role of emotional intelligence empirical study in telecommunication Sector Pakistan. *Journal of Social Sciences and Humanity Studies*, *4*(1), 7-14.

National Social Security Authority. (2012). *2012 ANNUAL STATISTICAL REPORT*.

National Social Security Authority. (2013), *Workers Compensation registry's half yearly accident statistics*, Harare.

National Social Security Authority, (2014). *ANNUAL STATISTICAL REPORT*

National Social Security Authority. (2015, June). Fostering a preventive OSH Culture Agrochemical use by small holder farmers. *ON Guard An Aid to Occupational; Safety & Health*, *21*(1).

National Social Security Authority. (2019, June). The Future of Work Towards Vision Zero *ON Guard An Aid To Occupational Safety & Health*, *25*(1).

Ncube, A. C., & Tshabalala, T. (2016). Factors Contributing to the Causes of Work Related Stress and Its Impact on Performance of Teachers in Nkayi District. *Nova Journal of Medical and Biological Sciences*, *1*(1).

Ncube, M. (2019). *The 2019 Mid-Year budget Review & Supplementary Budget*. Goverment of Zimbabwe.https://www.dpcorp.co.zw/assets/2019_mid-year_budget_review_-_supplementary_budget-(1)-(1).pdf

Ndiweni, N. J., & Manik, S. (2018). Determinants of food insecurity amongst primary school children through the lens of affected parents and teachers: The case of Matobo district, Zimbabwe. *Alternation: Interdisciplinary Journal for the Study of the Arts and Humanities in Southern Africa*, *SP*(21), 203-233. https://doi.org/10.29086/2519-5476/2018/sp21a10

Ndlovu, E., & Tigere, R. (2018). Economic migration and the socioeconomic impacts on the emigrant's family: A case of Ward 8, Gweru Rural district, Zimbabwe.

Jamba: Journal of Disaster Risk Studies, *10*(1), 1–10. https://doi.org/10.4102/jamba.v10i1.414

Negwaya, E., Chazuza, T., Mugogo, P., Mapira, N., Mlingwa, M., & Shamu, R. B. (2013). An Investigation of the Factors Influencing Levels of Staff Engagement in a Provincial, Referral Hospital: The Case of Bindura Provincial Hospital. *Australian Journal of Business and Management Research Vol*, *2*(11), 25-34.

Ng, T. W. (2017). Transformational leadership and performance outcomes: Analyses of multiple mediation pathways. *The Leadership Quarterly*, *28*(3), 385-417.

Nguyen, N. D., Ngoc, N. B., & Montague, A. (2019). Enhancing graduate work-readiness in Vietnam. In In: Dhakal S., Prikshat V., Nankervis A., Burgess J. (Eds.), *The Transition from Graduation to Work* (pp. 221-237). Springer, Singapore.

Nhundu, T. J. (1999). Determinants and prevalence of occupational stress among Zimbabwean school administrators. *Journal of Educational Administration*, *37*(3), 256-272.

Nielsen, K., Nielsen, M. B., Ogbonnaya, C., Känsälä, M., Saari, E., & Isaksson, K. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work and Stress*, *31*(2), 101–120. https://doi.org/10.1080/02678373.2017.1304463

Niemczyk, E. (2018). Rethinking research education in globalised times: Perspectives of European post-doctoral fellows. *Journal of Contemporary Educational Studies/Sodobna Pedagogika*, *69*(2).

Niesen, W., Van Hootegem, A., Elst, T. Vander, Battistelli, A., & De Witte, H. (2018). Job insecurity and innovative work behaviour: A psychological contract perspective. *Psychologica Belgica*, *57*(4), 174–189. https://doi.org/10.5334/pb.381

Njanike, K. (2010). The impact of globalisation on banking service quality in Zimbabwe (2003-2008). *Annals of the University of Petrosani, Economics*, *10*(1), 205–216.

Nolte, A., & Stummer, H. (2012). Employees' effort-reward imbalance in the banking industry–a discussion paper. *International Journal of Behavioural and Healthcare Research*, *3*(1), 1-10.

Notelaers, G., Törnroos, M., & Salin, D. (2019). Effort-reward imbalance: A risk factor for exposure to workplace bullying. *Frontiers in Psychology*, *10*(February), 1–5. https://doi.org/10.3389/fpsyg.2019.00386

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1)

Nowrouzi-Kia, B., Li, A. K., Nguyen, C., & Casole, J. (2018). Heart disease and occupational risk factors in the Canadian population: an exploratory study using the Canadian community health survey. *Safety and Health at Work*, *9*(2), 144-148.

Ntow, M. A. O., Sokro, E., Dogbe-Zungbey, O., & Bonsu, N. O. (2019, July). Psychosocial Risk Management and Psychological Attachment: Mediating Role of Job Satisfaction. In *International Conference on Applied Human Factors and Ergonomics.* 393-402. Springer, Cham.

Nugent, R., Bertram, M. Y., Jan, S., Niessen, L. W., Sassi, F., Jamison, D. T., ... & Beaglehole, R. (2018). Investing in non-communicable disease prevention and management to advance the Sustainable Development Goals. *The Lancet*, *391*(10134), 2029-2035.

Nuwayhid, I. a. (2004). Occupational health research in developing countries: A partner for social justice. *American Journal of Public Health*, *94*(11), 1916–1921. https://doi.org/10.2105/AJPH.94.11.1916

Nyasha, S., & Odhiambo, N. M. (2018). Financial development and economic growth nexus: A revisionist approach. *Economic Notes*, *47*(1), 223-229.

Nyoni, T. (2018). *Box – Jenkins ARIMA Approach to Predicting net FDI inflows in Zimbabwe* (Paper No. 87737), Munich University Library – Munich Personal RePEc Archive (MPRA). https://www.researchgate.net/publications/326270598

Nyoni, T., & Bonga, W. G. (2017). Cashless Transacting Economy: A Necessary Evil for Development! A Zimbabwean Scenario! *Dynamic Research Journals' Journal of Economics & Finance (DRJ-JEF), 2*(4*),* 01-10.

Nyoni, T., & Bonga, W. G. (2018). Anatomy of the small & medium enterprises (SMEs) critical success factors (CSFs) in Zimbabwe: Introducing the 3E model. *Dynamic Research Journals' Journal of Business & Management*, *1*(2), 01-18.

O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality and Quantity*, *41*(5), 673–690. https://doi.org/10.1007/s11135-006-9018-6

Oakman, J., Macdonald, W., & Kinsman, N. (2019). Barriers to more effective prevention of work-related musculoskeletal and mental health disorders. *Applied Ergonomics*, *75*, 184-192. https://doi.org/10.1016/j.apergo.2018.10.007

Ofili, A. N., Tobin, E. K., Ilombu, M. A., Igbinosun, E. O., & Iniomor, I. (2013). Job satisfaction and psychological health of long distance drivers in Benin City. *International Journal of Community Research*, *2*(4), 64-71.

Ogba, I. E. (2008). Commitment in the workplace: The impact of income and age on employee commitment in Nigerian banking sector. *Management Research News*, *31*(11), 867-878.

Okada, C. (2019). Initiatives aimed at reducing poverty with sport: A case in Zimbabwe. *Osaka Human Sciences*, *5*, 21-33.

Okeke, C. I. O., Adu, E. O., Drake and, M. L., & Duku, N. S. (2014). Correlating demographic variables with occupational stress and coping strategies of pre-school educators: A literature review. *Journal of Psychology*, *5*(2), 143-154.

Okon, E. O., & Osesie, S. W. (2017). Hazards of manufacturing sector and economic growth in Nigeria. *IJSSHE-International Journal of Social Sciences, Humanities and Education*, *1*(1), 3-7.

Oosthuizen, R. M., Visser, D., & Mudzimu, P. T. (2014). Work stress, work–home interference and perceptions of organisational culture amongst insurance employees in Zimbabwe. *Journal of Psychology in Africa*, *24*(2), 144-153.

Opie, T. J., & Henn, C. M. (2013). Work-family conflict and work engagement among mothers: Conscientiousness and neuroticism as moderators. *SA Journal of Industrial Psychology*, *39*(1), 1–12. https://doi.org/10.4102/sajip.v39i1.1082

Osabuohien, E. S., Beecroft, I., & Efobi, U. R. (2018). Global trade and trade protection in a globalised world. *Transnational Corporations Review*, *10*(1), 43-52.

Oshio, T., Inoue, A., & Tsutsumi, A. (2018). Associations among job demands and resources, work engagement, and psychological distress: fixed-effects model analysis in Japan. *Journal of Occupational Health*, 2017-0293.

Ostry, A. S., Kelly, S., Demers, P. A., Mustard, C., & Hertzman, C. (2003). A comparison between the effort-reward imbalance and demand control models. *BMC Public Health*, *3*(1),10. https://doi.org/10.1186/1471-2458-3-10

Ozer, S. (2019). Globalization and the proliferation of complex acculturation processes. In P. F. Titzmann & P. Jugert (Eds.), *Youth in Superdiverse societies: Growing up with globalization, diversity, and acculturation*. Routledge.

Pallant, J. (2011). *SPSS Survival Manual: A step by step guide to data analysis using SPSS*. Allen & Unwin.

Papkalla, U., & Collison, J. (2017). *International minimum requirements for health protection at the workplace.* World Health Organisation.

Patiar, A., & Wang, Y. (2016). The effects of transformational leadership and organizational commitment on hotel departmental performance. *International Journal of Contemporary Hospitality Management*, *28*(3), 586-608.

Patronea, A., Ilies, R. F., Marginean, M., Boca, A. N., Iancu, M., & Popa, M. (2016). The efect of working conditions on the development of chronic health conditions in Romanian bank employees. *Human and Veterinary Medicine*, *8*(4), 166-170.

Paudel, L., Manandhar, N., & Joshi, S. K. (2018). Work-related musculoskeletal symptoms among Traffic police: A Review. *International Journal of Occupational Safety and Health*, *8*(2).

Payne, N., Jones, F., & Harris, P. R. (2013). Employees' perceptions of the impact of work on health behaviours. *Journal of Health Psychology*, *18*(7), 887-899.

Pejtersen, J. H., Kristensen, T. S., Borg, V., & Bjorner, J. B. (2010). The second version of the Copenhagen Psychosocial Questionnaire. *Scandinavian Journal of Public Health*, *38*(3_suppl), 8-24.

Pelletier, A. (2018). Performance of foreign banks in developing countries: Evidence from sub-Saharan African banking markets. *Journal of Banking & Finance*, *88*, 292-311.

Peter-Cookey, M. A., & Janyam, K. (2017). Reaping just what is sown: Low-skills and low-productivity of informal economy workers and the skill acquisition process in developing countries. *International Journal of Educational Development*, *56*(May), 11–27. https://doi.org/10.1016/j.ijedudev.2017.07.005

Pfeffer, J. (2018). *Dying for a paycheck: How modern management harms employee health and company performance—and what we can do about it*. HarperCollins.

Pillinger, J. (2016). Psychosocial risks and violence in the world of work: A trade union perspective. *International Journal of Labour Research*, *8*(1/2), 35.

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, *92*(2), 438-454. https://doi.org/10.1037/0021-9010.92.2.438

Pool, R., Montgomery, C. M., Morar, N. S., Mweemba, O., Ssali, A., Gafos, M., Lees, S., Stadler, J., Crook, A., Nunn, A., Hayes, R., & McCormack, S. (2010). A mixed methods and triangulation model for increasing the accuracy of adherence and sexual behaviour data: The Microbicides development

programme. *PLoS ONE*, *5*(7), e11600. https://doi.org/10.1371/journal.pone.0011600

Popper, K. R. (1957). Philosophy of science: A personal report. In C. A. Mace (Ed.), *British Philosophy in the Mid-Century* (pp. 155-91). London: Allen & Unwin.

Potter, R., O'Keeffe, V., Leka, S., Webber, M., & Dollard, M. (2019). Analytical review of the Australian policy context for work-related psychological health and psychosocial risks. *Safety Science*, *111*, 37–48. https://doi.org/10.1016/j.ssci.2018.09.012

Presti, A. L., & Nonnis, M. (2014). Testing the Job Demands-Resources model: Evidence from a sample of Italian employees. *TPM: Testing, Psychometrics, Methodology in Applied Psychology*, *21*(1), 89-101.

Prilleltensky, I. (2012). The what, why, who, and how of globalization: What is psychology to do?. *Journal of Social Issues*, *68*(3), 612-629.

Probst, T. M., & Jiang, L. (2017). European flexicurity policies: Multilevel effects on employee psychosocial reactions to job insecurity. *Safety Science*, *100*, 83-90. https://doi.org/10.1016/j.ssci.2017.03.010

Punnett, L., Cherniack, M., Henning, R., Morse, T., Faghri, P., & CPH-New Research Team. (2009). A conceptual framework for integrating workplace health promotion and occupational ergonomics programs. *Public Health Reports*, *124*(4_suppl1), 16-25.

Puplampu, B. B., & Quartey, S. H. (2012). Key issues on occupational health and safety practices in Ghana: A review. *International Journal of Business and Social Science*, *3*(19), 151-156.

Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*, *44*(5), 485–495. https://doi.org/10.5271/sjweh.3736

Quinlan, M., Mayhew, C., & Bohle, P. (2001). The global expansion of precarious employment, work disorganization, and consequences for occupational health: a

review of recent research. *International Journal of Health Services*, *31*(2), 335-414.

Rahim, N. A., Ng, H. K., Biggs, D. M., & Boots, K. (2014). Perception of safety, physical working conditions and stress between Malaysia and United Kingdom. *International Journal of Business and Society*, *15*(2), 321-338.

Rahman, H. A., Abdul-Mumin, K., & Naing, L. (2017). Psychosocial work stressors, work fatigue, and musculoskeletal disorders: comparison between emergency and critical care nurses in Brunei Public Hospitals. *Asian Nursing Research*, *11*(1), 13-18.

Rai, A. (2018). Differential relationship of challenge and hindrance demands with employee engagement: The moderating effect of job resources. *International Journal of Sociology and Social Policy*, *38*(9/10), 887-906.

Rai, A., Ghosh, P., Chauhan, R., & Mehta, N. K. (2017). Influence of job characteristics on engagement: does support at work act as moderator?. *International Journal of Sociology and Social Policy*, *37*(1/2), 86-105.

Rainey, H. G., & Bakker, A. B. (2015). A Job Demands–Resources Approach to Public Service Motivation. *Public Administration Review*, *75*(5), 723-732.

Rainey, H. G., & Bakker, A. B. A Job Demands–Resources Approach to Public Service Motivation. *Public Administration Review*, *75*(5), 723-732.

Raj, I. A. E. A., & Julius, S. (2018). Causes and Consequences of work stress and coping Behaviour of Employees: an Analysis. *Prabandhan: Indian Journal of Management*, *11*(3), 24-38.

Rama, M. (2003). Globalization and the labor market. *The World Bank Research Observer*, *18*(2), 159-186.

Razavi, T. (2001). *Self-report measures: An overview of concerns and limitations of questionnaire use in occupational stress research*. [Unpublished manuscript].

Department of Accounting and Management Sciences, University of Southampton. Retrieved from http://www.eprints.soton.ac.uk/35712/01/01-175.pdf

Rehkopf, D. H., Modrek, S., Cantley, L. F., & Cullen, M. R. (2017). Social, psychological, and physical aspects of the work environment could contribute to hypertension prevalence. *Health Affairs*, *36*(2), 258-265. https://doi.org/10.1377/hlthaff.2016.1186

Reina-Tamayo, A. M., Bakker, A. B., & Derks, D. (2017). Episodic demands, resources, and engagement. *Journal of Personnel Psychology*, *16*(3), 125-136. https://doi.org/10.1027/1866-5888/a000177

Reserve Bank of Zimbabwe (RBZ), (2015). *Bank Supervision Division Banking Sector Report for Quarter Ended 31 March 2015*. Harare. https://www.rbz.co.zw/documents/BLSS/QuarterlyReports/quarterly-industry-report-march-2015.pd

Reserve Bank of Zimbabwe (RBZ), (2018). *The Bank Supervision Annual Report.* https://www.rbz.co.zw/index.php/publications-notices/publications/bank-supervision-annual-report/744-2018-bank-supervision-annual-report.

Reserve Bank of Zimbabwe (RBZ), (2019). *2019 Midterm Monetary Policy Statement.* https://www.rbz.co.zw/index.php/publications-notices/notices/press-release/770-2019-mid-term-monetary-policy-statement

Reserve Bank of Zimbabwe Act, [Chapter 22:15]. 1999 https://www.rbz.co.zw/index.php/about-us/about-us/legislation/acts/42-legislation/acts/572-reserve-bank-of-zimbabwe-act-chapter-22-15

Reynolds, T. W., Klawitter, M., Biscaye, P. E., & Anderson, C. L. (2018). Mobile money and branchless banking regulations affecting cash-in, cash-out networks in low- and middle-income countries. *Gates Open Research*, *2*, 64. https://doi.org/10.12688/gatesopenres.12876.1

Riedl, E. M., & Thomas, J. (2019). The moderating role of work pressure on the relationships between emotional demands and tension, exhaustion, and work

engagement: an experience sampling study among nurses. *European Journal of Work and Organizational Psychology*, *28*(3), 414–429. https://doi.org/10.1080/1359432X.2019.1588251

Ringson, J. (2019). The impact of inheritance experiences in orphans and vulnerable children support in Zimbabwe: A caregivers' perspective. *Child and Family Social Work*, *24*(4), 503–511. https://doi.org/10.1111/cfs.12630

Roczniewska, M., & Bakker, A. B. (2016). Who seeks job resources, and who avoids job demands? The link between dark personality traits and job crafting. *The Journal of Psychology*, *150*(8), 1026-1045.

Rod, M., & Ashill, N. J. (2009). Symptoms of burnout and service recovery performance: The influence of job resourcefulness. *Managing Service Quality*, *19*(1), 60–84. https://doi.org/10.1108/09604520910926818

Rodwell, J., & Munro, L. (2013). Well-being, satisfaction and commitment: the substitutable nature of resources for maternity hospital nurses. *Journal of Advanced Nursing*, *69*(10), 2218-2228.

Rolander, B., Lindmark, U., Johnston, V., Wagman, P., & Wåhlin, C. (2019). Organizational types in relation to exposure at work and sickness – a repeated cross-sectional study within public dentistry. *Acta Odontologica Scandinavica*, *78*(2), 132-140. https://doi.org/10.1080/00016357.2019.1659411

Rowley, J. (2012). Conducting research interviews. *Management Research Review*, *35*(3/4), 260-271.

Rugulies, R., Aust, B., & Madsen, I. E. H. (2017). Effort–reward imbalance at work and risk of depressive disorders. A systematic review and meta-analysis of prospective cohort studies. *Scandinavian Journal of Work, Environment and Health*, *43*(4), 294–306. https://doi.org/10.5271/sjweh.3632

Rurkkhum, S., & Bartlett, K. R. (2012). The relationship between employee engagement and organizational citizenship behaviour in Thailand. *Human Resource Development International*, *15*(2), 157-174.

Rushwaya, T. J., & Mutambara, E. (2018). Financial inclusion: disrupted liquidity and redundancy of mobile money agents in Zimbabwe. *Investment Management & Financial Innovations*, *15*(3), 131.

Sackey, J., & Sanda, M. A. (2011). Sustenance of human capital: Social support as a managerial stress reliever for women in developing economies. *Research and Practice in Human Resource Management*, *19*, 1–23.

Salanova, M., Bakker, A. B., & Llorens, S. (2006). Flow at work: Evidence for an upward spiral of personal and organizational resources. *Journal of Happiness Studies*, *7*(1), 1–22. https://doi.org/10.1007/s10902-005-8854-8

Sale, J. E., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality and Quantity*, *36*(1), 43-53.

Samet, J. M., & Spengler, J. D. (2003). Indoor environments and health: moving into the 21st century. *American Journal of Public Health*, *93*(9), 1489-1493.

Santa Maria, A., Wörfel, F., Wolter, C., Gusy, B., Rotter, M., Stark, S., ... & Renneberg, B. (2018). The role of job demands and job resources in the development of emotional exhaustion, depression, and anxiety among police officers. *Police Quarterly*, *21*(1), 109-134.

Santos, A., Chambel, M. J., & Castanheira, F. (2016). Relational job characteristics and nurses' affective organizational commitment: The mediating role of work engagement. *Journal of Advanced Nursing*, *72*(2), 294-305.

Santos, A., Leather, P., Dunn, J., & Zarola, A. (2009). Gender differences in exposure to Co-worker and public-initiated violence: Assessing the impact of work-related violence and aggression in police work. *Work & Stress*, *23*(2), 137-154. https://doi.org/10.1080/02678370903087934

Sanyang, E., Butler-Dawson, J., Mikulski, M. A., Cook, T., Kuye, R. A., Venzke, K., & Fuortes, L. J. (2017). Environmental and occupational health needs assessment

in West Africa: opportunities for research and training. *International Journal of Public Health*, *62*(2), 317-325.

Sarangi, S. (2012). An Exploratory Study of Employee Engagement Initiatives in the Indian Banking Sector. *SIES Journal of Management*, *8*(1).

Scanlan, J. N., & Still, M. (2019). Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, *19*(1), 62.

Schabracq, M. J., & Cooper, C. L. (2000). The changing nature of work and stress. *Journal of Managerial Psychology*, *15*(3), 227-241.

Schaufeli, W. B. (2015). Engaging leadership in the job demands-resources model. *Career Development International*, *20*(5), 446-463.

Schaufeli, W. B. (2017). Applying the job demands-resources model. *Organizational* Dynamics, 2(46), 120-132.

Schaufeli, W. B. (2018). Work engagement in Europe. *Organizational Dynamics, 47*(2), 99-106. https://doi.org/10.1016/j.orgdyn.2018.01.003

Schaufeli, W. B., & Bakker, A. B. (2003). Utrecht Work Engagement Scale: Preliminary manual. *Occupational Health Psychology Unit, Utrecht University, Utrecht*, *26*, 64-000.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293-315. https://doi.org/10.1002/job.248

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire. *Educational and Psychological Measurement*, *66*(4), 701-716.https://doi.org/10.1177/0013164405282471

Schaufeli, W. B., & Taris, T. W. (2013). A critical review of the job demands-resources model: Implications for improving work and health. *Bridging Occupational,*

Organizational and Public Health, 43-68. https://doi.org/10.1007/978-94-007-5640-3_4

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior, 30*(7), 893-917. https://doi.org/10.1002/job.595

Schmidt, B., Schneider, M., Seeger, P., van Vianen, A., Loerbroks, A., & Herr, R. M. (2019). A comparison of job stress models: Associations with employee well-being, absenteeism, presenteeism, and resulting costs. *Journal of Occupational and Environmental Medicine*, *61*(7), 535-544.

Schneider, I., Mädler, M., Clos, C., & Lang, J. (2018). 80 Psychological risk assessment – bridging the research-practitioner gap. *Work Organisation and Psychosocial Factors*. https://doi.org/10.1136/oemed-2018-icohabstracts.1747

Scholten, S., Velten, J., Neher, T., & Margraf, J. (2017). Wealth, justice and freedom: Objective and subjective measures predicting poor mental health in a study across eight countries. *SSM - Population Health*, *3*(May), 639–648. https://doi.org/10.1016/j.ssmph.2017.07.010

Schouw, D., Mash, R., & Kolbe-Alexander, T. (2018). Transforming the workplace environment to prevent non-communicable chronic diseases: participatory action research in a South African power plant. *Global Health Action*, *11*(1), 1544336.

Schüler, J., Sheldon, K. M., Prentice, M., & Halusic, M. (2014). Do some people need autonomy more than others? Implicit dispositions toward autonomy moderate the effects of felt autonomy on well-being. *Journal of Personality, 84*(1), 5-20. https://doi.org/10.1111/jopy.12133

Scrima, F., Lorito, L., Parry, E., & Falgares, G. (2014). The mediating role of work engagement on the relationship between job involvement and affective commitment. *The International Journal of Human Resource Management*, *25*(15), 2159-2173.

Sedgwick, P. (2014). Cross sectional studies: Advantages and disadvantages. *BMJ*, *348*(26 2), 2276-2276. https://doi.org/10.1136/bmj.g2276

Sewwandi, D. V. S., & Perera, G. D. (2016, October8). The impact of job stress on turnover intention: A study of reputed apparel firm in Sri Lanka. 3rd International HRM Conference. Sri Lanka.

Shadfar, S., & Malekmohammadi, I. (2013). Application of Structural Equation Modeling (SEM) in restructuring state intervention strategies toward paddy production development. *International Journal of Academic Research in Business and Social Sciences*, *3*(12), 576.

Shah, S. M. M., Ali, R., Dahri, A. S., Brohi, N. A., & Maher, Z. A. (2018). Determinants of Job Satisfaction among Nurses: Evidence from South Asian Perspective. *International Journal of Academic Research in Business and Social Sciences*, *8*(5). https://doi.org/10.6007/ijarbss/v8-i5/4082

Sharjeel, M. Y., Siddiqui, H., & Khwaja, G. (2016). Work-family conflict and career orientation amongst employed women in banks and hospitals. *Pakistan Business Review*, *17*(4).

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, *3*(7), 749-752.

Sharma, S., Singh, V. K., Kishore, J., & Sharma, N. (2014). A study on customer perception towards service quality and delivery with reference to e-banking. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2392234

Shaukat, M. Z., Senin, A. A., & Ahmed, I. (2012). An exchange perspective of job satisfaction: A study of banking sector of Pakistan. *Business Management Dynamics*, *1*(12), 59.

Shim, S. K. (2018). The Effect of Job Demands on Social Worker's Organizational Commitment: The Moderating of Leader-Member Exchange (LMX). *Journal of Digital Convergence*, *16*(9), 443-452.

Shimazu, A., Dollard, M., Nordin, R. Bin, & Oakman, J. (2016). Psychosocial factors at work in the Asia Pacific. *Psychosocial Factors at Work in the Asia Pacific: From Theory to Practice*, 1–369. https://doi.org/10.1007/978-3-319-44400-0

Shoss, M. K., Jiang, L., & Probst, T. M. (2018). Bending without breaking: A two-study examination of employee resilience in the face of job insecurity. *Journal of Occupational Health Psychology*, *23*(1), 112.

Shukla, H., & Garg, R. (2013). A study on stress management among the employees of nationalised banks. *Voice of Research*, *2*(3), 72-75.

Sibanda, P., Muchena, T., & Ncube, F. (2014). Employee engagement and organisational performance in a public sector organisation in Zimbabwe. *International Journal of Asian Social Science*, *4*(1), 89-99.

Sieberhagen, C., Rothmann, S., & Pienaar, J. (2009). Employee health and wellness in South Africa: The role of legislation and management standards. *SA Journal of Human Resource Management, 7*(1). https://doi.org/10.4102/sajhrm.v7i1.144.

Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, *1*(1), 27-41. https://doi.org/10.1037/1076-8998.1.1.27

Siegrist, J. (2008). Chronic psychosocial stress at work and risk of depression: Evidence from prospective studies. *European Archives of Psychiatry and Clinical Neuroscience, 258*(S5), 115-119. https://doi.org/10.1007/s00406-008-5024-0

Siegrist, J. (2012). *Effort-reward imbalance at work: Theory, measurement and evidence* [Unpublished manuscript]. Department of Medical Sociology, University Düsseldorf.

Siegrist, J. (2015). Justice and Health. In J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences* (2nd ed., pp. 928-931). Elsevier.

Siegrist, J., & Li, J. (2017). Work stress and altered biomarkers: A synthesis of findings based on the effort-reward imbalance model. *International Journal of*

Environmental Research and Public Health, *14*(11). https://doi.org/10.3390/ijerph14111373

Siegrist, J., Siegrist, K., & Weber, I. (1986). Sociological concepts in the etiology of chronic disease: the case of ischemic heart disease. *Social Science & Medicine*, *22*(2), 247-253.

Silva, L. S., & Barreto, S. M. (2010). Adverse psychosocial working conditions and minor psychiatric disorders among bank workers. *BMC Public Health*, *10*(1), 686. https://doi.org/10.1186/1471-2458-10-686

Silva, L. S., & Barreto, S. M. (2012). Adverse psychosocial working conditions and poor quality of life among financial service employees in Brazil. *Journal of Occupational Health*, *54*(2), 88–95. https://doi.org/JST.JSTAGE/joh/11-0072-OA [pii]

Silva, J. L., & Navarro, V. L. (2012). Work organization and the health of bank employees. *Revista Latino-Americana de Enfermagem*, *20*(2), 226–234. https://doi.org/10.1590/S0104-11692012000200003

Simba, A., Smith, D. J., & Dube, T. (2018). Competing with the grey market: Puzey and Payne in Zimbabwe. *The CASE Journal*, *14*(2), 145-163.

Singh, Z., & Sekhon, P. S. (2018). Need for risk management and regular occupational health safety assessment among workers of developing countries. *Global Journal on Quality and Safety in Healthcare*, *1*(1), 19.

Skaalvik, E. M., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and well-being. *Social Psychology of Education*, *21*(5), 1251-1275.

Smit, N. W., De Beer, L. T., & Pienaar, J. (2016). Work stressors, job insecurity, union support, job satisfaction and safety outcomes within the iron ore mining environment. *SA Journal of Human Resource Management, 15* https://doi.org/10.4102/sajhrm.v14i1.719

Soha, H. M., Osman, A., Salahuddin, S. N., Abdullah, S., & Ramlee, N. F. (2016). The relationship of work influence, sense of community and individual spirituality towards organizational performance. *Procedia Economics and Finance*, *35*, 591-596.

Sojane, J. S., Klopper, H. C., & Coetzee, S. K. (2016). Leadership, job satisfaction and intention to leave among registered nurses in the North West and Free State provinces of South Africa. *Curationis*, *39*(1), 1-10.

Somers, M. J., Birnbaum, D., & Casal, J. (2018). Supervisor support, control over work methods and employee well-being: new insights into nonlinearity from artificial neural networks. *The International Journal of Human Resource Management*, 1-23.

Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, *12*(3), 204–221. https://doi.org/10.1037/1076-8998.12.3.204

Sonnentag, S., Mojza, E. J., Demerouti, E., & Bakker, A. B. (2012). Reciprocal relations between recovery and work engagement: The moderating role of job stressors. *Journal of Applied Psychology*, *97*(4), 842.

Soo, H. S., & Ali, H. (2017). Can Stressed Employees Perform Organizational Citizenship Behavior?. *Journal of Advanced Management Science Vol*, *5*(2).

Soomro, A. A., Breitenecker, R. J., & Shah, S. A. (2018). Relation of work-life balance, work-family conflict, and family-work conflict with the employee performance-moderating role of job satisfaction. *South Asian Journal of Business Studies, 7*(1), 129-146. https://doi.org/10.1108/sajbs-02-2017-0018

Sorensen, G., Nagler, E. M., Pawar, P., Gupta, P. C., Pednekar, M. S., & Wagner, G. R. (2017). Lost in translation: The challenge of adapting integrated approaches for worker health and safety for low- and middle-income countries. *PloS ONE*, *12*(8), e0182607. https://doi.org/10.1371/journal.pone.0182607

Stephen, E. B. (2014). Occupational stress as correlates of behavioural outcomes among female employees of commercial banks in Nigeria. *Int J Appl Sociol*, *4*, 93-100.

Stewart, H., Gapp, R., & Harwood, I. (2017). Exploring the alchemy of qualitative management research: Seeking trustworthiness, credibility and rigor through crystallization. *The Qualitative Report*, *22*(1), 1-19.

Sulemana, M., Dramani, J. B., & Oteng-Abayie, E. F. (2018). Foreign bank inflows: implications for bank stability in sub-Saharan Africa. *African Review of Economics and Finance*, *10*(1), 54-81.

Sumner, R. C., & Gallagher, S. (2017). Unemployment as a chronic stressor: A systematic review of cortisol studies. *Psychology & Health*, *32*(3), 289-311.

Taderera, H. (2012). Occupational health and safety management systems: Institutional and regulatory frameworks in Zimbabwe. *International Journal of Human Resource Studies*, *2*(4), 99.

Tadić, M., Bakker, A. B., & Oerlemans, W. G. (2015). Challenge versus hindrance job demands and well-being: A diary study on the moderating role of job resources. *Journal of Occupational and Organizational Psychology*, *88*(4), 702-725.

Taheri Goudarzi, H. (2017). Investigating the Effect of Work-Family Conflict and Work-Family Support on Job Satisfaction and Job Performance of National Iranian Drilling Company Employees. *Human Resource Management in The Oil Industry*, *9*(33), 111-132.

Takala, J., & Hämäläinen, P. (2009). Globalization of risks. *African Newsletter on Occupational Health and Safety*, *19*(3), 70-73.

Talukder, A., Vickers, M., & Khan, A. (2018). Supervisor support and work-life balance. *Personnel Review*, *47*(3), 727-744. https://doi.org/10.1108/pr-12-2016-0314

Tang, J. J., Leka, S., Hunt, N., & MacLennan, S. (2011). Occupational psychosocial health policies in Hong Kong schools: A review and exploration of key stakeholder perceptions. *Health policy*, *103*(2-3), 266-275.

Tang, J. J., Leka, S., & MacLennan, S. (2012). The psychosocial work environment and mental health of teachers: A comparative study between the United Kingdom and Hong Kong. *International Archives of Occupational and Environmental Health*, *86*(6), 657-666. https://doi.org/10.1007/s00420-012-0799-8

Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, *20*(4), 316-334.

Taris, T. W., Leisink, P. L., & Schaufeli, W. B. (2017). Applying occupational health theories to educator stress: Contribution of the job demands-resources model. In T. M. McIntyre, S. E. McIntyre, & D. J. Francis (Eds.), *Educator stress: An occupational health perspective* (pp. 237-259). Springer.

Taris, T. W., & Schaufeli, W. B. (2016). The job demands-resources model. In S. Clarke, T. M. Probst, F. W. Guldenmund, & J. Passmore (Eds.), *The Wiley Blackwell handbook of the Psychology ofOccupational Safety and Workplace Health* (pp. 157-180). Wiley-Blackwell.

Tee, C. L., Saini, A., & Ibrahim, S. (2018). Globalisation and Innovation Activity in Developing Countries. *Institutions and Economies*, *10*(4).1-18

Telle-Lamberton, M., Faye, S., Pontin, F., Bensefa-Colas, L., de Clavière, C., Le Barbier, M., & Lasfargues, G. (2018). Trends in work-related mental disorders by sector in France. *Occupational Medicine*, *68*(7), 431-437.

Teoh, K. R., Hassard, J., & Cox, T. (2020). Individual and organizational psychosocial predictors of hospital doctors' work-related well-being. *Health Care Management Review*, *45*(2), 162-172. https://doi.org/10.1097/hmr.0000000000000207

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic Analysis. In C. Willig & W. S. Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (2nd ed.). SAGE.

Theorell, T., Hammarström, A., Aronsson, G., Träskman Bendz, L., Grape, T., Hogstedt, C., Marteinsdottir, I., Skoog, I., & Hall, C. (2015). A systematic review including meta-analysis of work environment and depressive symptoms. *BMC Public Health*, *15*(1). https://doi.org/10.1186/s12889-015-1954-4

Thobejane, T. D., & Nyathi, N. A. (2018). Poverty among female headed households in Matabeleland South Province in Zimbabwe: A perennial problem or an enlightening experience?. *Gender and Behaviour*, *16*(2), 11250-11262.

Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, *27*(2), 237-246. https://doi.org/10.1177/1098214005283748

Thompson, K., & Webber, J. K. (2016). Leadership best practices and employee performance: a phenomenological telecommunication industry study. *Global Journal of Business Research*, *10*(1), 41-54.

Thorsen, S. V., & Bjorner, J. B. (2010). Reliability of the Copenhagen Psychosocial Questionnaire. *Scandinavian Journal of Public Health*, *38*(3_suppl), 25–32. https://doi.org/10.1177/1403494809349859

Toderi, S., Gaggia, A., Balducci, C., & Sarchielli, G. (2015). Reducing psychosocial risks through supervisors' development: A contribution for a brief version of the “Stress Management Competency Indicator Tool”. *Science of the Total Environment*, *518*, 345-351.

Topcic, M., Baum, M., & Kabst, R. (2016). Are high-performance work practices related to individually perceived stress? A job demands-resources perspective. *The International Journal of Human Resource Management*, *27*(1), 45-66.

Torrente, P., Salanova, M., Llorens, S., & Schaufeli, W. B. (2012). Teams make it work: how team work engagement mediates between social resources and

performance in teams. *Psicothema*, *24*(1), 106–112. http://www.ncbi.nlm.nih.gov/pubmed/22269372

Tsui, a. S., Nifadkar, S. S., & Amy Yi Ou. (2007). Cross-National, Cross-Cultural Organizational Behavior Research: Advances, Gaps, and Recommendations. *Journal of Management*, *33*(3), 426–478. https://doi.org/10.1177/0149206307300818

Tuli, F. (2010). The basis of distinction between qualitative and quantitative research in social science: Reflection on ontological, epistemological and methodological perspectives. *Ethiopian Journal of Education and Sciences*, *6*(1).

Turner, S. F., Cardinal, L. B., & Burton, R. M. (2017). Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational Research Methods*, *20*(2), 243-267.

Twining, P., Heller, R. S., Nussbaum, M., & Tsai, C. (2017). Some guidance on conducting and reporting qualitative studies. *Computers & Education*, *106*, A1-A9. https://doi.org/10.1016/j.compedu.2016.12.002

Ugwu, L. I., Enwereuzor, I. K., Fimber, U. S., & Ugwu, D. I. (2017). Nurses' burnout and counterproductive work behavior in a Nigerian sample: The moderating role of emotional intelligence. *International Journal of Africa Nursing Sciences*, *7*, 106-113.

Urnikyte, L., & Sakenaite, J. (2011). New and increasing occupational and industrial hazards. In *Environmental Engineering. Proceedings of the International Conference on Environmental Engineering ICEE*, *8*, p. 393). Vilnius Gediminas Technical University, Department of Construction Economics & Property.

Useche, S. A., Ortiz, V. G., & Cendales, B. E. (2017). Stress-related psychosocial factors at work, fatigue, and risky driving behavior in bus rapid transport (BRT) drivers. *Accident Analysis & Prevention*, *104*, 106-114.

Usman, N., Murniati, A. R., & Marzuki, M. (2016). The influence of leadership in improving personnel performance at traditional Islamic boarding school (Dayah). *Jurnal Ilmiah Peuradeun*, *4*(2), 205-216.

Vaismoradi, M., & Snelgrove, S. (2019, September). Theme in qualitative content analysis and thematic analysis. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research 20*(3).

Valente, M. D. S. D. S., Lopes, C. S., Pastor-Valero, M., & Menezes, P. R. (2016). Psychosocial Work Conditions and Burnout Among Brazilian Bank Employees: A Cross-Sectional Study. *Annals of Occupational Hygiene*, *60*(5), 567-580.

Van der Doef, M., & Maes, S. (1999). The job demand-control (-support) model and psychological well-being: a review of 20 years of empirical research. *Work & stress*, *13*(2), 87-114

van der Doef, M. P., & Schelvis, R. M. C. (2019). Relations Between Psychosocial Job Characteristics and Work Ability in Employees with Chronic Headaches. *Journal of Occupational Rehabilitation*, *29*(1), 119–127. https://doi.org/10.1007/s10926-018-9769-7

Van der Heijden, B. I., van Dam, K., & Hasselhorn, H. M. (2009). Intention to leave nursing: The importance of interpersonal work context, work-home interference, and job satisfaction beyond the effect of occupational commitment. *Career Development International*, *14*(7), 616-635.

Van Laethem, M., Beckers, D. G. J., de Bloom, J., Sianoja, M., & Kinnunen, U. (2019). Challenge and hindrance demands in relation to self-reported job performance and the role of restoration, sleep quality, and affective rumination. *Journal of Occupational and Organizational Psychology*, *92*(2), 225–254. https://doi.org/10.1111/joop.12239

Van Mol, M. M., Kompanje, E. J., & Bakker, J. (2017). Reflections on work-related stress among intensive care professionals: an historical impression. In J. Vincent (Ed.), *Annual update in intensive care and emergency medicine 2017* (pp. 527-538). Springer.

Van Mol, M. M. C., Nijkamp, M. D., Bakker, J., Schaufeli, W. B., & Kompanje, E. J. O. (2018). Counterbalancing work-related stress? Work engagement among intensive care professionals. *Australian Critical Care*, Vol. 31, pp. 234–241. https://doi.org/10.1016/j.aucc.2017.05.001

Van Steenbergen, E. F., van der Ven, C., Peeters, M. C. W., & Taris, T. W. (2018). Transitioning Towards New Ways of Working: Do Job Demands, Job Resources, Burnout, and Engagement Change? *Psychological Reports*, *121*(4), 736–766. https://doi.org/10.1177/0033294117740134

Van Vegchel, N., De Jonge, J., Bosma, H., & Schaufeli, W. (2005). Reviewing the effort–reward imbalance model: drawing up the balance of 45 empirical studies. *Social Science & Medicine*, *60*(5), 1117-1131.

van Veldhoven, M., Van den Broeck, A., Daniels, K., Bakker, A. B., Tavares, S. M., & Ogbonnaya, C. (2017). Why, when, and for whom are job resources beneficial?. *Applied Psychology: An International Review*, *66*(2), 353-356.

van Woerkom, M., Bakker, A. B., & Nishii, L. H. (2016). Accumulative job demands and support for strength use: Fine-tuning the job demands-resources model using conservation of resources theory. *Journal of Applied Psychology*, *101*(1), 141–150. https://doi.org/10.1037/apl0000033

Vassos, M., Nankervis, K., Skerry, T., & Lante, K. (2019). Can the job demand-control-(support) model predict disability support worker burnout and work engagement? *Journal of Intellectual and Developmental Disability*, *44*(2), 139–149. https://doi.org/10.3109/13668250.2017.1310818

Ventura, M., Salanova, M., & Llorens, S. (2015). Professional self-efficacy as a predictor of burnout and engagement: The role of challenge and hindrance demands. *Journal of Psychology: Interdisciplinary and Applied*, *149*(3), 277–302. https://doi.org/10.1080/00223980.2013.876380

Virtanen, M. (2018). Psychosocial job stressors and suicidality: can stress at work lead to suicide?. *Occup Environ Med*, *75*(4), 243-244.

Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, *54*(2), 314-334.

Volmink, H. C. (2014). *Occupational stress in a South African workforce: instrument testing, prevalence measurement and risk factor analysis* [Unpublished Doctoral dissertation]. University of the Witwatersrand.

Wadesango, N., & Gudyanga, E. (2016). Managing Occupational Stress. *Journal of Psychology*, *7*(1), 32-39.

Wang, H. J., Lu, C. Q., & Siu, O. L. (2015). Job insecurity and job performance: The moderating role of organizational justice and the mediating role of work engagement. *Journal of Applied Psychology*, *100*(4), 1249.

Wang, Y., Papangelis, K., Lykourentzou, I., Liang, H., Sadien, I., Demerouti, E., & Khan, V. (2020). In their shoes:. *Proceedings of the ACM on Human-Computer Interaction*, *4*(GROUP), 1-40. https://doi.org/10.1145/3375187

Wang, W., Yin, H., & Huang, S. (2016). The missing links between emotional job demand and exhaustion and satisfaction: Testing a moderated mediation model. *Journal of Management & Organization*, *22*(1), 80-95.

Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, *82*(2), 247-252. https://doi.org/10.1037/0021-9010.82.2.247

Warr, P. B. (1990). Decision latitude, job demands, and employee well-being. *Work & Stress*, *4*(4), 285-294.

Wegman, L. A., Hoffman, B. J., Carter, N. T., Twenge, J. M., & Guenole, N. (2018). Placing Job Characteristics in Context: Cross-Temporal Meta-Analysis of Changes in Job Characteristics Since 1975. *Journal of Management*, *44*(1), 352–386. https://doi.org/10.1177/0149206316654545

Whyte, W. F. (1948). *Human relations in the restaurant industry*. Mcgraw- Hill

Widerszal-Bazyl, M., Zołnierczyk-Zreda, D., & Jain, A. (2008). Standards related to psychosocial risks at work. In S. Leka & T. Cox (Eds.), *The European Framework for Psychosocial Risk Management: PRIMA-EF* (pp. 37-59).

Willis, S. E., Neil, R., Mellick, M. C., & Wasley, D. (2019). The relationship between occupational demands and well-being of performing artists: A systematic review. *Frontiers in Psychology*, *10*, 393.

Wilpert, B. (2009). Impact of globalization on human work. *Safety Science*, *47*(6), 727-732.

Wolter, C., Santa Maria, A., Wörfel, F., Gusy, B., Lesener, T., Kleiber, D., & Renneberg, B. (2019). Job Demands, Job Resources, and Well-being in Police Officers—a Resource-Oriented Approach. *Journal of Police and Criminal Psychology*, *34*(1), 45-54.

World Health Organisation. (2007). *Workers health: Global plan of action* (WHA60.26). https://www.who.int/occupational_health/WHO_health_assembly_en_web.pdf

World Health Organization. (2008). *The global burden of disease:update 2004* https://apps.who.int/iris/handle/10665/43942

World Health Organisation. (2016). *Global Health Observatory data, World Health Statistics.* https://www.who.int/countries/zwe/en/

World Health Organisation. (2016). *WHO Country Cooperation Strategy 2016-2020: Zimbabwe*. https://www.afro.who.int/publications/country-cooperation-strategy-zimbabwe-2016-2020

World Health Organisation. (2017). *Protecting Workers' Health: Key Facts*. https://www.who.int/news-room/fact-sheets/detail/protecting-workers'-health

World Health Organization. (2017). *Depression and other common mental disorders: global health estimates* (No. WHO/MSD/MER/2017.2). World Health Organization.

World Health Organization. (2018). *Saving lives, spending less A strategic response to noncommunicable diseases*. http://apps.who.int/iris/bitstream/handle/10665/272534/WHO-NMH-NVI-18.8-eng.pdf

Wu, G., Wu, Y., Li, H., & Dan, C. (2018). Job Burnout, Work-Family Conflict and Project Performance for Construction Professionals: The Moderating Role of Organizational Support. *International journal of environmental research and public health*, *15*(12), 2869.

Xanthopoulou, D., Baker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology*, *13*(4), 345

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, *14*(2), 121–141. https://doi.org/10.1037/1072-5245.14.2.121

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational behavior*, *74*(3), 235-244.

Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, *22*(8), 766-786.

Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employees facing emotional demands. *Journal of Personnel Psychology, 12*(2), 74-84. https://doi.org/10.1027/1866-5888/a000085

Xenidis, Y., & Theocharous, K. (2014). Organizational health: Definition and assessment. *Procedia Engineering*, *85*, 562-570.

Yang, T., Ma, T., Liu, P., Liu, Y., Chen, Q., Guo, Y., Zhang, S., & Deng, J. (2019). Perceived social support and presenteeism among healthcare workers in China:

The mediating role of organizational commitment. *Environmental Health and Preventive Medicine*, *24*(1). https://doi.org/10.1186/s12199-019-0814-8

Yates, L. (2004). *What does good education research look like?: Situating a field and its practices*. McGraw-Hill Education (UK).

Yates, S. (2008). *Doing social science research*. SAGE.

Yauch, C. A., & Steudel, H. J. (2003). Complementary use of qualitative and quantitative cultural assessment methods. *Organizational Research Methods*, *6*(4), 465-481

Yearby, R. (2019). When Equal Pay Is Not Enough: The Influence of Employment Discrimination on Health Disparities. *Public Health Reports*, 0033354919847743.

Yee, L. C. (2018). An analysis on the relationship between job satisfaction and work performance among academic staff in Malaysian private universities. *Journal of Arts & Social Sciences*, *1*(2), 64-73.

Yeh, H. J. (2015). Job demands, job resources, and job satisfaction in East Asia. *Social Indicators Research*, *121*(1), 47-60.

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in quantitative methods for psychology*, *9*(2), 79-94.

Yongxing, G., Hongfei, D., Baoguo, X., & Lei, M. (2017). Work engagement and job performance: The moderating role of perceived organizational support. *Anales de Psicologia*, *33*(3), 708–713. https://doi.org/10.6018/analesps.33.3.238571

Yu, H., Jiang, A., & Shen, J. (2016). Prevalence and predictors of compassion fatigue, burnout and compassion satisfaction among oncology nurses: A cross-sectional survey. *International Journal of Nursing Studies*, *57*, 28-38. https://doi.org/10.1016/j.ijnurstu.2016.01.012

Yuh, J., & Choi, S. (2017). Sources of social support, job satisfaction, and quality of life among childcare teachers. *The Social Science Journal*, *54*(4), 450-457.

Zayyad, M. A., & Toycan, M. (2018). Factors affecting sustainable adoption of e-Health technology in developing countries: An exploratory survey of Nigerian hospitals from the perspective of healthcare professionals. *PeerJ, 6*, e4436. https://doi.org/10.7717/peerj.4436

Zhou, D. T., Oktedalen, O., Chisango, T., & Stray-Pedersen, B. (2016). HIV/AIDS and Coronary Heart Disease on a Collision Course? Review of Zimbabwe. *American Journal of Medical and Biological Research*, *4*(2), 26-32.

Zito, M., Emanuel, F., Molino, M., Cortese, C. G., Ghislieri, C., & Colombo, L. (2018). Turnover intentions in a call center: The role of emotional dissonance, job resources, and job satisfaction. *PloS ONE*, *13*(2), e0192126.

Appendices

Appendix 1: Qualitative Study

Appendix 1.1: Email Invitation to Key Stakeholders

Dear Sir

I am a doctoral student at the University of Nottingham based in Zimbabwe and I am writing to invite you to take part in my doctoral research study about the relationship between work organization, well-being and organizational outcomes. Our research focuses on the relevant context in Zimbabwe in general, and the banking sector in particular. More specifically, this study seeks to:

1. Determine the level of awareness of experts on the nature and effects of work organization on individual and organizational health.
2. Determine key challenges in relation to working conditions and resources in workplaces in Zimbabwe and the banking sector in particular.
3. Identify current interventions in place to manage the work environment and its effects in Zimbabwe and recommend avenues for preventing possible adverse outcomes in terms of individual and organizational health.

You have been approached as you have been identified, through publicly available information, as a key stakeholder working at NSSA. We are inviting key stakeholders from relevant organizations (e.g. Ministries, employers' associations, trade unions, HR representatives, NSSA, ZIOSH), like yourself, to take part in semi-structured interviews because we believe you possess knowledge on the nature of working conditions and their effect on well-being in Zimbabwe. We would really appreciate your participation in an interview with myself that will last about 30 minutes and will be arranged at your convenience. The interview will be recorded with your permission. A Participant Information Sheet and a Consent Sheet will be provided to you prior to the interview commencing.

Your participation is voluntary, and you may change your mind about being involved, or decline to answer a particular question or stop the recording at any time, and

without giving a reason. You are free to withdraw at any point before or during the study. However, please note that once the data has been transcribed, it will not be possible to withdraw from the study.

Please be assured that your confidentiality and anonymity will be maintained at all stages of the study. You will also have the opportunity to receive the study findings in the form of a report at the end of the study.

If you have any questions, please do not hesitate to contact me through this email address tarisayi.gwenzi@yahoo.com or on: 0772241832

I look forward to hearing from you and thank you in advance for your attention.

Sincerely,

Tarisayi Ndengu

Appendix 1.2: Participant Information Sheet

PARTICIPANT INFORMATION



PARTICIPANT INFORMATION

Division of Psychiatry & Applied Psychology
School of Medicine, Faculty of Medicine & Health Sciences
Project Title: Work organization and wellbeing in Zimbabwe: An investigation in the financial services sector

Researcher: Tarisayi Ndengu Email: msxtn1@nottingham.ac.uk
Supervisor: Professor Stavroula Email: stavroula.leka@nottingham.ac.uk
Ethics Reference Number: 203

This is an invitation to take part in a research study about the relationship between work organization, well-being and organizational outcomes. This information is designed to tell you what it will involve.

Your participation is voluntary, and you may change your mind about being involved, or decline to answer a particular question or stop the recording at any time, and without giving a reason. You are free to withdraw at any point before or during the study. However, please note that once the data has been transcribed, it will not be possible to withdraw from the study.

What is the project about?

The objectives of the research are:

1. To determine the level of awareness and understanding of experts on the

nature and effects of work organization on individual and organizational health.

2. To determine key challenges in relation to working conditions and resources in Zimbabwe.
3. To identify current interventions in place for preventing and managing adverse work organization and its effects in Zimbabwe and recommend ways of preventing and managing the same.

Who is being asked to take part, and why?

Key stakeholders are being asked to take part in semi-structured interviews because they are believed to possess knowledge on the nature of working conditions and their effect on well-being in Zimbabwe. Bankers and representatives from Zimbabwe Banks and Allied Workers' Union (ZIBAWU) will specifically be chosen on the basis of their expertise and experience of working in the banking sector.

What will I be asked to do?

Participants are requested to respond to questions in an interview which will last for about 30-45 minutes. The interviews will be recorded with the permission of participants. Participation will be on a voluntary basis with no consequences for non participation.

Will the research be of any personal benefit to me?

The doctoral research will not directly benefit the participant but it will contribute to knowledge generation in this area in the banking sector in Zimbabwe. Taking part in this research will not yield any financial benefit.

What will happen to the information I provide?

The researcher will maintain confidentiality at all stages of the project. Your identity shall not be disclosed since all information that can identify you or your organization directly or indirectly will be removed or anonymised. Data from the research will be stored in a password protected file for a minimum of 7 years at the end of the study,

and will then be destroyed. The School has right of access to the data provided by participants. Questions of a personal nature will be avoided or removed when the recordings are transcribed to ensure anonymity. The recordings will be transcribed by the researcher and uploaded into a password protected database. We may want to use quotations of your comments when necessary in the report or in a publication. In the event that we do, we will ensure that no one can identify you, but if you are not comfortable with your quotes being used let us know. Please note that once the data has been transcribed, it will not be possible to withdraw from the study.

What will you do with the data?

This research is part of a doctoral thesis that will be submitted to the University of Nottingham and results may be published in a journal article. Participants can learn of the results by requesting them from the researcher through email. A summary of the report will be made available to any interested participant.

If you have any questions or concerns, please don't hesitate to ask. We can be contacted before and after your participation through the above email address.

THANK YOU FOR YOUR PARTICIPATION

If you have any queries or complaints about this study, please contact the student's supervisor in the first instance. If this does not resolve the query to your satisfaction, please write to the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214) who will pass your query to the Chair of the Committee.

Appendix 1.3: Consent Form

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

PARTICIPANT CONSENT

Division of Psychiatry & Applied Psychology
School of Medicine, Faculty of Medicine & Health Sciences

Project Title: Work organisation and well-being in Zimbabwe: An Investigation in the Financial Services Sector

Researcher: Tarisayi Ndengu E-mail:msxtn1@nottingham.ac.uk
Supervisor Professor Stavroula Leka. E-mail:
stavroula.leka@nottingham.ac.uk
Ethics Reference Number: 247

- Have you read and understood the Participant Information?
  YES/NO
- I agree to answer an online questionnaire
  YES/NO
- Do you know how to contact the researcher if you have questions about this study?
  YES/NO
- Do you understand that you are free to withdraw from the study

  without giving a reason?
  YES/NO
- Do you understand that for anonymous questionnaire studies, once you have completed the study and submitted your questionnaire, the data cannot be withdrawn?
  YES/NO
- Do you give permission for your data from this study to be shared with
  other researchers in the future provided that your anonymity is protected?
  YES/NO
- Do you understand that non-identifiable data from this study might be used in academic research reports or publications?

YES/NO

I have read and understood the above information and consent form, I confirm that I am 18 years old or older and by clicking the NEXT button to begin the online questionnaire, I indicate my willingness to take part in the study voluntarily.

[Insert version number in the footer: Every time you make changes to the participant consent form you will need to update the version number]

Appendix 1.4: Research Questions

STUDY 1 RESEARCH QUESTIONS FOR NATIONAL KEY STAKEHOLDERS

This study is looking at the level of knowledge and understanding of factors associated with the design, management and organization of work, and their relationship with individual well-being and organizational performance. May I start by asking you a little bit about yourself?

1.1 What is the role of your job?

1.2 How long have you been in this job?

2. What are your views on the working environment in Zimbabwe generally and (in your organization)?

3. Have there been any major changes in the work environment? What have been some key challenges or any positive developments?

4. Do you think these challenges in the modern work environment affect organizations i.e. in terms of performance, job satisfaction, commitment or work engagement?

5. Do you think they are related with the well-being of workers? In what way?

6. What are the major pressures that workers are facing? For example work demands like workload, working hours, relationships with co-workers? Not being paid on time?

7. What is being done by organizations to address problems caused by work i.e. job performance, well-being?

7.1 Are you aware of actions taken at national level to address or manage these issues?

7.2 Are you aware of any policies, guidelines or legislation (national or international) that is available for preventing work-related stress and promoting well-being associated with work? For example policies on non- communicable diseases.

7.3 Are psychological, social or organizational aspects of work (like workload, support at work, work pace, etc.) included in any legislation or policies? i.e. Labour Act,

7.4 If not, what could be the reason?

7.5 If not, what do you consider to be the reasons for not prioritising these issues?

8.0 What are some key challenges in relation to occupational health and well-being and how could they be overcome?

9.0 Are there any opportunities that can be explored to manage these issues?

10.0 Do you think key people are aware of the impact that work can pose on health and productivity?

10.1 What can be done to raise awareness?

11.0 What do you think should be the top 3 priorities in terms of occupational health as it relates to how work is designed, organized or managed?

12.0 Is there anything else you would like to add in the context of this interview?

Appendix 1.5: Ethical Approval

The University of Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Faculty of Medicine & Health Sciences
School of Medicine
Division of Psychiatry and Applied Psychology
The University of Nottingham
YANG Fujia Building
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Nottingham
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www.nottingham.ac.uk/medicine

Investigators: Tarisayi Ndengu

Title of study: Work organization and wellbeing in Zimbabwe: An investigation in the financial services sector

Duration of study: Until 31 December 2019

Ethics reference number: 203

2nd August 2016

A favourable opinion is given to the above named study on the understanding that the applicants conduct their research as described in the above numbered application, and adhere to all conditions under which the ethical approval has been granted and use only materials and documentation that have been approved. If any amendments to the study are required, an amendment should be submitted to the committee for approval.

David Daley (Professor)

Co-Chair of DPAP Ethics Subcommittee

Amanda Griffiths (Professor)

Co-Chair of DPAP Ethics Subcommittee

Appendix 2: Quantitative study

Appendix 2.1: Invitation letter



Division of Psychiatry & Applied Psychology
School of Medicine, Faculty of Medicine & Health Sciences

The Human Resources Manager
CBZ Bank Limited
Fifth Floor Union House
60 Kwame Nkrumah Avenue
Harare
Zimbabwe

Dear Madam

Re: **Application to conduct a research study in your Bank.**

Topic: Work organisation and well-being in Zimbabwe: An investigation in the financial services sector

My name is Tarisayi Ndengu. I am a doctoral student at the University of Nottingham based in Zimbabwe and I am writing to seek authority to conduct my study with participants from your bank. My doctoral research study is looking at the relationship between work organization, well-being and organizational outcomes. Our research focuses on the relevant context in Zimbabwe in general, and the banking sector in particular.

The study is based on an online anonymous survey. Participation will be on a voluntary basis. An email containing information on the purpose of the study and providing a link to access the survey will be sent to five selected banks. The questionnaire will take approximately 15 minutes to complete and a copy will be forwarded to you so that we can discuss any comments you might have.

This research was approved by the University of Nottingham, Faculty of Medicine & Health Sciences Ethics Committee. The researcher is bound by the Zimbabwe Psychological Association ethics procedures, the Reserve Bank of Zimbabwe Code of Conduct, the Zimbabwe Psychological Association Ethics and by the British Psychological Society's Code of Conduct. Confidentiality and anonymity will be ensured. The results will be summarised without any mention of any aspect that may identify the participants and their organisations. Participants will have the right to withdraw at any point during the study.

The results will be presented in the form of a report, which will be forwarded to each bank organisation on completion. It will contain details about the methods used, information on sample characteristics, and results. Conclusions will be drawn as far as possible and any recommendations for further action or research will be discussed as necessary.

If you have any questions or queries, please feel free to contact me. My contact details are given below.

I look forward to hearing from you.

Contact Details

Mrs. T. Ndengu msxtn@nottingham.ac.uk cell: 0772241832

Professor Stavroula Leka (project supervisor) Stavroula.Leka@nottingham.ac.uk
T. +44 115 8466662, F. +44 115 8466625

T. Ndengu

Appendix 2.2: Information Participant Sheet

PARTICIPANT INFORMATION

Division of Psychiatry & Applied Psychology
School of Medicine, Faculty of Medicine & Health Sciences

Project Title: Work organisation and well-being in Zimbabwe: An Investigation in the Financial Services Sector

Researcher: Tarisayi Ndengu e-mail: msxtn1@nottingham.ac.uk

Supervisor: Professor Stavroula Leka e-mail: stavroula.leka@nottingham.ac.uk

Ethics Reference Number:247

This is an invitation to take part in a research study about the relationship between working conditions, well-being and organizational outcomes like job satisfaction, commitment and performance. This information is designed to tell you what it will involve.

You are being invited to participate in this research which is targeting all employees in your bank. This study is being conducted by Tarisayi Ndengu, a PhD student from the University of Nottingham. Taking part in this research will not yield any personal financial benefit.

Your participation is voluntary, and you may change your mind about being involved, or decline to answer a particular question. You are free to withdraw at any point before or during the study by closing the window. The data will only be uploaded on completion of the questionnaire by clicking the SUBMIT button. However once your

data have been submitted it will not be possible to withdraw them from the study as it will not be possible to identify you.

What is the project about?

The purpose of this research study is to establish the relationship between work characteristics that can facilitate the achievement of work goals and outcomes like job performance, job commitment and job satisfaction. It also seeks to establish the relationship between work characteristics associated with employee well-being. Participants will be requested to respond to an online questionnaire which will take about 15 minutes to complete. Participation is on a voluntary basis with no consequences for non-participation.

Who is being asked to take part, and why?

Any currently employed individual in the bank you are employed would be welcome to participate in this study. If you choose to participate you will be asked to complete an online survey.

Will the research be of any personal benefit to me?

We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach is always possible. We will do everything possible to ensure your answers in this study will remain anonymous. The researcher will maintain confidentiality at all stages of the project. Your identity shall not be disclosed since all information that can identify you or your organization directly or indirectly will be removed or anonymised.

What will happen to the information I provide?

Upon completion and submission of the completed questionnaires, all participants' data will be nameless and unspecified. Also, the collected research data will be handled and stored according to the Data Protection Act (1998) at every stage of the research process. All information collected will be kept strictly private and confidential.

Data from the research will be stored in a password protected file for a minimum of 7 years at the end of the study. The School has right of access to the data provided by participants.

The data as well as the results of the analysis will be used as part of a doctoral thesis (PhD). The thesis will be submitted to the University of Nottingham. The results of the study may be published in scientific journals and presented at scientific conferences. The data will be reported anonymously, with any identifying information removed. An executive summary of the results will be made available to any interested participant on completion on the study. Should they wish to receive the executive summary, participants are encouraged to contact the research team directly using the information provided on the online survey website.

If you have any questions about this project, you may contact the Lead Researcher using the contact details above or if you have any concerns about any aspect of this study please contact the Research Supervisor: Professor Stavroula Leka. If this does not achieve a satisfactory outcome please contact: the Administrator to the Division of Psychiatry & Applied Psychology's Research Ethics Sub-Committee (MS-DPAPEthics@nottingham.ac.uk, +44 (0)115 8232214).

This study has been reviewed and given a favourable opinion by the University of Nottingham, Faculty of Medicine & Health Sciences Ethics Committee.

THANK YOU FOR YOUR PARTICIPATION

Appendix 2.3: Ethical Approval

The University of Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Faculty of Medicine & Health Sciences
School of Medicine
Division of Psychiatry and Applied Psychology
The University of Nottingham
YANG Fujia Building
Jubilee Campus
Nottingham
NG8 1BB
t: +44 (0)115 82 32214
www.nottingham.ac.uk/medicine

Investigators: Tarisayi Ndengu and Stavroula Leka

Title of study: Work organization and well-being in Zimbabwe: An investigation in the financial services sector

Duration of study: Until 31 December 2020

Ethics reference number: 247

Friday 24th November 2017

A favourable opinion is given to the above named study on the understanding that the applicants conduct their research as described in the above numbered application, and adhere to all conditions under which the ethical approval has been granted and use only materials and documentation that have been approved. If any amendments to the study are required, an amendment should be submitted to the committee for approval.

David Daley (Professor)

Co-Chair of DPAP Ethics Subcommittee

Amanda Griffiths (Professor)

Co-Chair of DPAP Ethics Subcommittee

Appendix 2.4: Consent Form and Survey

University of Nottingham
UK | CHINA | MALAYSIA

Test survey

Page 1: Page 1

This survey is about the relationship between work organisation, well-being and organisational outcomes. Please note that participation is voluntary and you can withdraw from the study by closing the window. We will do everything possible to ensure your answers remain anonymous. The researcher will maintain confidentiality at all stages of the project. Your identity will not be disclosed since all information that can identify you and your organisation directly or indirectly will be removed or anonymised. Data from this survey will be handled and stored according to the Data Protection Act of 1998.

CONSENT FORM

1. Have you read and understood the Participant Information?

- Yes
- No

2. I agree to answer an online questionnaire

- Yes
- No

3. Do you understand that you are free to withdraw from the study without giving a reason?

- Yes
- No

4. Do you understand that for anonymous questionnaire studies, once you have completed the study and submitted your questionnaire, the data cannot be withdrawn?

- Yes

- No

Do you give permission for your data from this study to be shared with other researchers in the future provided that your anonymity is protected?

- Yes
- No

6. Do you understand that non-identifiable data from this study might be used in academic research reports or publications?

- Yes
- No

7. I have read and understood the above information and consent form and by clicking the NEXT button to begin the online questionnaire, I indicate my willingness to take part in the study voluntarily.

2/20

I consent to take part

I do not consen

Page 2: WORK ORGANISATION AND DESIGN

8. Which department do you work in?

9. What is your job title?

10. Are you?

Male

Female

11. How old are you?

Under 30 years

- 30-39 years
- 40-49 years
- 50-59 years
- 60 years or more

12. What is your highest qualification?

- Ordinary level
- Advanced level
- Professional certificate
- Diploma
- Higher National Diploma
- Undergraduate degree
- Masters degree
- PhD

13. How long have you been with this organisation?

The following questions are about work organisation and job satisfaction. Some of the questions may fit better to your work than others, but please try to answer all questions.

14. Is your work unevely distributed so it piles up?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

15. Does your work put you in emotionally disturbing situations?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly eve

16. Do you have a large degree of influence concerning your work?

Always Often Sometimes

Seldom Never/hardly ever

17. Do you have to work very fast?

Always Often Sometimes

Seldom Never/hardly ever

18. Do you have to relate to other people's personal problems as part of your work?

Always Often Sometimes

Seldom Never/hardly ever

19. Do you have a say in choosing who you work with?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

Do you have any influence on what you do at work?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

21. Do you get behind with your work?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

22. How often do you not have time to complete all your work tasks?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

23. Do you have enough time for your work tasks?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

24. Can you influence the amount of work assigned to you?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

25. How often do you consider looking for work elsewhere?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

26. How often do you get help and support from your colleagues?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

27. How often are your colleagues willing to listen to your problems at work?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

28. How often do your colleagues talk with you about how well you carry out your work?

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

29. Is it necessary to keep working at a high pace?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

30. Is your work emotionally demanding?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

31. Does your work require you to take the initiative?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

32. Would you recommend a good friend to apply for a position at your workplace?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

33. Do you get emotionally involved in your work?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

34. Can you use your skills or expertise in your work?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

35. Do you enjoy telling others about your place of work?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

36. Do you have the possibility of learning new things through your work?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

37. Do you work at a high pace through out the day?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

38. Does your work give you the opportunity to develop your skills?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

39. Do you feel that your place of work is of great importance to you?

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

The next questions concern your relationship to your nearest supervisor.

40. How often is your nearest superior willing to listen to your problems at work?

- ○ Always
- ○ Often
- ○ Sometimes
- ○ Seldom
- ○ Never/hardly ever

41. How often do you get help and support from your nearest superior?

- ○ Always
- ○ Often
- ○ Sometimes
- ○ Seldom
- ○ Never/hardly ever

42. How often does your nearest superior talk with you about how well you carry out your work?

- ○ Always
- ○ Often
- ○ Sometimes
- ○ Seldom
- ○ Never/hardly ever

To what extent would you say that your immediate superior.....

43. Makes sure that the individual member of staff has good development opportunities?

- ○ To a very large extent
- ○ To a large extent
- ○ Somewhat
- ○ To a small extent
- ○ To a very small extent

44. Gives high priority to job satisfaction

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

45. Is good at work planning

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

46. Is good at solving conflicts

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent

47. How satisfied are you with your job?

- Extremely satisfied
- Very satisfied
- Moderately satisfied
- Mildly satisfied
- Not at all satisfied

The next section is about the connection between work and private life.

48. Do you often feel a conflict between your work and private life, making you want to be in both places at the same time?

- Yes, often
- Yes, sometimes
- Rarely
- No, never

49. Do you feel that your work drains so much of your time that it has a negative effect on your private life?

Yes, certainly Yes, to certain degree Yes,but only very little No, not at all

50. Do you feel that your work takes so much of your time that it has a negative effect on your private life?

- Yes, certainly
- Yes, to a certain degree
- Yes, but only very little
- No, not at all

51. Do your friends or family tell you that you work too much?

- Yes, certainly
- Yes, to a certain degree
- Yes, but only very little
- No, not at all

YOUR GENERAL WELL-BEING

This section is to do with your general health. It is directly relevant to measuring the effects of work. Please read each of the questions carefully and decide how often, over the last six months, you have experienced the various symptoms that are listed. Please select just one point on each response scale (from All the time to Never). We would like you to

answer all the questions if possible so that we can score the questionnaire fully.

Over the last six months,

How often have you?

52. Become easily bored?

- All the time
- Often
- Sometimes
- Rarely
- Never

53. Become easily annoyed or irritated?

- All the time
- Often
- Sometimes
- Rarely
- Never

54. Had to clear your throat for no apparent reason?

- All the time
- Often
- Sometimes
- Rarely
- Never

55. Got mixed up in your thinking when you have had to do things quickly?

- All the time
- Often
- Sometimes
- Rarely
- Never

56. Done things rashly or on impulse?

- All the time
- Often
- Sometimes
- Rarely
- Never

57. Been forgetful?

- All the time
- Often
- Sometimes
- Rarely
- Never

58. Found things getting on your nerves and wearing you out?

- All the time
- Often
- Sometimes
- Rarely
- Never

59. Become easily tired?

- All the time
- Often
- Sometimes
- Rarely
- Never

60. Become flushed/ hot in the face for no apparent reason?

- All the time
- Often
- Sometimes
- Rarely
- Never

61. Had difficulty in falling or staying asleep?

- All the time
- Often
- Sometimes
- Rarely
- Never

62. Found your feelings easily hurt?

- All the time
- Often
- Sometimes
- Rarely
- Never

63. Found it hard to make up your mind?

- All the time
- Often
- Sometimes
- Rarely
- Never

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling select the 0, indicate how often you feel it by selecting the number from 1 to 6 that best describes how frequently you feel that way.

64. At my work, i feel bursting with energy

- 0 Never
- 1 Almost never
- 2 Rarely
- 3 Sometimes
- 4 Often
- 5 Very Often
- 6 Always

65. At my job, i feel strong and vigorous

○	0 never	○ 1	Almost never	○ 2	Rarely
○		○		○	Very
○	3 Sometimes	4	Often	5	often
	6 Always				

66. I am enthusiastic about my job

○	0 Never	○ 1	Almost never	○ 2	Rarely
○		○		○	Very
○	3 sometimes	4	Often	5	Often
	6 Always				

67. My job inspires me

	0 Never	1	Almost never	2	Rarely
					Very
	3 Sometimes	4	Often	5	often
	6 always				

68. When i get up in the morning, i feel like going to work

0	Never	1	Almost never	2	Rarely
					Very
3	Sometimes	4	Often	5	Often
6	Always				

69. I feel happy when i am working intensely

0	Never	1	Almost Never	2	Rarely
					Very
3	Sometimes	4	Often	5	often
6	Always				

70. I am proud of the work that i do

○	0 Never	○ 1	Almost never	○ 2	Rarely
○		○		○	Very
○	3 Sometimes	4	Often	5	Often
	6 Always				

71. I am immersed in my work

○ 0 Never	1	○ Almost never	2	○ Rarely	
○		○		○ Very	
○ 3 Sometimes	4	Often	5	Often	
6 Always					

72. I get carried away when i am working

○ 0 Never	○ 1	Almost never	○ 2	Rarely	
○	○		○	Very	
○ 3 Sometimes	4	Often	5	Often	
6 Always					

73. How would you rate your performance, as an individual employee?

○ Very poor ○ Poor ○ Fair

○ Good ○ Excellent

74. Think about your most recent assessment of your job performance or the most recent time you received feedback from your supervisor, How do you think your supervisor would rate your performance?

○ Very poor ○ Poor ○ Fair

○ Good ○ Excellent

75. How would you rate your performance as a work team member?

- ○ Very poor
- ○ Poor
- ○ Fair
- ○ Good
- ○ Excellent

Page 3: THANK YOU

Thank you very much for taking the time out of your busy schedule to complete this questionnaire. My email address is msxtn1@nottingham.ac.uk.

If you are interested in obtaining the summary of the findings of this study feel free to send an email to the above email address.