UNIVERSITY OF THE WESTERN CAPE

Faculty of Economic and Management Sciences

JOB DEMANDS AND RESOURCES OF ACADEMIC EMPLOYEES WITHIN HIGHER EDUCATION INSTITUTIONS

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in the Department of Industrial Psychology


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PREFACE

The following should be considered when perusing this report:

- This is a thesis by publication submitted in fulfilment of the requirements for Doctor Philosophy, according to the University of the Western Cape guidelines (C2012/1), as approved by Council.
- Full publication details are provided for the applicable chapters (Chapters 4 to 9).
- The thesis includes an American Psychological Association (APA) referencing style according to the Department of Industrial Psychology, while the published/submitted articles include the required referencing style of the respective journals for publication.
- The Protection of Personal Information Act (Act 4 of 2013) was considered during the study.

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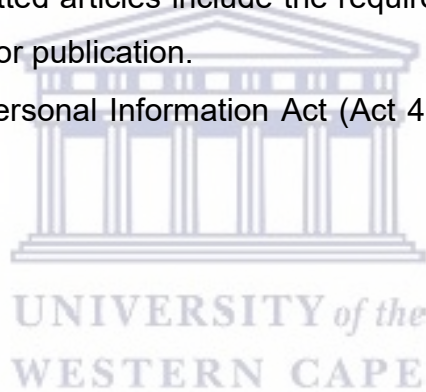
ABSTRACT

Excessive job demands and inadequate employment resources can harm employees' well-being. Job demands and resources, therefore, became crucial to understanding the relationships between employees and their organisations. These variables are identified predictors of work engagement, commitment, performance, process change, and other desirable work outcomes. A strong need exists to understand academics' job demands and resources because the higher education sector experienced an array of changes over the past decade. This may aid them in considering challenging demands while regarding ways to manage their resources more efficiently within their institutions. To approach the objectives of this proposed study, an exploratory sequential mixed-methods design was employed to answer the research questions. This study aimed to examine lived academic experiences in phases, presented as three research articles/reports. These three phases directed the research process. The job demands-resources framework was employed for all phases.

Article1: For the first phase of the study, a systematic review was conducted to identify, appraise, and synthesise the best evidence in the higher education environment, investigating job demands and resources. A list of quantitative, qualitative, and organisational job demands, and personal resources specific to the academic environment, were identified. Results from the review indicated more quantitative (based on volume, the amount of work) and organisational demands (based on work outputs) placed on the academic staff. Academics are, therefore, overseeing large workloads besides agonising over their outputs. Qualitative demands involve the complexity of processing tasks and, therefore, had less influence on academic staff. Concerning resources, it is emphasised that organisational resources were more prominent, with only two personal resources

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identified. Academics responded that a sizeable number of resources stem from the institution.

Article 2: The next phase included semi-structured face-to-face interviews with 23 academic employees from a higher education institution in South Africa. From these interviews, the job demands and resources relevant to the academic environment were derived. The job demands are divided into three categories, indicating quantitative, including publication pressure, overburdened with the load, and competing time demands; qualitative, including work/home balance, the complexity of student support, organisational politics, a lack of mental health support; organisational demands, using technology-mediated learning and lack of structural resources. The findings confirmed academics experienced these job demands. Job resources are divided into two categories, indicating organisational and personal resources. Organisational include social support and personal involvement autonomy, meaningful work, and personal support. These resources were identified among participants.

The final phase of the study was completed using the findings on the relevant job demands and resources from Phases 1 and 2. These findings include piloting a job crafting intervention to enhance academics' job resources while reducing their job demands. A pre-experimental research approach was implemented ($n = 9$). Participants completed pre- and post-measures while participating in two, two-hour online job crafting training sessions. No significant quantitative differences between pre- and post-measurements emerged from the data, although participant reflections hint towards qualitative differences in work-related thinking and actions. The pilot study implied favourable acceptance of a brief job crafting intervention to consider changes to academic work by reducing demands and increasing resources.

This present study provides insight into the most prevalent job demands and resources for academics, based on these phases. The study also provides insight

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into how academic employees harmonise with the demands and resources of their job roles. Knowledge and understanding of these job demands and resource variables allowed for the development and piloting of a job crafting intervention, specific to the academic environment.

Research progressively demonstrates that discarding the proper management of job demands and resources of an individual's workforce as crucial can cause destructive setbacks. Lacking such knowledge may harm academics' well-being, affecting their organisational performance. Academics need to be cautious of the challenges discussed while implementing strategies assisting them in managing their demands and exploiting their resources. One such recommendation suggested by the study is for academics to practise job crafting. Further recommendations are suggested for follow-up research to address the challenge that academics face in trying to balance their job demands and resources.

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KEYWORDS

Job demands

Job resources

Academics

Higher education

Systematic review

Qualitative

Pre-experimental

Job crafting

Job crafting intervention

DECLARATION

I, Mineshree Naidoo-Chetty, hereby declare that **"*Job demands and resources of academic employees within higher education institutions"*** is my own work. I also declare that the thesis has not been submitted for any degree or examination to any other university and all sources I have used or quoted have been indicated and acknowledged by complete references.

Name: Date:

Mineshree Naidoo-Chetty   July 2022

Signature

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I had heard "it takes a village" to produce a PhD thesis. This turned out to be true. I am grateful to each person supporting me in my dream of completing my PhD.

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AUM NAMA SHIVAYA

DEDICATION

This work is dedicated to my husband, Terence, and children, Shyla and Thrishaan; You have made me stronger, better, and more fulfilled than I could have ever imagined. I love you to the moon and back.

JOURNAL ARTICLES – PUBLISHED/ACCEPTED/IN PRESS FOR PUBLICATION

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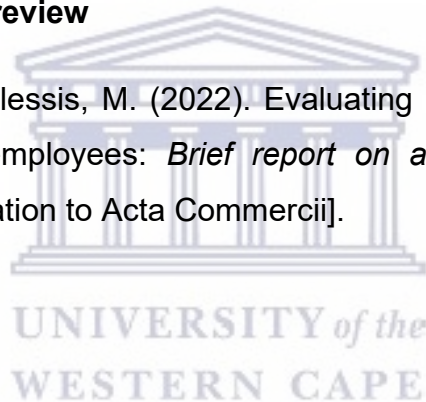
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LIST OF ABBREVIATIONS

APA	American Psychological Association
APES	Academic and Professional Editing Services
CHE	Council on Higher Education
COR	Conservation of Resources Model
DHE	Department of Higher Education
DHET	Department of Higher Education and Training
DoE	Department of Education
DVC	Deputy vice chancellors
ERI	Effort-reward imbalance
HDI	Historically Disadvantaged Institution
HE	Higher education
HEI	Higher education institution
HESA	Higher Education South Africa
HOD	Head of department
HPCSA	Health Professions Council of South Africa
HR	Human resource
HRM	Human resource management
IJHE	*International Journal of Higher Education*
IPA	Interpretive phenomenological analysis
JASR	Jordanian Association for Scientific Research
JC	Job crafting
JCE	Job Crafting Exercise
JCI	Job crafting intervention
JCM	Job characteristics model
JD	Job demands
JD-R	Job demands and resources
JR	Job resources

MMR	Mixed-method research
MPS	Motivating potential score
NRF	National Research Foundation
OTL	Opportunity to learn
PDP	personal development plan
PPQ	Publication Pressure Questionnaire
PRM	Participative ranking methodology
SPOS	Survey of perceived organisational support
WAMI	Work and meaning inventory

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CHAPTER 1: INTRODUCTION

1.1 Chapter overview

This chapter defines the study background, framework, and rationale while defining the problem statement. The main research and secondary questions are discussed. The study aims, objectives, significance, definition of terms, and outline are included.

1.2 Background and context of the study

The work of a traditional university, polytechnic or college of education academics can be divided into categories, such as teaching, research, community engagement, administration, and entrepreneurial activities (Makinde & Alao, 1987; Kinman, 2014). Academic work includes several roles (Kinman, 2014). According to the literature, the intensity and regularity of participation in these extensive categories of job activities depend on the academic's job level. With an amassed number of roles that students, parents, and employers demand, stress and burnout levels in academics are on a steady rise (Khan et al., 2019; Salami, 2011).

The accumulative demands and expansion of academic work have been paralleled by the necessity of greater responsibility and proficiency while demonstrating evidence of educational and research standards (Kinman & Johnson, 2019; Kinman, 2014). According to the job demands-resources model, adapted to the study context, the following two facets are experienced among academic employees (academics) within the university setting:

- **Job demands**: refer to work elements expending energy, such as workload, the complexity of tasks, and work conflicts (Bakker & Demerouti, 2018)
- **Job resources**: are elements assisting individuals to approach job demands (Bakker & Demerouti, 2008). Some resources can be classified as organisational, such as performance feedback, social support, and skill

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variety. Personal resources refer to what control individuals have over their environment, including optimism, self-efficacy, resilience, and value orientation (Bakker & Demerouti, 2017; Schaufeli & Taris, 2014).

According to the JD-R theory, stress, and health impairment (the health impairment process) are affected by an increase in demands; however, an increase in resources can lead to greater levels of motivation and efficiency (the motivational process) (Schaufeli & Taris, 2014). The JD-R model proposes a dynamic feedback sphere of the influence of job demands and resources on salient outcomes, such as motivation, engagement, and well-being.

Interventions are, therefore, to improve job resources (organisational and personal) and to manage job demands at an individual and organisational level. Interventions will enhance the experience of salient positive outcomes. Within this framework, the study aimed to develop a fit-for-purpose job demands and resources taxonomy, enabling the improvement of job resources and managing job demands of academics in higher education institutions (HEIs) in South Africa. A sequential mixed-method design was used to attain this requirement.

1.3   Contextualising the challenges for academics in higher education

South Africa anticipated higher education (HE) transformation in the academic profession following the election of a black government in 1994 (Koen, 2003). Assembling and sometimes pulling apart the varied features in a far-reaching attempt at post-apartheid transformation puts extensive demands on academic staffing; this is in the diverse, and still developing, South African higher education system (CHE, 2016).

In South Africa, the HE sector irrevocably approaches several transformational challenges (Du Plessis et al., 2021). The same applies in several other countries, such as Europe. The academic profession experienced and continues to experience

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vital changes, including COVID-19 restriction effects (Toquero, 2020). Specifically, during the outbreak of the COVID-19 pandemic various policy initiatives were launched by government to ensure that teaching activities continued. Unfortunately this led to challenges on what to teach, how to teach, the workload of teachers and students, the teaching environment, and the implications for education equity (Zhang et al., 2020). In addition to this over the past few years, a steady incline in student registrations was established. Academics are also expected to adopt additional administrative and management duties (CHE, 2010; Franco-Santos & Doherty, 2017; Ntshoe & De Villiers, 2008).

A clear indication exists that the HE environment no longer offers a low-stress atmosphere (Bhana & Suknunan, 2021; Kinman & Wray, 2014; Poalses & Bezuidenhout, 2018; Winefield et al., 2002). Statistics reveal that academics' job demands escalated owing to internationalisation, open-learning technology, and pressure to attain external funding; however, the levels of support and other resources weakened (Chitambu, & Pieters, 2021; Council of Higher Education, 2016; Guthrie et al., 2017).

Higher education institutions (HEIs) have a significant role in a country's wealth by encouraging intellectual capital, economic advancement, human growth, and innovation in a 'knowledge rigorous economy' (Ylijoki, 2013; Ylijoki & Ursin, 2013). Likewise, a country's global competitiveness and growth of the knowledge community depends on its population having a resilient and viable HE sector (Mapesela & Hay, 2006; Van Heerden et al., 2007). Change within the HE sector leads to global progression (Van Niekerk & Geertsema, 2009); therefore, a higher level of strain on HEI staff and, specifically, academics (Dhanpat et al., 2019).

The COVID-19 restrictions attained several changes where institutions had to re-strategise their working methods. This placed numerous demands and challenges on academics, such as the need to engage in emergency remote learning and

teaching, working from home arrangements for staff, searching for other ways to assist students, and restructuring resources to approach unfolding needs (Govindarajan & Srivastava, 2020). The COVID-19 restrictions conveyed considerable uncertainty for the HE sector in South Africa associated with diminishing funds (Wangenge & Kupe, 2020).

HEIs need to ensure the successful functioning and sustainability of any institution to be effective. Academic staff careers and their retention significantly influence HEIs' success (Barkhuizen et al., 2020; Ng'ethe et al., 2012). For this to happen, the academic staff's well-being must be a priority (Brewster et al., 2021).

1.4   The changing roles of academics

Traditionally, academic work was satisfying and stress-free (Willie & Stecklein, 1982). Attributable to the inherent qualities, such as tenure, clarity, flexibility, and autonomy, employees within academia were protected against occupational stress, including job uncertainty, role ambiguity, and low job control (1982; Kahn et al., 1964; Karasek & Theorell, 1990). An understanding of academic culture was observed to cushion the adverse influence of stress (Gmelch et al., 1984).

Academia used to be a highly esteemed profession. Academic autonomy was fiercely safeguarded while encouraging non-conformity (Adams, 1988); However, over the past two to three decades, the HE sector, globally, experienced extreme and widespread change. Growing evidence indicates that the work-related characteristics sheltering academics against work-related stress are fading rapidly (Kinman & Johnson, 2019; Kinman, 2014).

Viljoen and Rothmann (2002) remark academics' roles changed from previous years. For instance, universities in sub-Saharan Africa must operate in under-resourced environments. Academic staff are experiencing high workloads, with an adverse influence on their well-being and performance (Higher Education South

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African; HESA, 2011). Research evidence revealed that academics in HEIs experience an elevated level of stress and burnout (Barkhuizen et al., 2014; Lee et al., 2022; Zábrodská, et al., 2018).

Universities globally experienced significant changes triggering stress and burnout. These transformations include decreases in government subsidy, establishing managerial-style leadership focusing on productivity and success, and amplified student figures and staff downscaling, leading to higher student-staff ratios (Bakker et al., 2010; Franco-Santos & Doherty, 2017).

South African universities suggest that HE is the country's most significant and effective social device, approaching vital challenges. Challenges are presented in a complex third period, following the evolution from apartheid to a constitutional democracy. These challenges are increasingly well defined and include the deepening of social, political, and economic inequality, the sluggishness of the national and regional economies, and losing confidence in the national projects (USAF Statement, 2017).

Benchmarks embarked on by the transformation in HE, including global competitiveness and related efficiency standards. These can be accredited to globalisation pressures and profound aspects, intrinsic to the foundation of HE, particularly the combat to manage change and modernisation (Teferra, 2014; Vandeyar, 2010). In the future, HE leaders globally will be apprehended with the distresses and challenges of concern to university leaders (Council of Higher Education, 2016).

Ntshoe and De Villiers (2008) explored observations from eight universities, exposing the following major initiators of change in the HE sector:

- The expectation is that HEIs will ensure maximum input from a leaner staff complement, reducing costs and escalating profits

http://etd.uwc.ac.za/

- Participants ascribed that the reason for academics, unable to fulfil the government's standard of generating a 1.25-unit research output for every permanent employee is suggested by the Department of Education (DoE) to amassed student amounts and a consistent rise in administrative and management duties

- Most participants indicated preferring research and supervising masters and doctoral students to have to manage undergraduates. The reason for this is that overseeing these students provides leverage for promotional opportunities while elevating the individual's research profile concerning research output

- Participants also indicated that their roles as academics and researchers shifted from being scholars and inventors of information to those of administrators and managers

- Academic employees of publicly funded institutions operate in a progressively cut-throat environment, deploying their academic capital, which may cause the disengagement of teaching, research, consultancy skills, or various applications of academic skills (Mouton et al., 2013).

Some noted that the South African student population are not only more varied regarding their social, cultural, and educational background, but they also have a burgeoning 'consumer-oriented' approach to their studies. Universities use more market-led strategies, regular curriculum design, and assorted delivery methods, demanding an elevated level of technical expertise and an increasingly skilled classroom performance from academic employees (Kinman, 2014).

Academics' function has become more demanding and varied. Academics also need to ensure that they publish research outputs in subsidy-earning journals for career advancement. An expectation, therefore, exists, for academics to manage the roles of administrators, managers, support staff, and academics—devoid of any rewards

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or the support of added staff (Kaur et al., 2018; Kinman & Wray, 2014; Ntshoe & De Villiers, 2008).

This may include working extended hours, including evenings and weekends (Hogan et al., 2016; Kinman & Jones, 2008). Such changes will influence academics' performance and mental health (Zábrodská et al., 2018). Kinman and Jones (2008) indicate that academics experience increased levels of psychological anguish and intentions to quit, while job satisfaction decreased. According to a study by the Health and Safety Executive (2018) in Great Britain, workers within the HE domain display significantly more signs of stress, depression, and anxiety than the average worker, in all industries.

Dhanpat et al. (2019) and Sathye (2004) confirm that academic employees deal with more difficulties than the leaders of business organisations. The stakeholders present a vital motive in academia, such as students and faculty members. An academic employee should, therefore, consider each party independently by applying the policies for management. This advocates that universities as institutions are not operating as sufficiently as they historically have, owing to the growing stress that university staff are experiencing (Bell et al., 2012; The Guardian, 2019; Health and Safety Statistics, 2020). Poalses and Bezuidenhout (2018) confirm this finding in a quantitative analysis of academics in the South African environment, establishing that academics felt overwhelmed, and helpless, while lacking personal control, owing to the increasing burden of administrative and quality assurance tasks.

Academics' well-being at universities is often disregarded (Morrish, 2019; Goss et al., 2010). Evidence suggests that academic staff with teaching and research contracts are susceptible to work-related stress, burnout, and mental health problems (Guthrie et al., 2017; Kinman & Wray, 2014; Winefield et al., 2008). HE establishments globally are encountering important functional and structural

adjustments, attempting to meet the necessities proposed by a global and knowledge-based economy.

Globalisation appeals for government and HE establishments to consider diverse observations to meet the difficulties that a new global economy presents (De Wit & Altbach, 2021). A necessity also exists for HE to respond to and participate directly with local, national, and provincial social-economic concerns, predominantly in developing countries (Popescu, 2015).

In the present knowledge-based global economy, universities are not just compelled by values concerning academic excellence to undertake work for the public good and nation-building responsibilities, they must also attempt to function in a way that is commercially feasible (Samad, 2015).

1.5 Problem statement

Higher educational institutions experience a dissimilar level of pressure and change compared to their corporate counterparts (Dhanpat et al., 2019). This is owing to the unprecedented global coronavirus pandemic restrictions that have affected employees, organisations, and how work has been conducted traditionally. The shift to technology-mediated learning for universities led to academics needing to be flexible while learning rapidly. They had to manage their job requirements and responsibilities under significantly altered working conditions (Marinoni et al., 2020). These changes led to increased job demands and diminished resources for several academics (De Rijk, 2020).

The debate in most HEIs is to identify the influence of this global shift on the well-being of academics (Mudrak et al., 2018). Managers, leaders, and individual academics are presumed to be receptive to varied student needs and expectations, a competitive research environment, community expectations for relevance, diminishing public funding, and augmented administrative and fiscal responsibility.

Academics experience augmented teaching loads, added administrative duties, and further pressure to ensure secured research funding (Janse van Rensburg et al., 2018). Higher levels of occupational stress are experienced while dealing with decreased levels of well-being and performance (Biron et al., 2008; Brion et al., 2008; Janse van Rensburg et al., 2018) coupled with COVID-19 restrictions (Karatuna et al., 2022).

The aforementioned led to varied, changing working conditions for academics, explained by job demands and resources. A wealth of research emphasises job demands and resources as experienced by employees within organisations across several arenas; however, a paucity exists of research focusing on a comprehensive list of demands and resources academics experience in their everyday working life.

In light of the empirical link between job demands, job resources and well-being, understanding an academic's perception of their current job demands and resources, would need to be further explored. Furthermore a fit-for-purpose job demands and resources taxonomy should aid in improving job resources and limiting job demands encountered by academics within their academic environments.

1.6   Research aim

The present study aimed to identify academics' job demands in their working lives while emphasising the job resources needed to assist in overcoming these demands. Subsequently based on the information an intervention programme was implemented and evaluated to enable academics to craft their jobs to reduce job demands and enhance resources.

1.7   Research questions

The present study aimed to identify academics' job demands in their working lives while emphasising the job resources needed to assist in overcoming these demands. The following research questions guided the study:

1. According to existing literature, what are the job demands and resources that academics face in their daily working lives?
2. Through understanding academic experiences at a South African university, what job demands and resources can be identified?
3. Can an intervention aimed at academics assist academics in decreasing job demands and increase job resources?

1.8   The study's objectives

1. To determine what job demands, job resources and associated outcomes relevant to the academic role have been studied
2. To review the empirically tested relationships between academic job demands and resources and consequences
3. Identify the job demands and resources as experienced by academics
4. Determine if a job crafting intervention has an influence on the job demands and resources of academic employees in an HEI

1.9   Methodological framework

Traditionally, studies conducted using the JD-R model have been through quantitative research methods; however, this study used a sequential mixed-methods approach.

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1.9.1   Exploratory sequential research design

This study selected an exploratory sequential mixed-method research (MMR) design to broadly explore and understand academics' experiences concerning job demands and resources. This design normally involves two distinct phases of data collection and analysis, conducted consecutively: "Exploratory sequential" advocates that the qualitative phase is conducted first. Afterwards, quantitative survey data are collected and analysed, designed to follow up on the qualitative phase with the prospect of clarifying significant, insignificant, and unexpected outcomes.

Each approach has its benefits. The first method is suitable for generalising outcomes from a significant sample to a bigger population, whereas the second allows for a deeper level of understanding, collected from fewer participants. Both approaches have restrictions. Mixed methods indicate that "the limitations of one method can be offset by the strengths of the other method, and the combination of quantitative and qualitative data provides a more complete understanding of the research problem than either approach by itself" (Creswell & Clark, 2011, p. 8).

Instead of approaching a research question using the binary lens of quantitative or qualitative research, the mixed-methods research approach can advance the scholarly conversation by benefitting from the strengths of both methodologies (Onwuegbuzie & Combs, 2010). Figure 1.1 depicts an illustration of the MMR methodology.
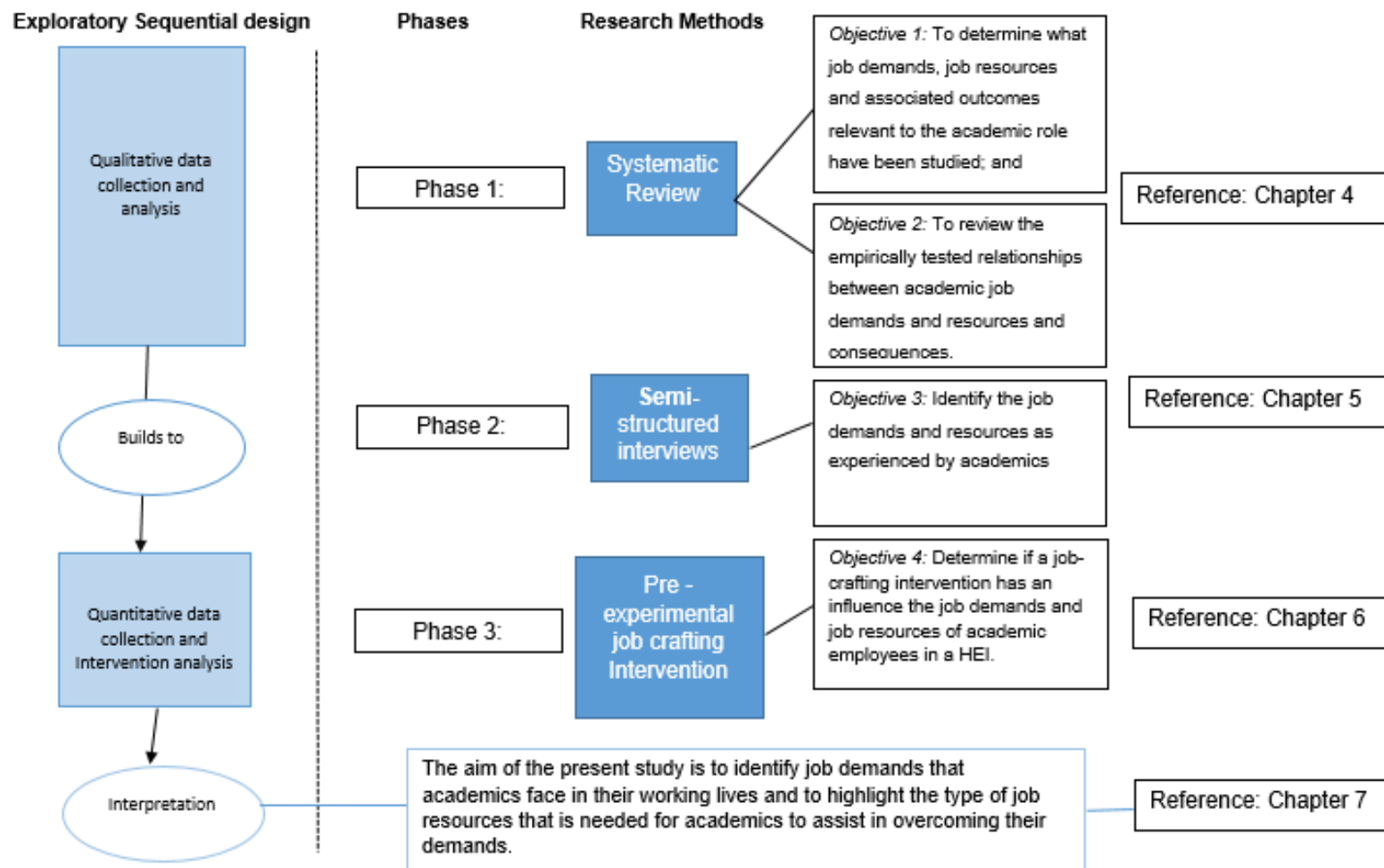
Figure 1.1: Summary of the exploratory sequential mixed-methods objectives, aligned with the study's job crafting intervention process

1.10 Outline of thesis

- Chapter 1: Introduction

Chapter 1 provides the research background and introduction. The chapter extends to contextualising the challenges academics encounter in the HE experience. The problem statement is identified by the research aim and the study's objectives. Finally, the methodological framework is discussed.

- Chapter 2: Research methodology

This chapter presents an outline of the methodology and design employed in the study, including the research worldview, research design, and the data collection methods in the study phases and stages.

- Chapter 3: Theoretical framework and literature review

This chapter reviews the literature to discuss the theoretical study objective concerning the JDR framework. Each underlying significance variable is defined, clarified, and deliberated in the academic literature. The relationship between job demands and resources with academic leaders within HEIs is outlined by reviewing the job demand-resources model. Further deliberations centre on HEIs' changing dynamics, the result of the academic environment, and the influence thereof on academic employees. This chapter contextualises the report within the job demand-resources framework.

- Chapter 4: Systematic review of the job demands and resources of academic staff within higher education institutions

This chapter aims to respond to the first objective of the present study, to identify academics' job demands and resources, where a systematic review scrutinised, the literature relating to job demands and resources of academics in HEIs. This section

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examines the systematic methods used when secondary data were collected, critically appraised several research studies, and finally synthesised the research findings. This chapter is presented as the following academic article, published in the *International Journal of Higher Education*.

Naidoo-Chetty, M., and Du Plessis, M. (2021). Systematic Review of the Job demands and resources of Academic Staff within Higher Education Institutions. *International Journal of Higher Education*, *10*(3), 268-284. https://doi.org/10.5430/ijhe.v10n3p268

- Chapter 5: Job demands and resources of academics in higher education

This chapter aims to respond to the second study objective, to understand the lived experience of academics' job demands and resources. This was conducted through a qualitative approach, with 23 semi-structured interviews with academic employees. An interpretive phenomenological analysis (IPA) with a thematic analysis approach was used to analyse the data. Themes could, therefore, be created based on the feedback from academics through interviews. The chapter is presented in the following academic article, published in *Frontiers in Psychology*.

Naidoo-Chetty, M., & Du Plessis, M. (2021). Job demands and resources of Academics in Higher Education. *Frontiers in Psychology, 12,* 2336. https://doi.org/10.3389/fpsyg.2021.631171

- Chapter 6: Job demands and resources of academics in higher education

This chapter aims to determine the effectiveness of a job crafting intervention among HEI academics in improving job resources and decreasing job demands using a job crafting intervention adapted for study by the researcher. A mixed-method, pre-experimental research approach was implemented (n = 9). Participants completed pre- and post-measures while participating in two, two-hour online job crafting

training sessions. The chapter is presented as the following academic article—in review.

Naidoo-Chetty, M., & Du Plessis, M. (2022). Evaluating a job crafting intervention among academic employees: Brief report on a pilot study. [Manuscript submitted for publication to Acta Commercii].

- Chapter 7: Implications, limitations, and suggestions for future research

This is the concluding chapter, summarising the study deductions with the main findings. A discussion of the limitations along with future recommendations are made, including a conclusion.

1.11 Conclusion

This chapter acknowledges that the academics' job demands and resources transformed in the past decade; however, inadequate research is conducted to identify the job demands and resources and how these aspects affected academics in HEIs. It was emphasised that, owing to these constant changes, academics are no longer part of a low-stress environment and often have to deal with persistent challenges. It is important to recognise that academics affect institutional transformation within the HE sector, therefore, the well-being of academics plays a significant role in ensuring the continued success of the functioning of a university.

This study assumes that altering job demands and enhancing job resources will lead to an increase in well-being (as work engagement and job performance) and reduced burnout through the JD-R theoretical framework (Converso, Sottimano, Molinengo & Loera, 2019; Han, Yin, Wang, & Bai, 2019). Job crafting was employed, as it is a preferred method of the JD-R framework (Kinman & Johnson, 2019). The study, therefore, allowed for a better understanding of the quantitative and qualitative job demands and resources, experienced by academics, while understanding the

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challenges of academics within the HE context to institute strategies and practices that could allow for empowering environments and effective change interventions. Last, the outline for each chapter of the research report is presented. The methodology framework is, therefore, presented in the subsequent Chapter 2.

References

Bakker, A. B. & Demerouti, E. (2014). Job demands-resources theory. In C. Cooper & P. Chen (Eds), *Wellbeing: A Complete Reference Guide* (pp. 37-64). Chichester: Wiley-Blackwell.

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 wellbeing*. Salt Lake City, UT: DEF Publishers.

Bakker, A. B., Boyd, C. M., Dollard, M., Gillespie, N., Winefield, A. H., & Stough, C. (2010). The role of personality in the job demands-resources model. *Career Development International, 15*, 622–636. https://doi.org/10.1108/13620431011094050

Barkhuizen, E. N. (2005). *Work wellness of academic staff in higher education institutions*. Unpublished Doctoral Thesis, Northwest University. http://hdl.handle.net/10394/713

Barkhuizen, N., Rothmann, S., & van de Vijver, F. J. (2014). Burnout and work engagement of academics in higher education institutions: Effects of dispositional optimism. Stress and Health. *Journal of the International Society for the Investigation of Stress, 30*, 322–332. http://dx.doi.org/10.1002/smi.2520

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Bell, A., Rajendran, D., & Theiler, S. (2012). Job Stress, Wellbeing, Work-Life Balance and Work- Life Conflict among Australian Academics. *Electronic Journal of Applied Psychology, 8,* 25-37. https://doi.org/10.7790/ejap.v8i1.320

Bhana, A. & Suknunan, S. (2021). Exploring leadership factors creating employee engagement or disengagement across job grade categories at a public higher education institution in South Africa. *Problems and Perspectives in Management, 19*(1), 317-327. https://doi.org/10.21511/ppm.19(1).2021.27

Biron, C., Brun, J. P., & Ivers, H. (2008). Extent and sources of occupational stress in university staff. Work. *Journal of Prevention Assessment and Rehabilitation, 30*, 511-22. http://dx.doi.org/1051-9815/08/

Cetin, M. O. & Kinik, F. S. F. (2015). An analysis of academic leadership behavior from the perspective of transformational leadership. *Procedia - Social and Behavioral Sciences, 207*, 519 – 527. https://doi.org/10.1016/j.sbspro.2015.10.122

Chitambu, S. & Pieters, W. R. (2021). The Impact of Personal and Work Resources on Work Stress of Staff Members during the Covid-19 Pandemic, Khomas Region. *African Journal of Sociological and Psychological Studies, 1*(2), 69-90. https://hdl.handle.net/10520/ejc-aa_ajosaps_v1_n2_a4

Converso, D., Sottimano, I., Molinengo, G., & Loera, B. (2019). The Unbearable Lightness of the Academic Work: The Positive and Negative Sides of Heavy Work Investment in a Sample of Italian University Professors and Researchers. *Sustainability, 11*, 2439. https://doi.org/10.3390/su11082439

Council on Higher Education. (2010). Reflections of South African university leaders. Pretoria, South Africa: CHE.

Council on Higher Education. (2016). VitalStats: Public higher education 2014. Pretoria, South Africa: CHE. http://doi.org/ISBN: 978-0-9946785-8-4

Creswell, J. W., & Clark, V. L. P (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

De Rijk, A. (2020). *How to Relieve Work Stress During the Corona Crisis?* Available online at: https://www.maastrichtuniversity.nl/news/how-relieve-work-stressduring-corona-crisis (accessed July 7, 2022)

Deci, E. L. & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Dhanpat, N., Geldenhuys, M., & De Braine, R. (2019). Preliminary development of the Higher Education Hindrance Demands Scale amongst academics in the South African context. *SA Journal of Industrial Psychology, 45*(1), 1-12. http://dx.doi.org/10.1037/str0000131

Du Plessis, M., Jansen van Vuuren, C. D., Simons, A., Frantz, J., Roman, N., & Andipatin, M. (2022). South African Higher Education Institutions at the Beginning of the Covid-19 Pandemic: Sense-Making and Lessons Learnt. *In Frontiers in Education* (p. 564). Frontiers. https://doi.org/10.3389/feduc.2021.740016

Franco-Santos, M. & Doherty, N. (2017). Performance management and well-being: A close look at the changing nature of the U. K. higher education workplace. *The International Journal of Human Resource Management, 28*, 2319–2350. http://dx.doi.org/10.1080/09585192.2017.1334148

Gmelch, W. H., Lovrich, N. P., & Wilke, P. K. (1984). Sources of stress in academe: A national perspective. *Research in higher education, 20*(4), 477-490. https://doi.org/10.1007/BF00974924

Govindarajan, V. & Srivastava, A. (2020). *What the Shift to Virtual Learning Could Mean for the Future of Higher Ed*. Harvard Business Review. Available at: https://hbr.org/2020/03/what-the-shift-to-virtual-learning-could-mean-for-the-future-of-higher-ed.

Guthrie, S., Lichten, C., Van Belle, J., Ball, S., Knack, A., & Hofman, J. (2017). *Understanding mental health in the research environment.* Santa Monica, CA: Rand Corporation. Retrieved from https://www.rand.org/ pubs/research reports/RR2022.html

Han, J., Yin, H., Wang, J., & Bai, Y. (2019). Challenge job demands and resources to university teacher well-being: the mediation of teacher efficacy. *Studies in Higher Education, 45*(8), 1771-1785. https://doi.org/10.1080/03075079.2019.1594180

Health and Safety Executive, Annual Statistics. (2018). Work related stress depression or anxiety statistics: Great Britain (Online). Available: http://www.hse.gov.uk/statistics/causdis/stress.pdf [Accessed: 19 May 2022]

Health and Safety Statistics. 2020. Work-related stress, anxiety or depression or statistics in Great Britain, 2020 (Online). Available: https://www.hse.gov.uk/statistics/causdis/stress.pdf [Accessed: 20 May 2022]

Herbst, T. H. H. & Conradie, P. D. P. (2011). Leadership effectiveness in Higher Education: Managerial self-perceptions versus perceptions of others. *SA Journal of Industrial Psychology/SA Tydskrif vir*

Bedryfsielkunde, 37(1), Art. #867, 14 pages. http://dx.doi.org/10.4102/sajip.v37i1.867

Higher Education South Africa (HESA). (2011). A generation of growth: Proposal for a national programme to develop the next generation of academics for South African higher education Pretoria, South Africa: University of South Africa

Hogan, V., Hogan, M., & Hodgins, M. (2016). A study of workaholism in Irish academics. *Occupational Medicine, 66*, 460 – 465. http://dx.doi.org/ 10.1093/occmed/kqw032

Janse van Rensburg, C., Rothmann, S., & Diedericks, E. (2018). Job demands and resources: Flourishing and job performance in South African universities of technology settings. *Journal of Psychology in Africa, 28*(4), 291-297. https://doi.org/10.1080/14330237.2018.1501881

Jooste, K., Frantz, J., & Waggie, F. (2018). Challenges of academic healthcare leaders in a higher education context in South Africa. *Educational Management Administration & Leadership, 46*(4), 692–708. https://doi.org/10.1177/1741143216688468

Karatuna, I., Jönsson, S., & Muhonen, T. (2022). Job Demands, Resources, and Future Considerations: Academics' Experiences of Working from Home During the Coronavirus Disease 2019 (COVID-19) Pandemic. *Front. Psychol. 13*, 908640. doi: 10.3389/fpsyg.2022.908640

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. John Wiley, New York, NY.

21

Kaur, A., Noman, M., & Awang-Hashim, R. (2018). The role of goal orientations in students' perceptions of classroom assessment in higher education. *Assessment & Evaluation in Higher Education, 43*(3), 461-472. https://doi.org/10.1080/02602938.2017.1359818

Khan, A., Din, S. U., & Anwar, M. (2019). Sources and adverse effects of burnout among academic staff: A systematic review. *City University Research Journal, 9*(2), 350-363. http://cusitjournals.com/index.php/CURJ

Kinman, G. & Johnson, S. (2019). Special section on well-being in academic employees. *International Journal of Stress Management, 26*(2), 159–161. https://doi.org/10.1037/str0000131

Kinman, G. & Jones, F. (2003). Running up the down escalator: Stressors and strains in UK academics. *Quality in Higher Education, 9*(1), 21-38. https://doi.org/10.1080/13538320308162

Kinman, G. & Jones, F. (2008). A Life Beyond Work? Job Demands, Work-Life Balance, and Wellbeing in UK Academics. *Journal of Human Behavior in the Social Environment, 17*(1/2) 41-60. https://doi.org/10.1080/10911350802165478

Kinman, G. & Wray, S. (2014). Doing more with less. Work and wellbeing in academics. *Somatechnics, 4,* 219–235. http://dx.doi.org/10.3366/soma.2014.0129

Kinman, G. (1998). P*ressure Points: A Sííncv into the Causes and Consequences of Occupational Stress in UK Academic and Related Staff.* London: Association of University Teaciiei-s.

22

Lee, M., Coutts, R., Fielden, J., Hutchinson, M., Lakeman, R., Mathisen, B., Nasrawi, D., & Phillips, N. (2022). Occupational stress in university academics in Australia and New Zealand. *Journal of Higher Education Policy and Management, 44*(1), 57-71. https://doi.org/10.1080/1360080X.2021.1934246

Little, L. M., Simmons, B. L., & Nelson, D. L. (2007). Health Among Leaders: Positive and Negative Affect, Engagement and Burnout, Forgiveness and Revenge. *Journal of Management Studies, 44*(2), 243-260. https://doi.org/10.1111/j.1467-6486.2007.00687.x

Makinde, O. & Alao, K. (1987). *Profile of career education*. Ibadan: Signal Educational Services Limited.

Marinoni, G., Van't Land, H., & Jensen, T. (2020). *The impact of Covid19 on higher education around the world*. IAU Global Survey Report. Available online at: https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_ survey_report_final_may_2020.pdf (accessed July 7, 2022).

Mouton, N., Louw, P., & Strydom, G. L. (2013). Present-Day Dilemmas and Challenges of the South African Tertiary System. *International Business & Economics Research Journal, 12*(3), 285-300. http://hdl.handle.net/10394/14007

Muchiri, M. K., Cooksey, R. W., & Walumbwa, F. O. (2012). Transformational and social processes of leadership as predictors of organisational outcomes. *Leadership & Organization Development Journal, 33*(7), 662–683. https://doi.org/10.1108/01437731211265241

Mudrak, J., Zabrodska, K., Kveton, P. K., Jelinek, M., Blatny, M., Solcova, I., & Machovcova, K. (2018). Occupational Well-being Among University Faculty:

A Job Demands-Resources Model. *Res High Educ, 5*9, 325–348. https://doi.org/10.1007/s11162-017-9467-x

Ntshoe, I. & De Villiers, P. (2008). Steering the South African higher education sector towards transformation. *Perspectives in Education, 26*(4), 17-27. https://hdl.handle.net/10520/EJC87500

Onwuegbuzie, A. J. & Combs, J. P. (2010). Emergent Data Analysis Techniques in Mixed Methods Research: A Synthesis". In Sage *Handbook of Mixed Methods in Social & Behavioral Research*, edited by A. Tashakkori and C. Teddlie, 2nd ed., 397-430. Thousand Oaks, CA: SAGE Publications.

Poalses, J. & Bezuidenhout, A. (2018). Mental health in higher education: A comparative stress risk assessment at an open distance learning university in South Africa. The *International Review of Research in Open and Distributed Learning, 19* (Online). https://doi.org/10.19173/irrodl.v19i2.3391

Salami, S. O. (2011). Job stress and burnout among lecturers: Personality and social support as moderators. *Asian Social Science*, 7(5), 110. https://doi.org/10.5539/ass.v7n5p110

Sathye, M. (2004). Leadership in higher education: a qualitative study. *Qualitative Social Research,* 5(3), 1-11. https://www.researchgate.net/publication/286563134_Leadership_in_Higher _Education_A_Qualitative_Study

Teferra, D. (2014). Charting African higher education: Perspectives at a glance. *International Journal of Higher Education 1*(1), 9–21. https://doi.org/10.6017/ijahe.v1i1.5642

The Guardian. (2019). *Record levels of stress 'put teachers at breaking point.* Retrieved from https://www.theguardian.com/education/2019/nov/10/stressed-teachers-at-breaking-point-saysreport#:~:text =Nearly%20three%2Dquarters%20of%20teachers%20and%2084%25%20o f%20school%20leaders,in%20t he%20past%20academic%20year.

Toquero, C. M. (2020). Challenges and Opportunities for Higher Education amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Res, 5*(4), em0063. https://doi.org/10.29333/pr/7947

Vandeyar, S. (2010). Shifting selves: Constructing and negotiating academic identities. South *African Journal of Education, 24*(6), 914-934. https://hdl.handle.net/10520/EJC37658

Viljoen, J. P. & Rothmann, S. (2002). Transformation in a tertiary education institution: A case study. *Management Dynamics, 11*(2), 2–9. https://hdl.handle.net/10520/EJC69645

Wangenge-Ouma, G. & Kupe, T. (2020). Uncertain Times: Re-Imagining Universities for New, Sustainable Futures. Available at: https://www.usaf.ac.za/wp-content/uploads/2020/09/Uncertain-Times-Paper.pdf. Accessed 27 December 2020.

Willie, R., & Stecklein, J. E. (1982). A three-decade comparison of college faculty characteristics, satisfactions, activities, and attitudes. *Research in Higher Education*, *16*(1), 81-93. https://doi.org/10.1007/BF00992051

Winefield, A. H., Boyd, C., Saebel, J., & Pignata, S. (2008). Job Stress in University Staff: An Australian Research Study, Australian Academic Press, Bowen Hills.

25

Winefield, A. H., Gillespie, N., Stough, C., Dua, J., & Hapuararchchi, J. (2002). *Occupational stress in Australian universities: A national survey* (Doctoral dissertation, National Tertiary Education Union).

Zábrodská, K., Mudrák, J., Šolcová, I., Kveton, P., Blatný, M., & Machovcová, K. (2018). Burnout among university faculty: The central role of work–family conflict. *Educational Psychology, 38*, 800 – 819. http://dx.doi.org/10.1080/01443410.2017.1340590

Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending Classes Without Stopping Learning: China‟s Education Emergency Management Policy in the COVID-19 Outbreak. Journal of Risk and Financial Management, 13(55), 1-6. https://doi.org/10.3390/jrfm13030055

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CHAPTER 2: RESEARCH METHODOLOGY

2.1   Introduction

Section A of this chapter discusses mixed methods as a methodological framework with the research worldview and the mixed methods applied. Section B delivers the research design of the present study, the research setting, the study population and sampling, the data collection and data analysis, and the trustworthiness. Finally, Section C presents clarifications of the ethics processes and a conclusion.

2.2   Section A: A methodological framework

This section describes mixed methods as a methodological framework employed in the current study. This section also provides the research worldview and diverse types of mixed methods. The research method signifies an analysis approach. The literature discusses several methodological approaches. It was established that these approaches can be separated into three expansive groupings, extending from quantitative and qualitative to the mixed-methods approach. It is imperative to deliberate on the nature of the research challenge and its objectives to ensure a suitable methodological approach (Creswell, 2015).

The quantitative approach is typically used to ascertain underlying description variance in explicit outcomes or to determine intervention effectiveness. Researchers attempt to gain a comprehensive understanding of the significance of a certain occurrence; however, limited information is known, therefore, the qualitative approach is more appropriate. Mixed methods combine these approaches. This method is used when the quantitative and qualitative approaches are adequate, respectively. An example is when researchers desire to obtain a comprehensive understanding of a certain occurrence's meaning and to make generalisations about the outcomes attained, the mixed-methods approach is beneficial (Creswell, 2015).

Considering the research challenge and its objectives, a mixed-methods approach was the most appropriate. This approach provided a thorough understanding of the job demands-resources phenomenon among academics in South Africa and HEIs.

2.2.1 Research paradigm

A research paradigm refers to the conventional tradition or framework guiding all research features; this includes its laws, beliefs, techniques, methods, the analysis and interpretation of the data collected (Babbie & Mouton, 2010). Research paradigms are based on researchers' philosophical foundations or belief systems, categorised as epistemology, ontology, axiology, and methodology. It is, therefore, imperative to understand these components as they encompass the basic conventions, opinions, norms, and principles suggested by each paradigm (Lincoln & Guba, 1985).

According to Babbie (2010), no research paradigm is superior to any other research paradigm. Researchers should consider the most applicable paradigm for the research challenge and its objectives. This study assumed a pluralistic approach by considering more than one research paradigm to yield a broad understanding, description, and explanation of the job demands-resources phenomenon among academic employees.

2.2.2 Mixed methodology: Pragmatic worldview

This study subscribes to the worldview of pragmatism, allowing for multiple philosophical positions. A pragmatic worldview is deliberated as extensive besides being varied, endorsing applications and explanations to resolve issues with accessible probable methods (Klenk, 2008; Creswell, 2008; Sharp et al., 2011). It is often associated with a mixed-method or multiple methods (Morgan, 2007; Johnson & Onwuegbuzie, 2004). Johnson and Onwuegbuzie (2004), emphasise the significance of this pragmatic approach by recognising that activities, conditions, and

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consequences appear vital to the worldview rather than antecedent circumstances (Creswell, 2008; Klenk, 2008; Sharp, et al., 2011). This research design is initiated from a mostly constructivist orientation (during the qualitative phase) and shifts to a more post-positivist stance (associated with the quantitative phase of the study).

Context is another vital consideration for the pragmatist. According to Morgan (2014), any effort to produce knowledge occurs within a social context. Concerning context, this research was conducted during a specific period in history, indicating the COVID-19 pandemic. The events during the study influenced the results, the meanings, and the interpretation thereof. The mixed-methods approach allowed for an appreciation of the function of that context while enriching the researchers' understanding (and potentially also that of the reader) regarding the study results.

Shaw et al. (2010) and Johnson et al. (2007) emphasise that the pragmatic approach welcomes humans while emphasising the significance of the natural or physical, social and psychological world. The research questions involved humans. Humans have emotions and experiences. It, therefore, seemed inadequate to embark on a purely quantitative study, since without a qualitative component, the emotions and lived experiences underlying the numbers would have been hidden from the study. Mixed methods has gained more acceptance in the past 15 years and is more often used in social science studies (Bryman, 2016).

The mixed-methods approach in this study occurred in three distinct and sequential phases. The first phase and second were qualitative and exploratory, this was followed up by a third phase, with a small embedded quantitative component. This final phase included a qualitative inquiry to gain further insights and explanations for the quantitative findings. Using this pragmatic approach enabled the formulation of a complete response to the research questions.

Pragmatism, compared to post-positivism, constructivism, and transformative worldview, is discussed based on the basic beliefs related to axiology, ontology, epistemology, and methodology as presented in Table 2.1.

Table 2.1: Basic beliefs associated with worldviews

Source: Denzin & Lincoln, 2005; Guba & Lincoln, 2005

Basic Beliefs	Post-positivism	Constructivism	Transformative	Pragmatic
Axiology	Respect privacy, informed consent, minimise harm (beneficence); justice/equal opportunity	Balanced representation of views, raise participants' awareness, community rapport	Respect cultural norms, beneficence is defined in terms of promotion of human rights and increase in social justice, reciprocity	Gained knowledge in pursuit of desired ends as influenced by the researcher's values and politics
Ontology (nature of reality)	One reality. Knowable within a specified probability	Multiple, socially constructed realities	Rejects cultural relativism, recognises that various versions of reality are based on social positioning; conscious recognition of consequences of privilege versions of reality	Asserts a single reality and that all individuals have their unique interpretation of reality
Epistemology (nature of knowledge, relation between knower and would-be known)	Objectivity is important; the researcher manipulates and observes in a dispassionate, objective manner	The interactive link between researchers' and participants' values are made explicit; created findings	Interactive link between researcher and participants; knowledge is socially and historically situated;	Relationships in research are determined by what the researcher deems be appropriate to that study

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				need to address issues of power and trust
Methodology (approach to systematic inquiry)	Quantitative (primarily); interventionist; decontextualised	Qualitative (primarily); hermeneutical; dialectical; contextual factors are described	Qualitative (dialogic), but quantitative and mixed methods can be used; contextual and historical factors are described particularly concerning oppression	Match methods to specific questions and purposes of research; mixed methods can be used as the researcher works back and forth between various approaches

2.2.3 The research design of the current study

Various typologies of mixed methods can be employed in a study. The mixed-method typology uses more than one methodology, encompassing sequential and concurrent procedures; however, as it applies to this study, only the sequential procedure is discussed.

2.2.4 Sequential procedure

The sequential procedure aids researchers to collect data, which may elaborate on or expand the outcomes of one method with the findings of another (Creswell, 2003; Leavy, 2017). This design does not use an obvious advocacy lens. Integration ensues in the analysis of outcomes or in the discussion phase, where the results are assembled.

A sequential process for this study was followed, where findings from the systematic literature review and semi-structured interviews informed a fit-for-purpose job demand-resources model for academic employees in HE. This allowed using a mixed-methods exploratory sequential design. The reason for this is that the exploratory design allowed for generalising qualitative discoveries, based on several participants from the second phase to a sample collected during the third phase (Creswell, 2015). When phenomena have not been studied, exploratory research designs are used to produce new information and understandings (Burns & Grove, 2007).

Polit and Hungler (1999) confirmed that exploratory research designs are used to examine the full nature of a phenomenon, its manifestations, and related antecedents. In deliberation of this, the study assumed a mixed-methods exploratory sequential design. This research design was appropriate for collecting a comprehensive understanding of the job demands-resources phenomena among academics within an HEI in the Western Cape, as little is known about it. Following

this approach allowed capturing the subjective emotions of the academic working environment, identifying demands and resources experienced. A deeper and richer understanding of academic employees' experiences of job demands and job resources, provides academics with the opportunity to better manage their career demands and resources.

The intervention was designed based on job demands, most prominently identified by academics, identifying job resources to be developed to assist academic employees. To establish the intervention effect, a pre-test and post-test were piloted with nine participants. The respective questionnaire was administered before and after implementing the intervention. This assisted in identifying changes after the intervention was implemented and if it was effective in producing a change in perception.

This study, therefore, adopted a sequential exploratory mixed-method approach in addressing the research questions and the study's objectives. Three phases were identified for the study. These phases include a systematic literature review, a qualitative inquiry, and a mixed-method pre-experimental design to test an intervention. The sequential procedure is further discussed below. Figure 2.1 below illustrates the sequential phases of the study.
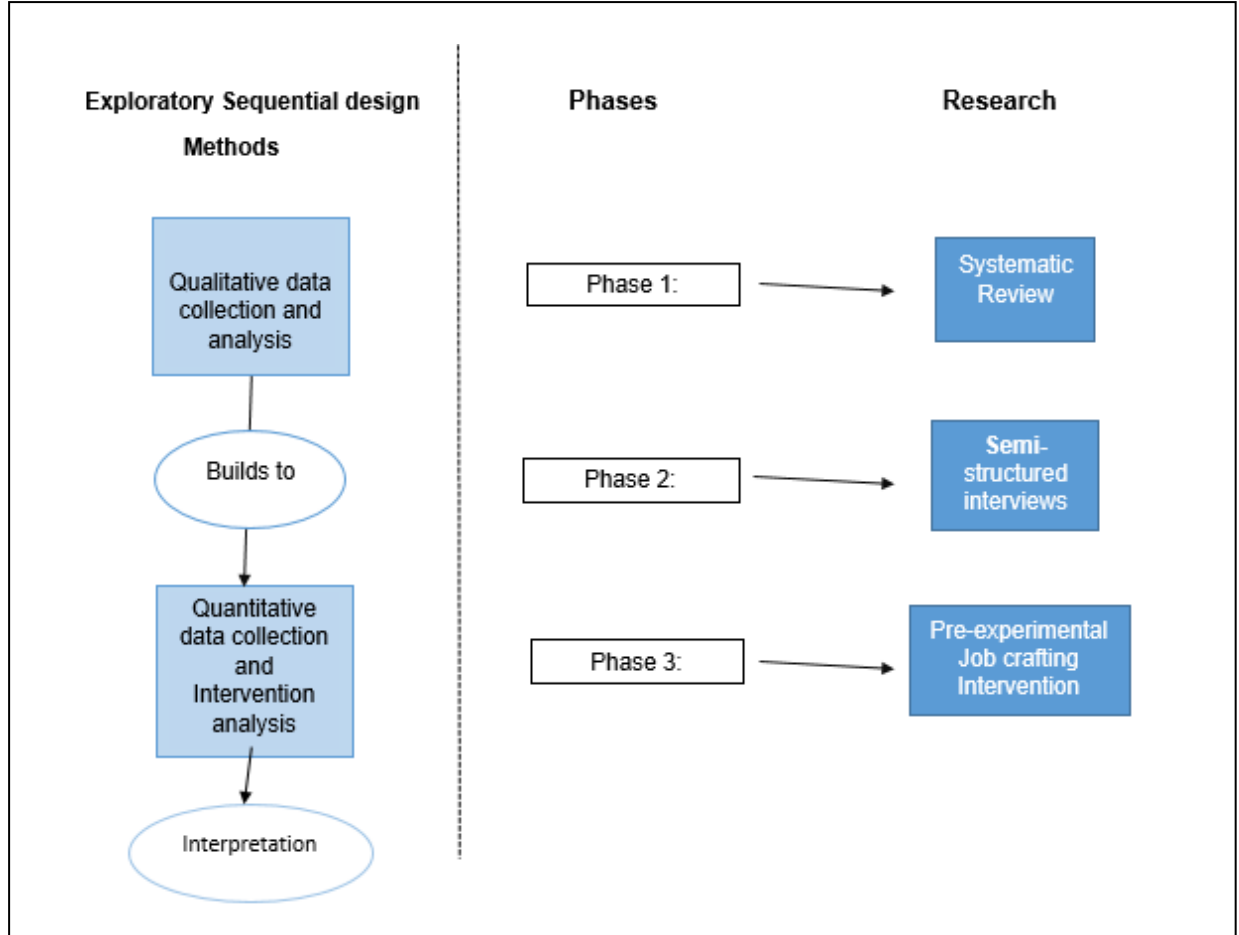
Figure 2.1: Sequential phases of the study

2.2.5 Abduction: Connection of theory and data

The process where the quantitative and qualitative methods are combined sequentially is known as the abduction process; the inductive findings from a qualitative approach could be used for the deductive results from a quantitative approach. No restrictions are established on the mixture of methods in a lone study as part of theory and data movement back and forth. Morgan (2007, p.71) further

indicates that the pragmatic approach centres on abduction reasoning and moves "back and forth between induction and deduction".

The current study employed diverse methods, such as a qualitative phase comprising a systematic review, semi-structured interviews, and mixed-method pre-experimental intervention with a quantitative questionnaire. These diverse methods improved using abduction reasoning and moving back and forth throughout the study processes. Phase 1, Phase 2, and Phase 3 of the study findings were organised using tables/matrices to inform the guidelines' design and development to assimilate job demands and resources among academic employees within HEIs. In this study, deductive reasoning was employed to link the results from the phases. Data were used, collected from Phases 1 and 2 of the study, to make deductions to construct a questionnaire for the pre and post-test used in the final phase (Chapter 7 presents an integrated summary of findings).

2.3 Section B: The context of the current study

This section describes the context of the current study based on the research setting, study population, and sampling.

2.3.1 Research setting

The research setting for the second and last phase of the current study was conducted at a public university in the Western Cape, South Africa. The institution has historically been categorized as a disadvantaged institution. It has been at the forefront of South Africa's historic change, playing a unique academic role in creating an equitable and dynamic nation.

The university is now—more than ever challenged to demonstrate that it can compete with the best. It plays a vital role in the intellectual, social, and economic life of the nation. The institution hosts seven academic faculties, including Faculties

of Arts and Humanities, Community and Health Sciences, Dentistry, Education, Economic and Management Sciences, Law, and Natural Sciences.

2.3.2 Population and sampling

The study population refers to all the individuals confirming a set of specifications, comprising the entire group with people of interest to the researcher (Hanlon & Larget, 2011; Polit & Hungler, 1999). Brown (2006) defined the population as the entire group of people forming the study's focus. The sampling method is regarded as "the process of selecting and recruiting a group of people, events, behaviour or other elements that represent the population being studied" (Burns & Grove, 2009, p.349). The following section presents the study population and sampling methods used in the various stages of the research.

A nonprobability sampling design was adopted through a purposive sampling technique to identify the study participants for the second and last phase of the study. The population targeted in this study is academic employees. Academics with the following rank were considered, such as senior professor, professor, associate professor, senior lecturer, lecturer, and assistant lecturer.

For this study, academics are called staff employed at a university to teach, research, and conduct community engagement (Mogaji, 2021). Academics are also called faculty and staff in other countries; lecturers are also called professors. These job titles are, therefore, specific to the South African HE context.

2.4   Data collection

The main data collection techniques employed in this study were the systematic literature review, semi-structured interviews, pre- and post-measurement questionnaires, and focus groups.

Data collection began after ethical clearance was obtained from the relevant research ethics committees from the HEI, Ethics reference number (HS19/6/11, attached as Appendix 6: PowerPoint presentation (Job creation focus group)). Participants were also requested to complete an informed consent form. For Phase 2 (Section 2.6.2) of the study, a consent form was provided to gain permission to conduct and record the interviews and another form for Phase 3 (Section 2.6.3), which was to obtain permission to have academics participate in the electronic survey and focus groups. This included consent to record focus group sessions for job crafting interventions. An information sheet was provided to participants to ensure clarity about the constructs to be measured throughout the study.

The second form of data collection occurred by interviewing; this was conducted using an online platform owing to COVID-19 social distancing restrictions. The final data phase involved focus groups and online questionnaires; once again, an online platform was used to ensure social distancing.

2.4.1   Interviews

Interviews are methods of collecting information through oral quizzes using a set of pre-planned core questions. According to (Shneiderman & Plaisant, 2005), interviews can be productive since the interviewer can pursue specific issues of concern that may lead to focused and constructive suggestions. The major advantages of the interview method of data collection are (Genise, 2002; Shneiderman & Plaisant, 2005):

- Direct contact with the users often leads to specific, constructive ideas
- Interviews are adequate for obtaining detailed material
- Fewer participants are required to collect rich and detailed data

Contingent on the need and design, interviews can be unstructured, structured, and semi-structured with individuals, or may be focus group interviews. Semi-structured and focus group interviews were conducted in the study phases, and further deliberated on:

- Semi-structured interviews

This method uses open-and-closed questions; therefore, the interview has aspects of structured and unstructured interviews, with the benefit of both methods. To ensure consistency among participants, the interviewer has a set of pre-planned core questions for guidance, therefore, ensuring the same aspects are covered with each interviewee. As the interview progresses, the interviewee is allowed a chance to provide further detail or more significant information if they opt to do so. The twenty-three participants interviewed in Phase 2 of this study were interviewed using a semi-structured interview approach, best suited to explore the subjective experiences of participants in depth, providing a structure for the conversation with a focus on the interview purpose.

- Focus group interviews

Focus group interviews are less structured, in parallel to the three categories of interviews discussed above. A reason for this is the difficulty in bringing structure to a group; however, rich data can transpire through interaction within the group. For example, sensitive matters that could have been overlooked in individual interviews may be discovered. In a group, people cultivate and express ideas they would not have thought about on their own (Rana & Muhammed, 2013). This interview is

normally conducted after a sequence of individual interviews, further discovering the general nature of the explanations from various individuals (Shneiderman & Plaisant, 2005). Denscombe (2007) recommends membership of an ideal focus group to range from six to nine subjects. This method was used in Phase 3 of the study, where a total of *n=9* participants contributed to the study. There were 3 focus group sessions, where there were at least 3 participants present for the session. It was the most suitable, allowing the researcher to determine the qualitative experiences of participants in the pre-experimental job crafting intervention.

2.4.2 Questionnaires

Questionnaires have the advantage of a wider audience compared to interviews; conversely, it has the disadvantage of not being able to customise it to individuals, possible with other methods of data collection. As part of the pre and post-test for the pre-experimental job crafting intervention, a final sample size of nine academic employees was chosen, and the questionnaire was distributed. In this study, seven instruments were used. These measurement instruments are discussed in the next section (2.5.3).

2.4.3 Measurement scales: quantitative analysis

To identify a significant difference between the pre-test and post-test scores of the intervention, paired sample t-tests were conducted. An instrument had to measure each job demand and resource variable identified by academics within the first and second phases of the study. The measurement instrument operationalised each variable. The instruments used to measure these identifiable variables, therefore, had to comprise psychometric properties, providing valid and reliable results. The measurement instruments used include;

- Autonomy and meaningful work dimensions from the flourishing-at-work scale short form (FAWS-SF) (Rautenbach & Rothmann, 2017)

- Perceived organisational support (Eisenberger, Huntington, Hutchison & Sowa, 1986)
- Workload (Dhanpat; Geldenhuys; De Braine & Geldenhuys,2019)
- Online teaching and learning (Dhanpat et al., 2019)
- Survey work-home interaction (SWING) (Geurts et al., 1995)
- Publication pressure questionnaire (PPQr)(Haven et al., 2018)

2.4.3.1   The flourishing-at-work scale short form

Rautenbach (2015) developed and validated the flourishing-at-work scale (FAWS-SF). The FAWS-SF comprises 17 items. These were chosen as the most archetypal elements expressive of the construct definition of each of the three dimensions of well-being at work, indicating emotional, psychological, and social well-being. For this study, only two dimensions from the FAWS-SF were employed, indicating Autonomy and Meaningful work.

2.4.3.2   Autonomy

The need for autonomy refers to the experience of having choices and freedom when work activities are conducted (Deci & Ryan, 2011). An example of this would be "I feel confident to think or express my own ideas and opinions?".

2.4.3.3   Meaningful work

Meaningfulness refers to the significance of work to people where they experience their jobs as valuable and worthwhile (Rosso et al., 2010; Steger et al., 2012; Barrick et al., 2013). An example of this is "I feel that my work is meaningful?" The scale measured how frequently participants experienced certain phenomena at work by recording their responses on a six-point scale ranging from 1 (never) to 6 (every day).

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The FAWS-SF has been valid and reliable (>0.70) in the South African context (Rautenbach & Rothmann, 2017). The reliability coefficients of all the scales were acceptable ($\rho \geq 0.70$). Scale reliabilities were ranging from 0.75 to 0.95, indicating acceptable internal consistency (Rautenbach, 2015; Raykov, 2009). Redelinghuys and Rothmann (2020) explored the prevalence of workplace flourishing, indicating that all the reliability coefficients also comfortably exceeded the acceptable reliability threshold (>0.70) (Nunnally & Bernstein, 1994). In the present study, reliability coefficients for the three dimensions ranged above.759, indicating a sufficient reliability level.

Various scales were used to measure job demands. This study aimed to proceed further than evaluating academic staff experience of work overload but also included the various types of demand.

2.4.3.4   Workload

Dhanpat et al. (2019) developed a workload scale. The dimension 'overburdened with a load' was measured by using seven items on a seven-point response scale ranging from 1 = strongly disagree to 7 = strongly agree, and 1 = never to 7 = always. An example of an item in this dimension is 'I work under time pressure'. The items on workload previously indicated an acceptable Cronbach alpha of 0.76, and the workload dimension scored an acceptable alpha of 0.82 (Dhanpat et al., 2019).

2.4.3.5   Online teaching and learning

The online teaching and learning questionnaire by Dhanpat et al. (2019) features the altering nature of teaching and was used to measure technology-mediated learning approaches. It is, therefore, intended to measure the movement of blended learning and online education. Understanding how this evolved the way teaching/learning ensued with technology, producing undue strain on academics (Dhanpat et al., 2019).

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Five items in a seven-response format measured online teaching and learning, ranging from 1 = strongly disagree to 7 = strongly agree. An example of an item on this dimension is 'The drive towards online teaching and learning in my department is progressing well'.

Dhanpat et al. (2019) established no significant factor loadings for online learning and teaching as part of their HE hindrance demand scale. They explain this may have been because online learning and teaching lacked presence in the institution; however, owing to the online learning caused by the COVID-19 pandemic, online learning and teaching have become a new norm and, therefore, imperative to include in the study.

2.4.3.6   Survey work-home Interaction (SWING)

The Survey of Work-home Interaction (*Nijmegen or SWING) developed by Geurts et al. (1995) measured the demands of work-home responsibilities in the present study. SWING differentiates between the direction of influence (for example, the influence from work on private life, and conversely) and the influence quality (for example, negative versus positive influence). This questionnaire comprised 27 items. In this study, only the first 15 items, investigating negative work-home interaction, were used. The negative load reactions developed at work hamper functioning at home (Questions 1-9), negative home-work interference, and negative load reactions developed at home hamper functioning at work (Questions 10-15) are most relevant to the study. An example of this is "you find it difficult to fulfil your domestic obligations because you are constantly thinking about your work". The responses are presented on a four-point scale (range: 0 = never to 3 = always).

In South Africa, the construct equivalence of the English version of the SWING was confirmed for two language groups in the earthmoving equipment industry (N = 326, Pieterse & Mostert, 2005) and two language and ethnic groups in the mining industry

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(N = 320, Pieterse & Mostert, 2005). These studies identified acceptable reliabilities (Cronbach's alpha) for the scale of the SWING. For NWHI, Cronbach's alpha varied from 0.85 to 0.90 across these three studies, and for PWHI, alpha varied from 0.78 to 0.79. These studies provided beneficially, yet still, preliminary, evidence that the English version of the SWING works well in the South African context; no such information is available for other versions of the SWING.

2.4.3.7 *Perceived organisational support*

The survey of perceived organisational support (SPOS) was developed by Eisenberger, Huntington, Hutchison and Sowa (1986). SPOS is a one-dimensional measure of the general belief held by an employee that the organisation is committed to them, values their continued membership, and is concerned about their well-being. The SPOS refers to the employer's perception of how valuable their employee is. An organisation is a place of socioemotional resources. Respect, care, wages and medical benefits are all part of an employee. This includes tangible benefits, such as wages and medical benefits. The POS was assessed on a seven-point agreement scale (1 = strongly disagree, 7 = strongly agree).

The 8-item scale follows the recommendation of Rhoades and Eisenberger (2002, p. 699) that "because the original scale is unidimensional and has high internal reliability, using shorter versions does not appear problematic". Although Eisenberger et al. (1986) do not refer to an 8-item version of the instrument, information about assessing POS available on Eisenberger's website requests that the 1986 article be referenced if the 8-item version is used. An example item was 'My organisation really cares about my well-being'. The internal consistency reliability (coefficient alpha) for the three-item measure was reported as $\alpha = 0.75$ (Eisenberger et al., 2002).

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2.4.3.8   Publication pressure questionnaire (PPQr)

The PPQr developed by Haven, De Goede, Tijdink and Oort (2019) is used to study publication pressure among academic researchers from all disciplinary fields and academic ranks. This enables researchers to investigate the relationship between publication pressure and work stressors.

The PPQr is a valid and reliable instrument to measure publication pressure, comprising three subscales, scored on a 5-point Likert scale ('Totally agree' = 5, 'Totally disagree' =1). For this study, an adapted version of the questionnaire was used. Only two subscales were the third subscale "publication resources" was not focused on the demands aspect that academics experienced but, on the resources, needed—not what was needed to be measured in the study.

Concerning the publication stress, the subscale (6 items) indicated a Cronbach's α =.804. This subscale considers the stress a researcher experiences owing to the feeling they must publish. It includes items, such as "I feel forced to spend time on my publications outside office hours". The second subscale publication attitude (6 items) indicated a Cronbach's α =.777. This reflects a researcher's attitude towards publication pressure, for example: "Publication pressure harms science".

2.5   Description of the phases of the study

The proposed study progression was conducted in phases. The first part was to systematically review empirical literature providing clarity on the job demands and resources inherent to the academic occupation (Section 2.6.1). The next phase was to use qualitative methods of analysis to help understand the academics' job demands and resources (Section 2.6.2). The last segment was aimed at testing whether a pre-experimental job crafting intervention influenced the job demands and resources of academic employees in an HEI.

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2.5.1 Phase 1: Qualitative data collection and analysis (systematic review)

This phase involved a literature review. The review was conducted during May to December 2019. A systematic review identified published literature on job demands and resources within the HE sector. This was done to identify the types of job demands and resources as experienced by academic employees. A systematic review uses a clear algorithm, as opposed to a heuristic, to achieve a search and critical appraisal of the literature (Arksey & O'Malley, 2005).

2.5.1.1   Eligibility criteria

Studies were included if the desired criteria were satisfied, such as a focus on job demands and resources of academics, using the JD-R model as a theoretical framework. Studies that included academics as the target audience were sought and the period 2014 to 2019 was considered. This period was chosen to reflect the recency of job demands and resources within the HE context. The British Council report on Higher Education (2012) estimated a 1.4% growth in global Higher Education enrolments between the period of 2011 and 2020; thus numerous changes between 2014 − 2019 are estimated ("Higher education global trends and emerging opportunities to 2020", 2012). Within the South African context the period from 2014 was characterised by student protest actions that resulted in mental and emotional demands for academics (Du Plessis, 2020). The systematic review excluded non-English studies based on the financial implications and time it would take to have the articles translated. Studies excluded in the subscribed or open access databases of the researchers' library access were disregarded for systematic review. International and national studies of qualitative, quantitative, and mixed methodology designs were included in the review. It was observed that this could reduce the body of knowledge for the study and, therefore, could affect the study and the findings.

Seven databases were used *Science Direct, Scopus, SAGE, Sabinet, EBSCOhost, Emerald Insight and Wiley* online for their relevance to the topic. These databases were systematically searched by two reviewers in November 2019. The following keywords were used in the current study: 'Job demands, Job resources, higher education, university, college, academic staff'. Strings of keywords were created using the Boolean operator 'AND' and were entered into 'All fields' in the respective database.

2.5.1.2   Sample population

The target population considered for this study had to include academic staff employed at HEIs.

2.5.1.3   Methodological assessment and appraisal

To assess the methodological quality of the potential articles, the PRISMA critical appraisal tool was utilised. The PRISMA critical appraisal tool consists of four dimensions (1) Identification; (2) Screening; (3) Eligibility; and (4) Included (Moher, Liberati, Tetzlaff, Altman, 2009).

The PRISMA appraisal tool was rated using a dichotomous scale of 'yes' (1) or 'no' (0), resulting in a composite score indicating the methodological quality and intervention reporting. Articles scoring less than 70% were omitted, demonstrating that they were poorly developed or executed.

The methodological quality was assessed using the methodological quality appraisal method, adapted from Roman and Frantz (2013). Six categories were used to appraise the sampling methods, such as (1) sampling method, (2) response rate, (3) validity and reliability of the measuring device, (4) data source, (5) definitions of the variables and, (6) exploring these variables in the HE sector.

2.5.2 Phase 2: Qualitative data collection and analysis (semi-structured interviews)

Regarding a qualitative study, significant aspects need to be deliberated, such as the study topic, information quality required, and the study design. This assists the researcher in establishing an appropriate sample size (Morse, 2000).

Sandelowski (1995) advises that an adequate sample size in qualitative research allows for a deep, case-oriented examination, a guarantee of all qualitative inquiry, and in this case, a novel and richly textured understanding of experience. Twenty-three semi-structured interviews were conducted with academic employees during March to July 2020 (Interview guide – Appendix 4: Participant Information sheet (job crafting intervention)). Purposive sampling was used to identify individuals, such as academic employees, for the study.

An interpretative phenomenological analysis approach was employed to analyse the data. The present study followed the steps for analysing IPA data recommended by Smith and Osborn (2008).

First, each transcript was perused and reread closely, with the left-hand margin being used to annotate what was interesting or significant about the respondent's comments. When the entire transcript was annotated, the researcher returned to the beginning of the transcript and documented emerging theme titles. Here, the initial notes were transformed into concise phrases, aiming to capture the essential quality of what was established in the text. The themes moved the response to a slightly higher level of abstraction and invoked more psychological terminology. This transformation of initial notes into themes was continued through the complete transcript with the same theme title used when similar themes emerged. The next stage involved a more analytical and theoretical ordering as some themes were

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clustered while others emerged as superordinate concepts. Finally, a summary table comprising coherently ordered themes was produced for the individual interview.

Insights were produced because of intensive and detailed engagement with individual cases, only integrated with the later stages of analysis, consistent with the idiographic approach of IPA (Willig, 2008). At this stage, repeating patterns were discerned while additional issues emerging through the transcripts were acknowledged. Recognising the ways accounts from participants were similar, but also different (Smith & Osborn, 2008). Summary tables for individual interviews were integrated into an inclusive list of master themes to reflect the experiences of the group and obtain a more generalised understanding of the phenomenon (Willig, 2008).

2.5.2.1 Trustworthiness in the qualitative phase

Four measures are used to appraise the trustworthiness of the results obtained by qualitative studies to establish its scientific rigour. These criteria are credibility, dependability, transferability and confirmability (Guba, 1981).

2.5.2.1.1 Credibility

The credibility of qualitative studies refers to how much the results are truthful (Holloway & Wheeler, 2002). It determines whether the results accurately reflect participants' experiences with the phenomenon of interest (Graneheim & Lundman, 2004). Numerous strategies can institute the credibility of the results acquired. These strategies include member-checking, triangulation, peer debriefing, persistent observation, prolonged and varied engagement in the field, and reflexivity (Anney, 2014).

The study used reflexivity, peer debriefing, and member-checking to enhance the credibility of the results acquired during the qualitative phase (i.e., Parts 1 and 2) of

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the study. The researchers engaged in regular self-reflection. By exploring her responses and experiences, she categorised and recognised any biases that may sway her skill to be unbiased and non-judgemental in her actions and observations. The researcher discussed the outcomes of the qualitative phase with her supervisor to examine her growing insights while exposing herself to searching for questions. Last, she presented the findings obtained during Part 1 of the qualitative phase to participants before commencing with Part 2. This allowed her to conclude whether participants could recognise and associate with the results.

2.5.2.1.2 Transferability

The transferability of qualitative studies represents how much the results obtained can be transferred to other environments with other participants (Bitsch, 2005). The transferability of the outcomes acquired can be recognised through purposive sampling and the delivery of a detailed description of the research context and process (Anney, 2014).

Purposive sampling was used to increase the transferability of the results attained throughout the qualitative phase (i.e., Parts 1 and 2) of the study. Participants were selected as they provided an insider outlook on matters of vital significance to the research challenge and its objectives. The researchers also provided a comprehensive narrative of the research context and process. This promises to help to impend researchers appraise the applicability and transferability of the results attained to context with other participants.

2.5.2.1.3 Dependability

The dependability of qualitative studies refers to the level at which the results acquired are reliable. Bitsch (2005, p. 86) defines it as "the stability of findings over time". The dependability of the results obtained can be established with an audit trail, code-recode strategy, stepwise replication, triangulation, and peer examination

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(Anney, 2014). The criteria for dependability cannot be met without establishing credibility (Lincoln & Guba, 1985).

An audit trial and peer examination enhanced the dependability of the results obtained during the qualitative phase (Phases 1 and 2) of the study. First, an audit trail was created of each successive procedural step in the qualitative phase and its results. This enabled the supervisors of the study to examine the data and interpretations to determine whether it was internally coherent. Second, the research process and the results were discussed with neutral university colleagues and at conferences. These colleagues were familiar with qualitative research methodologies.

2.5.2.1.4 Confirmability

The confirmability of qualitative studies denotes the extent to which other researchers can confirm or corroborate the results (Baxter & Eyles, 1997). Several strategies can establish the confirmability of the results. These strategies include an audit trail, triangulation, and reflexive journal (Anney, 2014).

2.5.3 Phase 3: Quantitative data collection and analysis (pre and post-test)

Quantitative research centres on quantification in collecting and analysing data (Bryman, 2016). It centres on numeric values, obtained through statistical reporting, such as correlations, comparisons of means, and the statistical significance of findings (Sekaran, 2010).

Once Phase two was completed the next step was to administer the pre- and post-test questionnaire to a sample of nine academic employees. Data were collected through electronically distributed questionnaires. The questionnaire was constructed from existing measures of job demands and resource questionnaires; however, the questionnaire was tailored based on the specific JD and JR dimensions identified in

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Phase two.

Reliability analyses on six scales comprised coefficient alpha, item-total correlations and inter-item correlation analysis, ensuring the items consistently reflect the construct measured by each scale (Field, 2009). The Cronbach alpha coefficient reflects the average item correlation within a scale; acceptable values of internal consistency range from.7 to.8 (Field, 2009; Nunnally, 1978). (Each scale was considered against a Cronbach's alpha value of.7 and inter-item correlations of.3 and above (Hair et al., 2006; Tabachnick, Fidell & Ullman, 2007).

The raw data from the questionnaire was imported from the Google survey into a Microsoft Office Excel spreadsheet. Each participant's survey response was assigned a random identity from Number 1 to Number 9. Columns and rows were removed, and only the question numbers (each relating to an individual item/indicator) appeared in the header row. Before exporting the data SPSS Version 28 (Corp IBM, 2019), the terms used in the Likert scales had to be recoded and the Recoding of reverse-scored items was conducted in SPSS.

2.6   Qualitative data collection and analysis (focus group discussions)

Concerning the intervention itself, it was modelled on the study of Van den Heuvel, et al. (2015). The reason for choosing this job crafting intervention is its congruence with the JD-R model, and, therefore, striving to compel participant employees mindful of the model's three main strategies for altering job demands and resources (i.e., increasing resources, increasing challenging job demands, and decreasing hindering job demands). Based on this, the intervention comprised a training workshop, a personal crafting plan, and a reflection exercise, over four weeks (Figure 2.2).

Phase 1	Phase 2	Phase 3
Pre Week 1 – Consent Form & online questionnaire (Pre-test)	**Intervention** Week 2 & 3 - Training workshop & personal crafting plan	**Post** Week 4 – Online questionnaire (Post-test), training workshop and reflection exercise
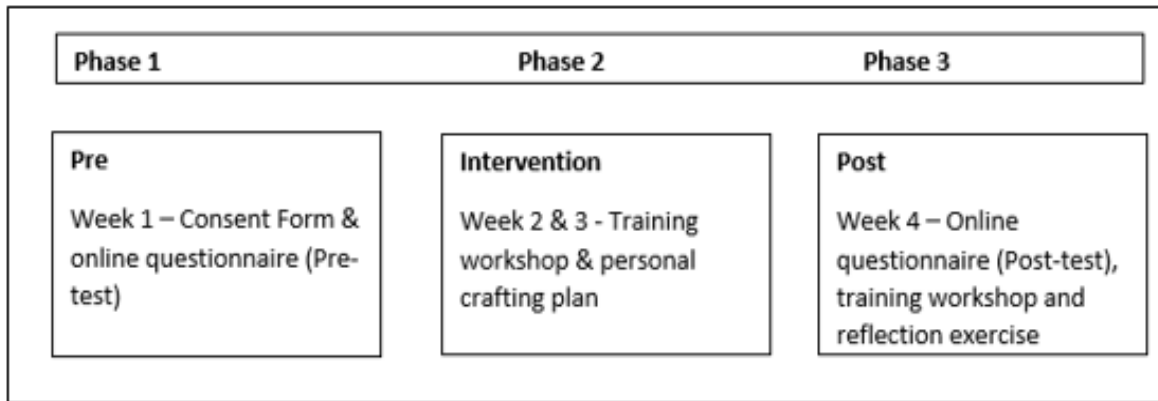
Figure 2.2: Overview of the job crafting intervention

The suggested intervention started with a 2-hour online training session between November and December 2021. Owing to COVID-19 restrictions and following social distance rules, this was the most appropriate method, as opposed to a face-to-face training session. Three training workshops was presented to a group of three academic employees. A presentation format was executed (Appendix 5: Online questionnaire (pre and post-test- job crafting intervention)) and subsequent focus group discussions and exercises. The presentation commenced with a conversation on work engagement and what it means for an individual to be engaged with their work.

The JD-R model was clarified before explanations of (a) what job crafting means, (b) success stories of past job crafting behaviours, and (c) case study examples. At the close of the presentation, academics were divided into groups of three. Each participant was requested to write their job demands, job resources accessible to them, how they could reduce the former and increase the latter, and how they could use increased resources to further reduce demands. Each group of three presented what they had written to the larger group. A debate was invited around the identified issues and challenges.

Afterwards, academics were requested to discuss concerns they could alter in their work to increase social job resources, structural job resources, and challenging job demands. The objective of this goal-setting exercise was to motivate participants to (a) proactively optimise their job demands and resources, (b) gain an understanding of how job crafting can apply to any job, and (c) reflect on their work performance.

The reflection exercise was conducted three weeks after the training workshop. This exercise occurred within the context of three focus group sessions—each featuring three academic employees. During these online group discussions, reflection on challenges the academics encountered in attempting to achieve their job crafting goals was directed. Questions about what had worked well during the intervention phase, and whether they were successful in achieving their goals, were discussed. Academics were encouraged to answer four questions as part of the post-test to evaluate their experience of the job crafting intervention. These four questions were based on the Kirkpatrick evaluation model, where the four aspects to consider are: reaction, learning, behaviour, and results (Cahapay, 2021). The questions were adapted slightly to meet the needs of the intervention.

The questions were as follows:

- What was your experience with the intervention?
- In your own words, what did you learn from the intervention?
- How has the intervention changed your behaviour?
- How have the changes you made influenced or changed your department?

The purpose of the suggested intervention was to determine if job crafting influenced the job demands and resources of academic employees in an HEI. The intervention was launched at an individual level (i.e., it was provided to employees), based on the JD-R theoretical framework (i.e., it aimed to improve the balance between job demands, job resources, and personal resources.).

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Paired sample t-tests were conducted to compare the differences between pre- and post-test scores on the measurement instruments, besides calculating descriptive statistics. The confidence interval level for statistical significance was set at 95% ($p \leq 0.05$). The information from the focus group discussions was transcribed using thematic analysis. Specific themes identified patterns from the information obtained in the focus group discussions. This was categorised according to the topic.

The purpose of these reflection discussions and the intervention was to allow academics to alter their job features and inter-connections to increase their job resources and challenges at work.

2.7 Section C: Ethics procedures and conclusion

2.7.1 Ethics statement

According to Creswell (2014), ethical deliberations exist during each phase of the research process, starting at the onset of conducting the study while collecting data, through the analysis phase of the data and during data reporting, sharing, and storing. Ethical deliberations formed a critical part of the study, such as during engagements with participants, in preparation, and during and after implementing the research project.

After commencing with the study, ethical clearance was sought from and granted by the Ethics Research Committee of the Senate and Council at the University of the Western Cape in 2019. Ethics Clearance Registration (REC Number: HS19/6/11) (Appendix 6: PowerPoint presentation (Job crafting focus group)). Approval from the deputy registrar of the institution was obtained to collect primary data from employees at the university.

The Ethical Code of Professional Conduct (2004) of the Health Professions Council of South Africa (HPCSA) was also considered during this process. According to

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Babbie and Mouton (2002), common ethical issues must be considered during the research process—further discussed below:

Participants were provided with an adequate understanding of the project goals and procedures. Participants were, therefore, provided with information sheets and consent forms. While participants indicated their willingness to proceed, consent was confirmed and clarification was provided at the commencement of each data collection phase. This confirmed that their participation was voluntary and that they could withdraw from the process at any stage without negative consequences. Participants were guaranteed the right to anonymity and confidentiality. Participants were informed of the potential risks of the study and were assured no harm because of their participation, physical or psychological. The researcher and research supervisors' contact details were provided to discuss any matter relating to the research process. The study limitations should be acknowledged; however, findings will be conveyed fully, with no distortion of any results.

One of the normally unforeseen concerns relating to ethical issues is cultural sensitivity. Silverman (2000) maintains that the relationship between the researcher and the subject in an interview needs to be deliberated concerning the values of the researcher and cultural aspects.

No identifiable information about individuals or organisations was made known to anyone, resulting in identifying participants, either in this report, academic presentations, or academic publications.

2.8   Summary

This chapter presents mixed methods as the research methodology, supported by a pragmatic worldview. Correspondingly, Phase 2 and Phase 3 were conducted. The explanation of the research design, the context of the research, study population and sampling, data collection methods, data analysis, and trustworthiness of the study

are provided. Ethical considerations are included. The theoretical history underlying the job demands and resources framework follows (Chapter 3). Job demand and resources concerning the HE sector are also being reviewed.

References

Anney, V. N. (2014). Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies* (JETERAPS), *5*(2), 272-281. https://www.scirp.org/%28S%28351jmbntvnsjt1aadkposzje%29%29/reference/referencespapers.aspx?referenceid=3077301

Arksey, H. & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology, 8*(1), 19-32. https://doi.org/10.1080/1364557032000119616

Babbie, E. & Mouton, J. (2002). *The practice of social study*. Cape Town: Oxford University Press.

Babbie, E. & Mouton, J. (2010). *The practice of social research*. Cape Town: Oxford University Press.

Babbie, E. (2010). *The practice of social research*. London: Wadsworth Cengage Learning.

Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of purposeful work behavior: The role of personality, job characteristics, and experienced meaningfulness. *Academy of Management Review, 38*(1), 132-153. https://dx.doi.org/10.5465/amr.2010.0479

Baxter, J. & Eyles, J. (1997). Evaluating qualitative research in social geography: Establishing "rigour" in interview analysis. *Transactions of the Institute of British Geographers, 22*(4), 505-525. https://doi.org/10.1111/j.0020-2754.1997.00505.x

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Bitsch, V. (2005). Qualitative research: A grounded theory example and evaluation criteria. *Journal of Agribusiness,* 23(1), 75-91. https://doi.org/10.22004/ag.econ.59612

Brown, J. D. (2006). *Generalisability from second language research samples*. Shiken: JALT Testing & Evaluation SIG Newsletter, 10(2), 21 – 24. https://hosted.jalt.org/test/PDF/Brown24.pdf

Bryman, A. (2016). *Social Research Methods*. (5th Ed.). New York: Oxford University Press.

Burns, N. & Grove, S. K. (2007). *Understanding nursing research: Building an evidence-based practice* (4th Ed.). Philadelphia, PA: Saunders Company.

Burns, N. & Grove, S. K. (2009). *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. St. Louis, MO: Saunders Elsevier.

Cahapay, M. (2021). Kirkpatrick model: Its limitations as used in higher education evaluation. *International Journal of Assessment Tools in Education*, 8(1), 135-144. https://doi.org/10.21449/ijate.856143

Corp IBM. Released (2019). IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp.

Creswell, J. W. (2015). *A concise introduction to mixed methods research.* Thousand Oaks, CA: SAGE.

Deci, E. L. & Ryan, R. M. (2011). Levels of analysis: Regnant causes of behavior and well-being: The role of psychological needs. *Psychological Inquiry, 22*, 17–22. https://doi.org/10.1080/1047840X.2011.545978

Denscombe, M. (2007). *The good research guide for small-scale social research projects*. (3rd ed.). New York: McGraw-Hill.

Denzin, N. K. & Lincoln, Y. S. (2005) (Eds). *The SAGE Handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: SAGE.

Dhanpat, N., Geldenhuys, M., & De Braine, R. (2019). Preliminary development of the Higher Education Hindrance Demands Scale amongst academics in the South African context. *SA Journal of Industrial Psychology, 45*(1), 1-12. https://hdl.handle.net/10520/EJC-1720168513

Du Plessis, M. (2020). Model of coping with occupational stress of academics in a South African higher education institution. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 46*(0), a1714. https://doi.org/10.4102/sajip.v46i0.1714

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied psychology, 71*(3), 500. https://doi.org/10.1037/0021-9010.71.3.500

Field, A. P. (2009). *Discovering statistics using SPSS*. London: SAGE Publications.

Genise, P. (2002). *Usability Evaluation: Methods and Techniques*. Available from, http://www.cs.utexas.edu/users/almstrum/cs370/elvisino/usaEval.htmGenise ,2002: [Accessed 15 September 2014].

Geurts, S. A., Taris, T. W., Kompier, M. A., Dikkers, J. S., Van Hooff, M. L., & Kinnunen, U. M. (2005). Work-home interaction from a work psychological perspective: Development and validation of a new questionnaire, the SWING. *Work & Stress, 19*(4), 319-339. https://doi.org/10.1111/1475-6773.12117

Graneheim, U. H. & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today, 24*(2), 105-112. https://doi.org/10.1016/j.nedt.2003.10.001

Guba, E. G. & Lincoln, T. S. (2005). *Paradigmatic controversies, contradictions, and emerging confluences*. In N.K. Denzin & Y.S. Lincoln (Eds.), The SAGE Handbook of qualitative research (pp. 191-215). (3rd ed.). Thousand Oaks, CA: SAGE.

Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development, 29*(2), 75-91. https://doi.org/10.1007/BF02766777

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Hanlon, B. & Larget, B. (2011). *Samples and Populations*, Article: Department of Statistics, University of Wisconsin Madison, September, pp. 1-21.

Haven, T. L., De Goede, M. E. E., Tijdink, J. K., & Oort, F. J. (2019). Personally perceived publication pressure: revising the Publication Pressure Questionnaire (PPQ) by using work stress models. *Research integrity and peer review, 4*(1), 1-9. https://doi.org/10.1186/s41073-019-0066-6

Holloway, I. & Wheeler, S. (2002). *Qualitative research in nursing*. Blackwell Science, Oxford.

Johnson, R. B. & Onwuegnuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26. https://doi.org/10.3102/0013189X033007014

Klenk, K. (2008). *Qualitative research in the study of leadership*. United Kingdom: Emerald Group Publishing Limited.

Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. New York: The GUILFORD Press.

Lincoln, Y. S. & Guba, E. G. (eds) (1985). *Naturalistic Inquiry*. Thousand Oaks: SAGE.

Mogaji, E. (2021). Academic staff using university website profile page for academic digital branding. *In Improving university reputation through academic digital branding* (pp. 30-46). IGI Global. DOI: 10.4018/978-1-7998-4930-8.ch003

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group*. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of internal medicine, 151*(4), 264-269. https://doi.org/10.7326/0003-4819-151-4-200908180-00135

Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*(1), 48-76. https://doi.org/10.1177/2345678906292462

Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative inquiry, 20*(8), 1045-1053. https://doi.org/10.1177/1077800413513733

62

Morse, J. M. (2000). Determining sample size. *Qualitative Health Research, 10*, 3–5. SAGE Publications, Inc

Nunnally, J. (1978). *Psychometric methods*. New York, NY: McGraw-Hill.

Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric theory (*3rd ed.). New York: McGraw-Hill.

Pieterse, M. & Mostert, K. (2005). Measuring the work-home interface: Validation of the Survey Work-Home Interaction — (SWING) Instrument. *Management Dynamics, 14*, 2-15.

Polit, D. F. & Hungler, B. P. (1999). *Nursing research: Principles and methods*. (6th ed.). Philadelphia: JB Lippincott.

Rana, M. D. & Muhammed, I. J. (2013). Focus Group Interview as a Tool for Qualitative Research: An Analysis. *Pakistan Journal of Social Sciences (PJSS), 33*(1), 191-198.

Rautenbach, C. & Rothmann, S. (2017). Psychometric validation of the Flourishing-at-Work Scale–Short Form (FWS-SF): Results and implications of a South African study. *Journal of Psychology in Africa*, 27(4), 303-309. https://doi.org/10.1080/14330237.2017.1347748

Raykov, T. (2009). Interval estimation of revision effect on scale reliability via covariance structure analysis. *Structural Equation Modeling, 16*(3), 539–555. https://doi. org/10.1080/10705510903008337

Redelinghuys, K. & Rothmann, S. (2020). Exploring the prevalence of workplace flourishing amongst teachers over time. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 46*(0), a1764. https://doi.org/10.4102/sajip.v46i0.1764

63

Rhoades, L. & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of applied psychology, 87*(4), 698. https://doi.org/10.3200/SOCP.149.1.119-124

Roman, N. V. & Frantz, J. M. (2013). The prevalence of intimate partner violence in the family: a systematic review of the implications for adolescents in Africa. *Family practice, 30*(3), 256-265. https://doi.org/10.1093/fampra/cms084

Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in organizational behavior, 30*, 91-127. https://doi.org/10.1016/j.riob.2010.09.001

Sandelowski, M. (1995). Sample size in qualitative research. *Research in nursing and health, 18*(2), 179-183. doi: https://doi.org/10.1002/nur.4770180211.

Sekaran, U. (2010). *Research Method for Business: A skill Building Approach*. (4th Ed.). New York: John Wiley & Sons.

Sharp, J. L., Mobley, C., Hammond, C., Withington, C., Drew, S., Stringfield, S., & Stipanovic, N. (2011). A mixed methods sampling methodology for multisite case study. *Journal of Mixed Methods Research*, *6*(1), 34-54 doi: 10.1177/1558689811417133

Shaw, J. A., Connelly, D. M., & Zecevic, A. A. (2010). Pragmatism in practice: Mixed methods research for physiotherapy. *Physiotherapy Theory and Practice, 26*(8), 510-518. https://doi.org/10.3109/09593981003660222

Shneiderman, B. & Plaisant, C. (2005). Designing the User Interface: *Strategies for Effective Human-Computer Interaction*. (4th Ed.). New York: Addison-Wesley.

Silverman, D. (2000). *Doing Qualitative Research*. Thousand Oaks, CA: SAGE.

Smith, J. A. & Osborn, M. (2008). Interpretative phenomenological analysis. *Doing Social Psychology Research*, 229–254. https://doi.org/10.1002/9780470776278.ch10

Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory (WAMI). *Journal of career Assessment, 20*(3), 322-337. https://doi.org/10.1177/1069072711436160

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5, pp. 481-498). Boston, MA: pearson.

Van den Heuvel, M., Demerouti, E., & Peeters, M. C. W. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, *88*, 511–532. https://doi. org/10.1111/joop.12128

Willig, C. (2008). *Introducing qualitative research in psychology*. 2nd ed. New York, NY: Open University Press.

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CHAPTER 3: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

3.1   Introduction

This literature review aims to provide a methodical, structured, and logical argument, based on a review of the relevant literature. An overview of the early job stress and motivation theories is discussed. Based on this, a critique of the earlier models is outlined. The job demands-resources theory is deliberated as the theoretical framework for this study. An outline of the JD-R model and the constructs applicable to the present study, as supported by this theoretical framework, is discussed. It also considers its influence on academics within the context of HE. This study, therefore, aimed to explore the positive methods on how job demands and resources can be better maintained at work. The aim was to develop an intervention programme from an organisational perspective leading to desirable outcomes for the individual and the institution.

3.2   An overview of early job stress and motivation models and theories

An array of models was established in occupational health literature. These models signify job stress (fatigue, dissatisfaction, and health complaints) experienced in the working environment is owing to a disturbance in the symmetry amid the resources employees receive. Employees could deal with the demands placed on them to accomplish their tasks. Presumptions suggested by these occupational health stress and motivation models appraise the influence of job stressors and job features on employee health and well-being. These influences informed the development of the job demands-resources (JD-R) model (Bakker & Demerouti, 2007, 2016).

The JD-R model has been extensively studied over the past decade (Bakker & Demerouti, 2007, 2018; Demerouti et al., 2001). Bakker and Demerouti (2014)

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suggest the following subsequent occupational health stress and motivation models affecting and informing the job demands-resources (JD-R) model: the two-factor theory (Herzberg, 1966), the job characteristics model (Hackman & Oldham, 1980), the demand-control model (Karasek, 1979), the effort-reward imbalance model (Siegrist, 1996), and the conservation of resources model (Hobfoll, 2001). This is discussed briefly below.

3.2.1 Two-factor theory

The motivation-hygiene theory is also known as Herzberg's two-factor theory or Herzberg's dual-factor theory (1959). Herzberg's (1966) two-factor theory advocates that two mutually exclusive groups of needs drive employee motivation and satisfaction. The difference between motivation factors (satisfiers/ higher-level needs) and hygiene factors (dissatisfiers/lower-level needs) is central to this concept. These two concepts influencing job satisfaction are divided into two groups (Alshmemri, Shahwan-Akl & Maude, 2017).

Motivators originated from factors built into the job; for example, achievement, recognition, responsibility, and advancement. Hygiene factors are linked to emotions of dissatisfaction within the employee, extrinsic to the job; for example, interpersonal relations, salary, supervision, and company policy (Herzberg, 1966). The two-factor theory indicates employees surpass the minimum job expectations by increasing their determination with motivator elements, such as achievement, recognition, responsibility, advancement, and nature of work. Employees will not do more than is required in the absence of motivators (Herzberg, 1966).

Among the hygiene factors, job dissatisfaction normally occurs when factors worsen to a level below what the employee considers adequate; however, the contrary does not hold. When the job context can be characterised as optimal, an individual does not develop dissatisfaction but will neither achieve a positive attitude. The

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'motivators' primarily produce job satisfaction (Herzberg, 1959, pp. 113–114). Herzberg indicates that tasks, considered important, lead to satisfaction. Factors representing job satisfaction, therefore, differ from those leading to job dissatisfaction (Dartey-Baah & Amoako, 2011).

Herzberg (1966) suggests a two-dimensional in contrast to a one-dimensional model, with satisfaction and dissatisfaction as opposites. Figure 3.1 demonstrates the two continuums: not dissatisfied with the environment (hygiene factors), and not satisfied with the job itself (motivator factors). According to Herzberg's theory, problems associated with stress and motivation can, therefore, be dealt with by ensuring employees have a balanced exposure and mixture of motivator and hygiene factors.
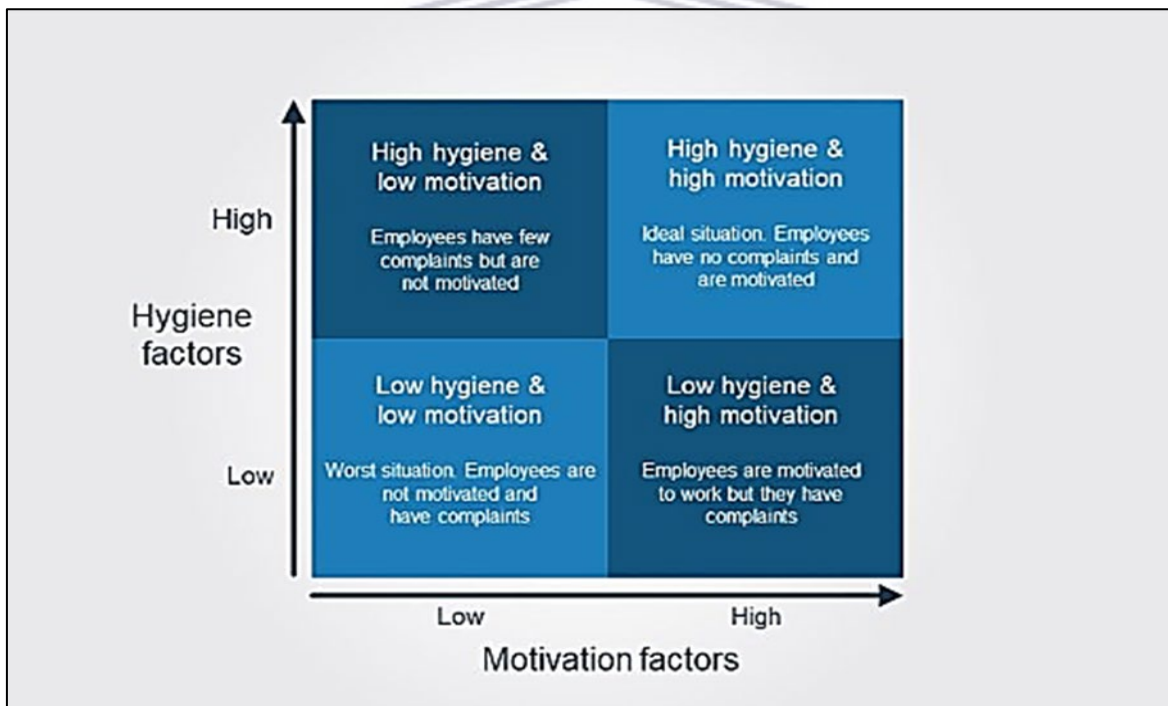
Figure 3.1: The two-factor theory

Source: Kacel et al. (2005), adapted from Herzberg (1964, 1967).

According to Grant (2008), Herzberg significantly contributed to growing awareness among researchers and practitioners of the potential for job enrichment. This also conversed how this could increase motivation and job satisfaction levels within the workplace; however, the two-factor model lacks strength in predicting job satisfaction.

3.2.2 The job characteristics model

Hackman and Oldham's (1975, 1976, 1980) job characteristics model (JCM) (Figure 3.3) is a prominent theory presented in organisational psychology. The research was extensively reviewed, providing a basis for numerous studies besides job redesign interventions over the past two decades (Fried & Ferris, 1987; Loher et al., 1985; Taber & Taylor, 1990).

The main JCM aspect (Hackman & Oldham, 1976, 1980) is that it scrutinises the relationship between job characteristics and individual responses to work (job satisfaction, absenteeism, sickness, personnel turnover). Hackman and Oldham (1976) identified five core job characteristics: skill variety (how much a job requires using an assortment of skills and talents of an individual); task identity (how much a job necessitates the completion of a whole ratio of work); task significance (how much the job influences the lives of others); autonomy (how much the job affords independence, substantial freedom and ability in determining goal-directed behaviour at work); and job feedback (to what extent employees are provided with information about effectiveness in performance).

After the Hackman-Oldham model, these five characteristics can be joined into a solitary index replicating the perspective of a job to insist on high employee internal work motivation. This index is called the motivating potential score (MPS). The MPS associates positively with several valuable work outcomes, including employee

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satisfaction, motivation, productivity, and attendance (Hackman et al., 1976). It is computed as indicated in Figure 3.2 below.

$$MPS = \frac{\text{Skill Variety} + \text{Task Identity} + \text{Task significance}}{3} \times \text{Autonomy} \times \text{Feedback}$$

Figure 3.2: Motivating potential score (MPS)

Source: Hackman, Oldham and Pearce (1976).

From a motivational perspective, the JCM suggests individuals obtain internal rewards when they learn (knowledge of results) they (experienced responsibility) performed well on a task they respect (experienced meaningfulness). The more these three psychological perspectives are established, the greater the employees' motivation, performance, and satisfaction, and the lower their absenteeism and probability of resigning. As observed in Figure 3.2, people with a prime need for growth experience critical psychological perspectives when their jobs are enriched, responding to tasks more positively than their counterparts with low growth needs (Robbins et al., 2016).

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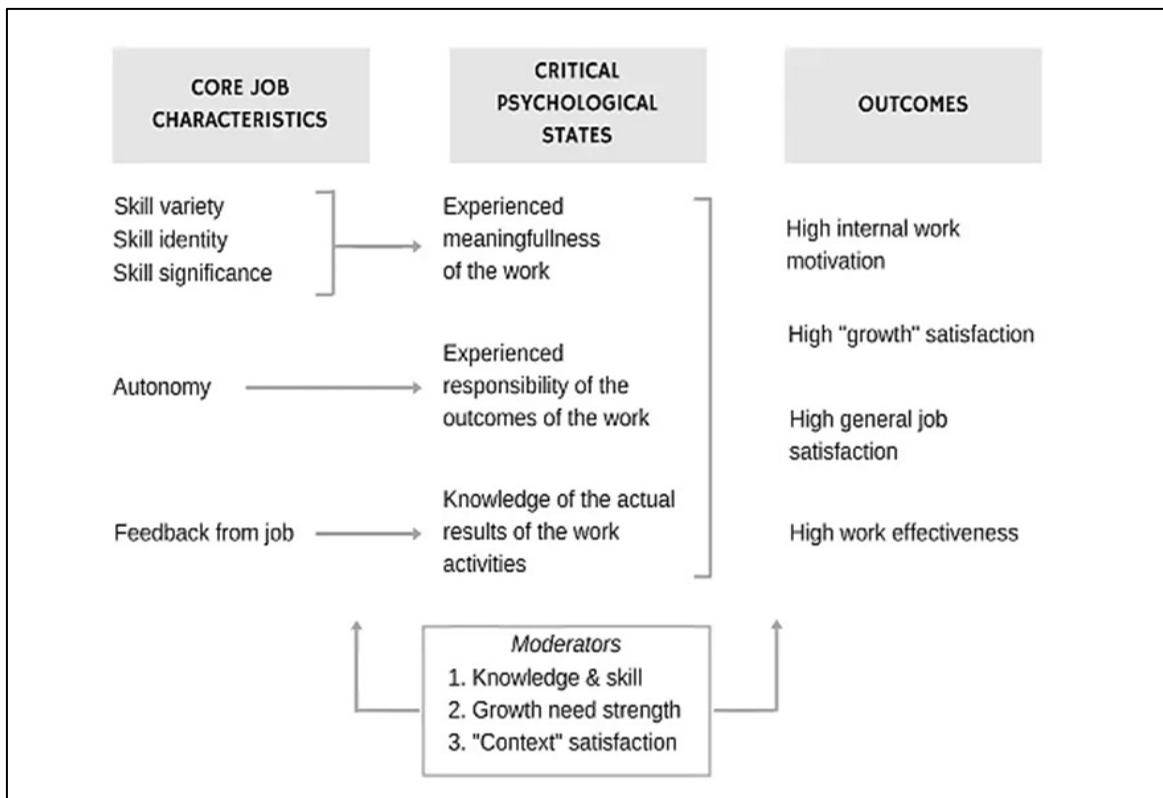
Figure 3.3: The job characteristics model

Source: Hackman and Oldham (1980, p. 90).

3.2.3 The demand-control model

Karasek (1979) established and suggested the demand-control model. The job demand-control-support model is a principal model employed in occupational stress studies (Karasek & Theorell, 1990). The model designates that the most unfavourable job-related strain responses are to be anticipated, categorised in high job demands, low control, and low worksite support (Pelfrene et al., 2001).

Karasek (1979) combined two research lines, dealing with the association between psychosocial work characteristics and well-being. The JDC model prediction is that job strain and subsequent physical or psychological illness stem from the

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relationship between job demands and job control. A primary hypothesis, also known as the `strain hypothesis', indicates that arranging heavy job demands with low control over own tasks and conduct during the working day leads to `high strain'.

Conversely, blending low demands and high control causes 'low strain' or stress-free professions. An additional and occasionally unnoticed hypothesis of the model is that learning, personal growth, and active involvement in social life have the best prospects in 'active jobs' comprising high demands and high control; this is opposed to 'passive jobs', characterised by low demands and low control.

Job demands refer to psychological demands, such as the mental workload, organisational restrictions on job completion, or conflicting demands. Karasek's job control model is also called 'the decision latitude' of the worker. It relies on the autonomy provided to the worker in determining how to meet the demands or how to perform tasks; it is a complex measure constructed from two correlated psychosocial working conditions, such as skill discretion and decision authority. It presents the chance to use skills and make decisions, decreasing potential adverse effects experienced by substantial psychological demands (Karasek, 1979).
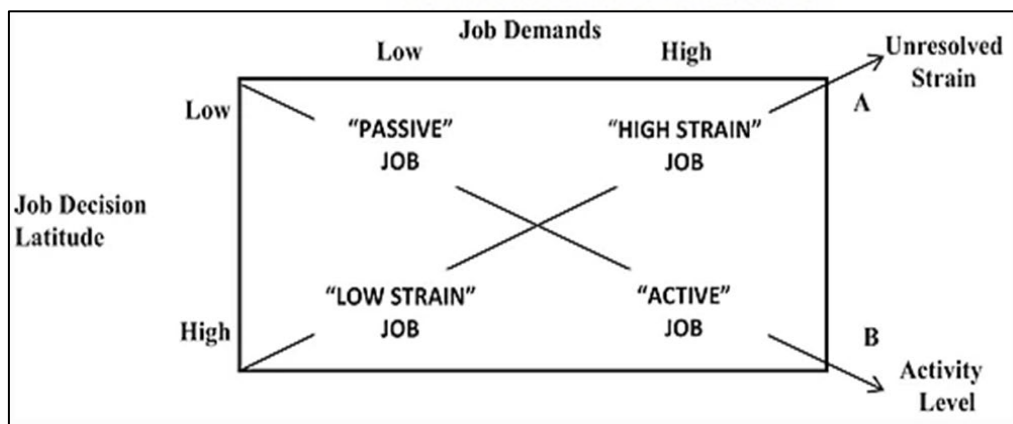
Figure 3.4: The job strain model

Source: Adapted from Karasek (1997).

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Figure 3.4 presents two predictions in the job strain model. Diagonal A proposes an increase in strain job demands, relative to a decline in job decision latitude. When the challenge of a situation matches an individual's ability to deal with or control a situation, an incremental increase in competence will ensue. When job decision latitude and job demands are high, the job is described as 'active'; it is recommended that this will guide the formation of novel behaviour patterns within and outside the job; this is advocated by Diagonal B. The model proposes that jobs at the opposite continuum ('passive') will produce a decrease in total and a decline in problem-solving activity.

3.2.4 The effort-reward imbalance model

Siegrist, Peter, Junge, Cremer and Seidel (1990) developed the effort-reward imbalance model. This model suggest that if jobs are perceived as disproportionate, such as a high amount of effort but low rewards (having a demanding, but an unstable job, achieving at an elevated level without being offered any promotion aspects), it leads to emotional distress and, therefore, has adverse health outcomes. This is established in individuals with inadequate coping capabilities. This model should tap the trait of an individual's "need for control"; a personality characteristic associated with flexibility in coping. According to the model, an individual with a high need for control will react inflexibly to work situations of high effort and low reward; they will be more stressed and disease prone than an individual in the same circumstances with less need for control (Ostry et al., 2003; De Jonge et al., 2000).

The effort-reward imbalance (ERI) model manifests extrinsic (situational) and intrinsic (personal) components of effort-reward imbalance. It suggests that a mixture of both sources delivers a more precise evaluation of experienced stress than a limitation to one source. Extrinsic or situational components comprise efforts, such as psychological and physical demands at work. The three dimensions of occupational rewards are discussed below (De Jonge et al., 2000).

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The effort-reward imbalance (ERI) model (Siegrist, 1996; 1998) accentuates the reward rather than the control assembly of work (Marmot et al., 1999). The model comprises personal characteristics (i.e., a specific coping pattern). The focal point of the ERI model is the importance of paid employment in adult life. The model postulates that effort at work is expended as part of a socially planned exchange procedure where society contributes to occupational rewards. Rewards are dispersed to personnel through three transmitter systems: money (i.e., adequate salary), esteem (e.g., respect and support), security/career opportunities (e.g., promotion prospects, job security, and status consistency (De Jonge et al., 2000). Figure 3.5 below represents the ERI model at work.
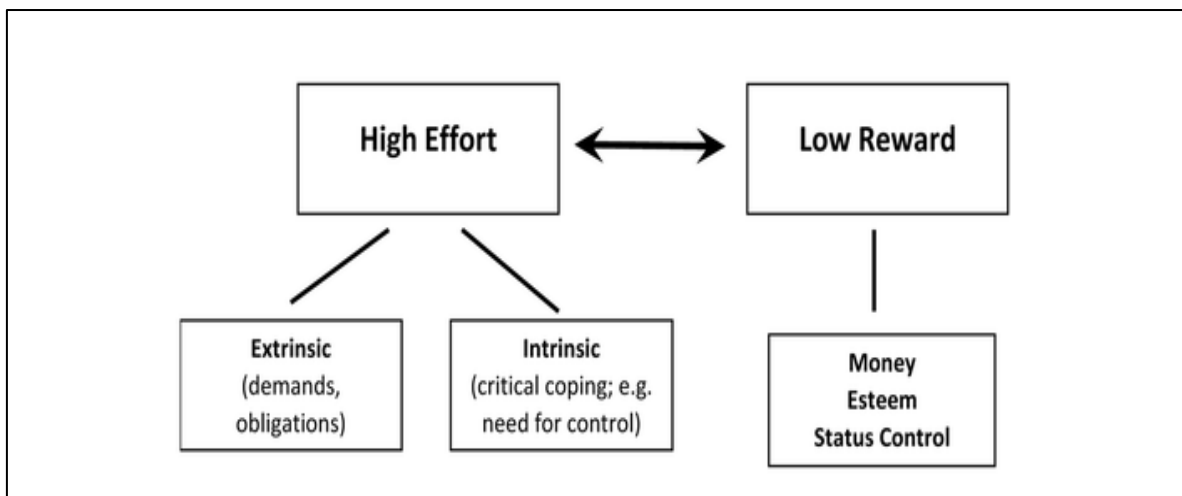
Figure 3.5: The effort-reward imbalance model at work

Source: Adapted from Siegrist (1996).

3.2.5 The conservation of resources model

The conservation of resources (COR) commences with the tenet that people attempt to acquire, retain, foster, and safeguard objects they centrally value. The COR follows an understanding that cognitions have an evolutionary-based, build-in and

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potent bias to place too much emphasis on resource loss and inadequate emphasis on resource gain. Following this foundation, the COR suggests that stress ensues (a) when vital or significant resources are threatened with loss; (b) when vital or significant resources are missing; (c) with a failure to gain vital or significant resources after substantial effort (Hobfoll et al., 2018).

At its centre, COR motivation describes human behaviour founded on the evolutionary need to obtain and conserve resources for survival, fundamental to human behavioural genetics. Humans must obtain and conserve personal strengths and social bonds, compared to other social animals. What sets humans apart from other beings, is that humans can produce intricate devices to safeguard their existence. Humans have the benefit of communicating in a complex language, supporting survival and social bonding. Individuals, therefore, employ significant resources to deal with stress, and to construct an embankment of supporting resources for times of need. Obtaining and retaining personal, social, and material resources generates a sense of competency to manage demanding challenges in people, families, and organisations (Hobfoll et al., 2018).

According to Hobfoll (2011), resources are not established in isolation but reside together. This concept was coined as 'resource caravans' and can be used for individuals and organisations. It accumulates and links resources (Salanova et al., 2010). Since resources are consequences of nurturance and learnt adaptation, they provide the impression of co-travellers. For instance, self-esteem, optimism, and self-efficacy stem from mutual environmental and developmental circumstances; these are highly correlated. Personal resources are expected to develop from nurturing or helpful social conditions; therefore, these personal resources are associated with supportive families and work organisations (Hobfoll et al., 2018).

Gain spirals are additional COR aspects. Gain spirals are defined as intensifying loops where recurring interactions among concepts develop positively over time

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(Lindsley et al., 1995). COR posits elements, such as principal resilience building blocks. It is the resources accessible to individuals and groups, supporting situational demands; however, inadequate literature exists on personal, social, and material resources and how they assist with the recovery path and potential progress and improved adaptation.

COR provides valuable insight into the dynamics of resources, including loss and gain spirals. Initial resource gain begets future gain, therefore, generating 'gain spirals'. These gain cycles are acceptable because when initial gains are made, more resources are provided. COR is proactive rather than reactive, emphasising the importance of proactive resource investment; this has significant implications for stress prevention and resilience building (Chen et al., 2016).

While gain spirals are vital, other elements affecting an individual or group's level of resiliency must be considered. This aspect is known as resource depletion. Resource depletion suggests that upon personal resource depletion, individuals encounter difficulties in preserving effort, persistence, and positive work behaviour (Trougakos et al., 2015). A balance of resources must be accessible to avoid the depletion in individuals.

COR precarious tenets present individual evaluation as secondary to central values, universal among people. These commonly valued resources include health, well-being, family, self-confidence, and a sense of purpose and meaning in life. These assessments are articulated contrarily in diverse cultures but continually resonate with similar fundamental elements (Hobfoll et al., 2018). Figure 3.6 outlines these tenets.

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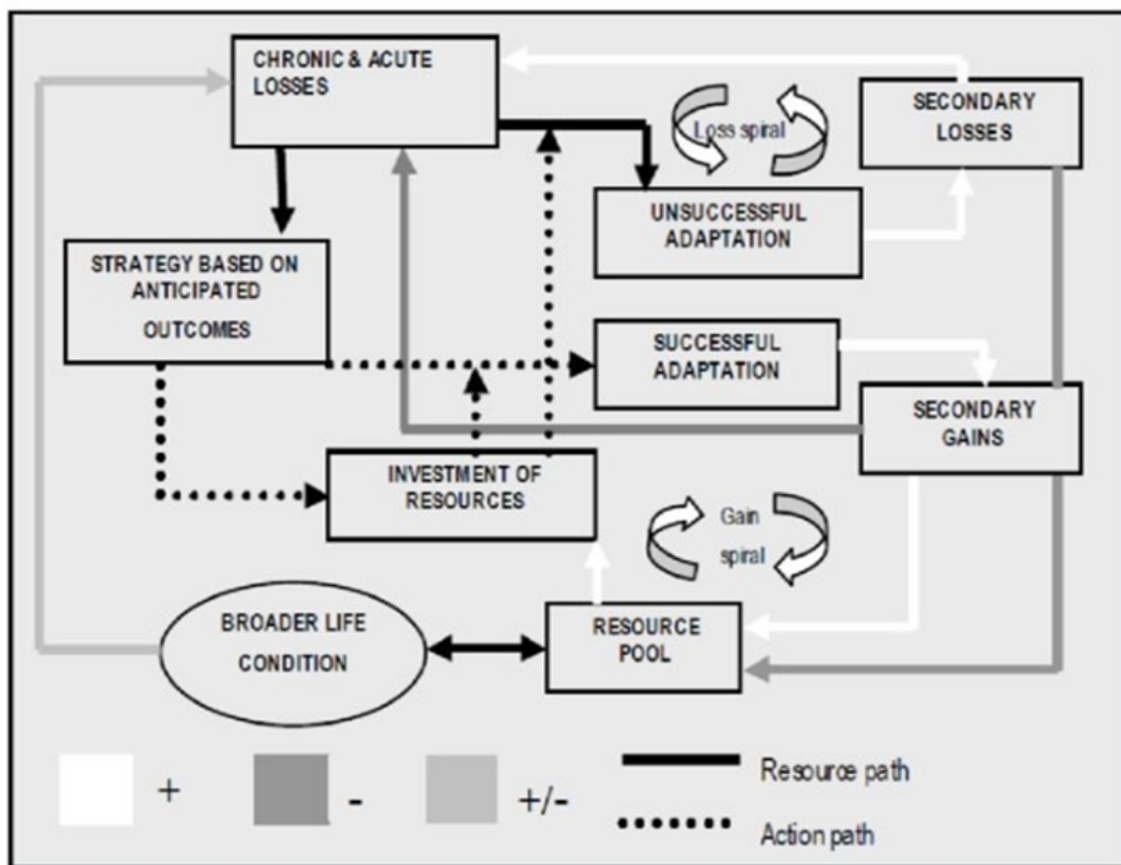
Figure 3.6: The conservation of resources model

Source: Adapted from Hobfoll (2001).

3.3 Critique of the early models

Bakker and Demerouti (2014) present four principal challenges through former models of work motivation and job strain, as aforementioned. The first aspect for consideration is that the models singularly emphasise work motivation or job stress, disregarding the influence of the connections among these variables. A second aspect that Bakker and Demerouti (2007, 2014) contend, is that the former models

are modest in their approach; "the complex reality of working organisations is reduced only to a handful of variables" (Bakker & Demerouti, 2014, p. 6).

Third, Bakker and Demerouti (2007, 2014) criticise the immobility of the previous models. Debates around autonomy are the most vital resource for employees in the demand-control model, whereas the ERI model involves remuneration, esteem reward, and status control. The authors question why work pressure or effort is the most central job demand, with other aspects having been abandoned. Finally, they contend that the prior models of job strain and work motivation disregard the unpredictability of the hastily fluctuating nature of jobs.

While Bakker and Demerouti (2007) indicate that earlier models of work motivation and stress provided valuable intuition into factors influencing employee well-being, they also emphasise it as limited and oversimplified. This, therefore, restricted their practical usefulness and theoretical progress, while restraining their applied practicality to countless work contexts and jobs. These restrictions created a platform to expand the job demands-resources (JD-R) model, including an assortment of working conditions by concentrating on positive and negative antecedents of employee well-being.

Over the past 50 years, researchers in industrial and organisational psychology strived to ascertain and understand job stress causes and employee motivation. In 2020, these aspects continue to command researchers' attention. The JD-R theory is further discussed and used as the guiding theoretical framework of the present study investigating how job and personal resources and job demands affect an academics' well-being. The JD-R model has been reviewed to further explain this phenomenon. The model guides the study while specifying how job demand overload can cause undue stress and strain; increased job resources allow better work responsibility management while increasing an employee's motivation level and work commitment.

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3.4 The job demands-resources model

In 2002, the JD-R model was suggested to understand burnout. Burnout is a prolonged state of work-related emotional stress comprising aspects, such as exhaustion (this is about feeling emotionally tired and drained), mental distancing (scepticism and an absence of interest in tasks) and reduced personal efficacy (lack of confidence about one's capability and contribution at work) (Schaufeli, 2017). After some time, the model was supplemented with work engagement. This was a positive, fulfilling emotional state, comprising vigour (elevated energy levels and resilience), dedication (a sense of meaning, pride, and challenge) and absorption (focused and happily immersed in tasks) (Schaufeli, 2017).

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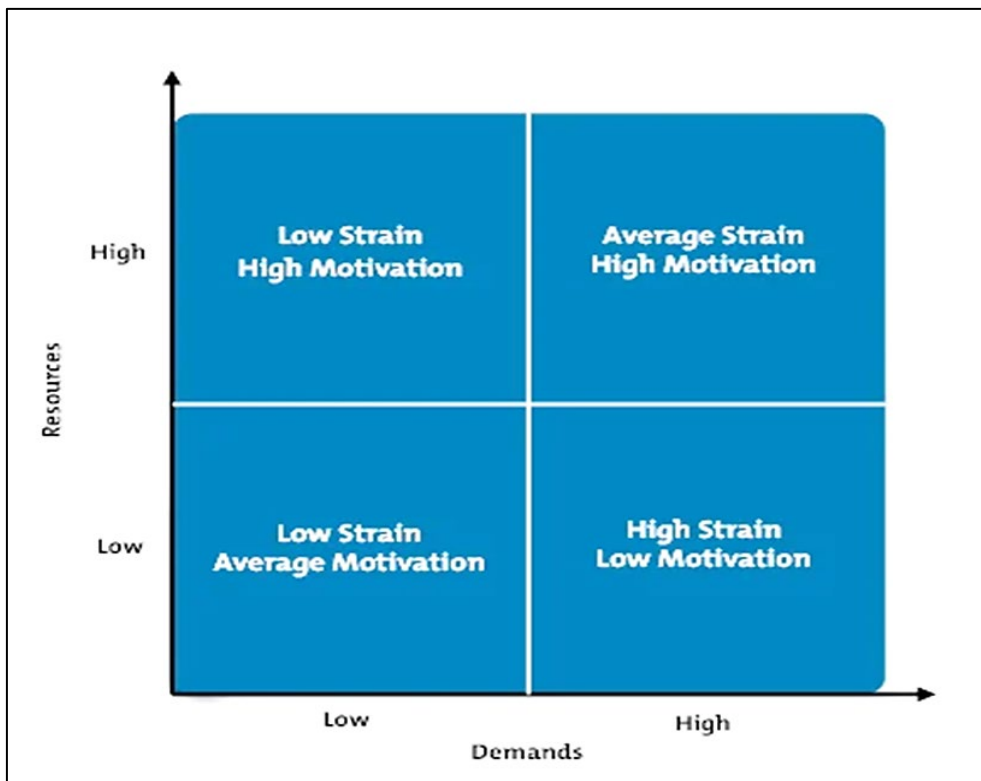
Figure 3.7: The early Job demands-resources model

Source: Bakker and Demerouti (2010).

An innovative and interesting method was developed after proposing the initial model, expanding on stress model research, indicating the job demands-resources model (JD-R: Demerouti et al., 2001). The JD-R model is based on the aforementioned approaches. The JD-R categorises psychosocial factors into global job demands and resources to determine how these could affect illness with organisational commitment (Llorens et al., 2007). Figure 3.8 below presents the revised version of the JD-R model.

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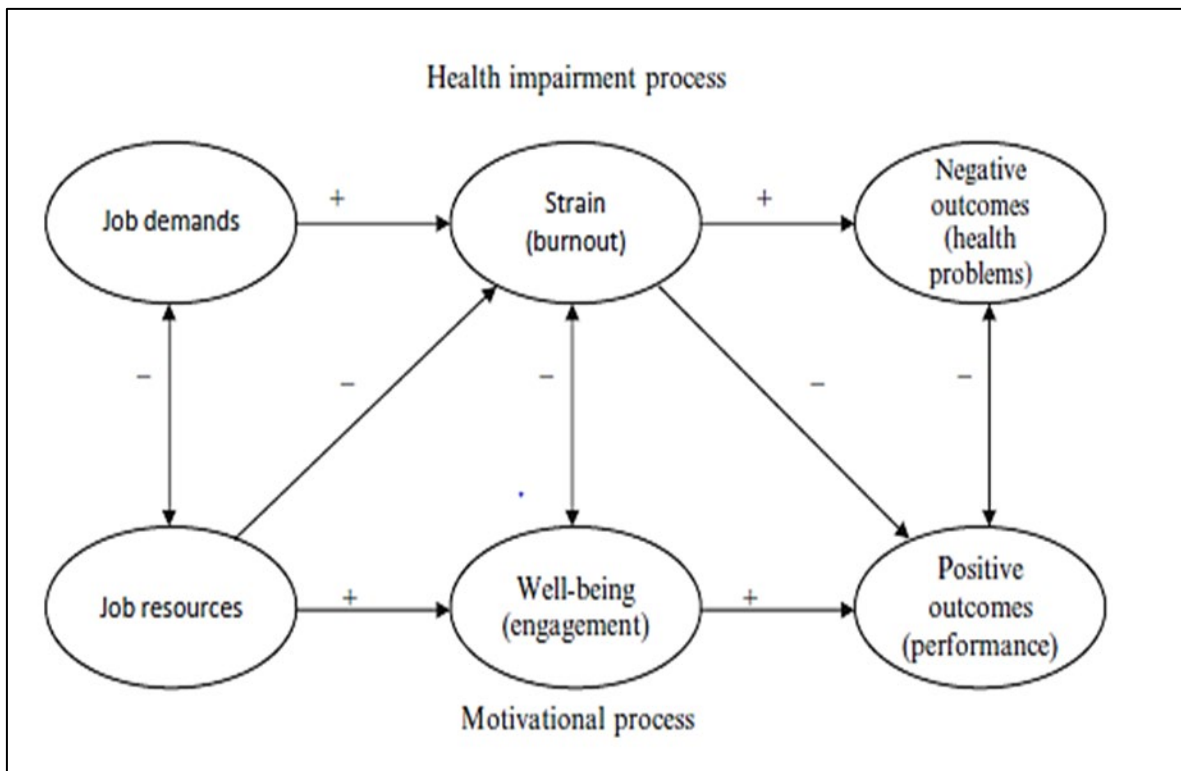
Figure 3.8: The revised version of the job demands-resources model

Source: Schaufeli and Bakker (2004).

After three years of the JD-R model's introduction, Schaufeli and Bakker (2004) displayed a revised version of the JD-R model (Figure 3.8). This model comprised work engagement and burnout. They furthered deliberate burnout and work engagement as mediators of the relationship between job demands and health problems, and job resources and turnover intention, respectively. Schaufeli and Bakker (2004), therefore, provided a positive psychological twist to the JD-R model. The revised JD-R model attempted to explicate a negative psychological state (i.e., burnout) and its positive counterpart (work engagement) (Schaufeli & Taris, 2014).

The revised model also accepts burnout because of elevated job demands and limited job resources, similar to the early JD-R model; however, burnout is now

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considered a unitary instead of a two-dimensional construct. According to burnout literature (Melamed et al., 2006), it was anticipated that burnout will lead to health problems, such as depression, cardiovascular disease, or psychosomatic complaints. Burnout mediates the relationship between job demands and employee health and well-being (at least partly) through the gradual draining of mental resources (i.e., burnout). This is the *energy* or *health impairment process* of the revised JD-R model. Likewise, a *motivational process* operates, fuelled by abundant job resources. The revised JD-R model emphasises job resources' fundamental motivational qualities (Schaufeli & Taris, 2014).

3.4.1   Personal resource integration

The previous and revised versions of the JD-R model consider aspects of the work environment only. Most human interactions result from personal and environmental aspects, therefore, this should be considered and included as a feature in the JD-R model. Personal resources are the psychological characteristics or aspects of the self, normally linked to an individual's resilience level and the ability to regulate and influence the environment effectively. Analogous to job resources, personal resources are practical in achieving work goals, and encouraging personal growth and development (Schaufeli & Taris, 2014); therefore, integrating personal resources into the model.

Previous studies, for example, Xanthopoulou et al. (2007) included three personal resources (self-efficacy, organisational-based self-esteem and optimism) in their study. This was used to predict exhaustion and work engagement (Demerouti & Bakker 2011).

Subsequently other studies have shown that these personal resources are not only linked to stress resilience, but also have positive effects on physical and emotional well-being (Chen et al., 2001; Pierce et al., 1989; Scheier & Carver, 1992). While an

individual's awareness of and adaptation to their environment varies, contingent on their levels of personal resources, these resource levels are nurtured by environmental factors (Bandura, 2000). Specifically, it is suggested that personal resources may function moreover as moderators or as mediators in the association concerning environmental factors and (organizational) outcomes. It may even regulate the way people understand the environment, formulate it, and respond to it (Xanthopoulou et al., 2007).

Preceding empirical studies have most often reinforced this triple role of the three personal resources. With regard to the role of personal resources as moderators, research have mainly scrutinized the association between unfavorable work characteristics and negative outcomes. An example, Van Yperen and Snijders (2000) revealed that general self-efficacy moderates the relationship between job demands and psychological health symptoms. This advocates that employees with higher levels of personal resources show greater mastery which aids them in dealing with demanding conditions more efficiently, which in turn helps with having less negative outcomes such as exhaustion for example (Xanthopoulou et al., 2007)

3.4.2 The job demands-resources model as a conceptual framework

The job demands-resources model (JD-R model) has become a highly popular stress model (Schaufeli & Taris, 2014). Organisational psychology researchers use the JDR model (JD-R) as a theoretical framework to obtain first-hand evidence to examine employee well-being (Mudrak, Zábrodská, Kveton, Jelinek, Blatny, Solcova & Machovcova, 2018; Crawford, Lepine, & Rich, 2010; Rothmann & Essenko, 2007; Rothmann & Joubert, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The JDR model (JD-R model) has, therefore, become one of the leading stress models (Schaufeli & Taris, 2014).

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The JDR (JD-R) model was developed as a theoretical framework, emphasising work characteristics predicting employee work engagement and burnout. A reason the model was considered a framework was that the JD-R model is not restricted to specific job demands or resources, like the other models (Job Demand-Control and ERI model) (Schaufeli & Taris, 2014), therefore, its growth and popularity . The scope of the JD-R model is much broader than that of other models because it includes all job demands and resources (Demerouti et al., 2019). Another aspect to consider about the model is its versatility and ability to be personalised to diverse work settings (refer to Table 3.1, 3.2 and 3.3) (Demerouti & Bakker, 2011; Schaufeli & Taris, 2014). The comprehensive scope of the model appeals to researchers, as its versatility is attractive to practitioners, owing to its movement from a model to a framework.

The JD-R theory yields a theoretical framework for how job demands, resources, psychological perspectives, and outcomes are linked (Van Wingerden et al., 2017). The JD-R model can evaluate any job; therefore, it is a better model to predict employee well-being, work engagement, and burnout than the older models (Bakker & Demerouti, 2018; De Braine & Roodt, 2010).

Earlier, the JD-R model explained how job demands and resources can affect every day working lives; it ascribes employee well-being to the features of the work setting (Van Wingerden, et al., 2017; Xanthopoulou et al., 2007). It attempts to assimilate two self-regulating research traditions, indicating stress and motivation. The JD–R model identifies job demands as stimulators of a health diminishing process, such as "the most crucial predictors of job strain" and job resources are initiators of a motivational process, including learning, commitment, and engagement (p. 4) (Demerouti et al., 2001; Schaufeli & Bakker, 2004; Demerouti & Bakker, 2011; Brough et al., 2013).

The model stipulates how demands and resources relate while projecting imperative organisational outcomes (Demerouti & Bakker, 2011; Demerouti et al., 2001; Schaufeli & Bakker, 2004).

The JD-R model's power is in its capability to understand two parallel practices, influencing employee well-being. These include (Hakanen et al., 2006):

i. A de-energising procedure where job demands consume an employee's mental and physical resources might cause burnout and ill health.
ii. A motivational procedure where job resources endorse work engagement and may cause organisational commitment (De Braine & Roodt, 2010).

The JD-R model, in its unique and adjusted forms (Bakker & Demerouti, 2007; Bakker, et al., 2005), has been positively applied in diverse contexts. Below is the most recent version of the JD-R model, applied in this study (Figure 3.9).
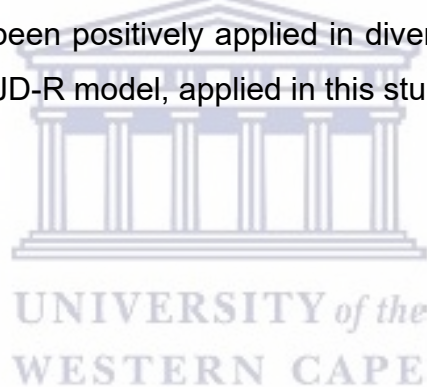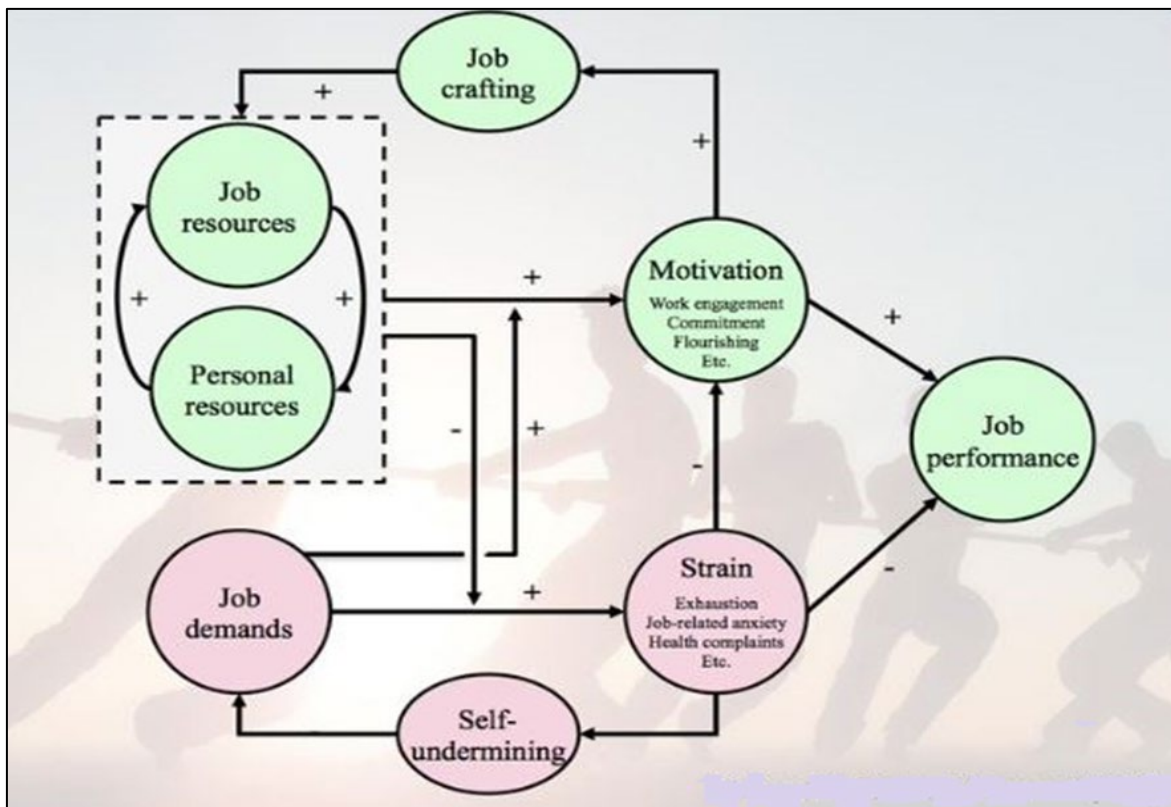
Figure 3.9: The job demands-resources model

Source: Bakker and Demerouti (2018).

3.4.3 Empirical support for the processes suggested by the job demands-resources model

Assessments of the JD-R model within a longitudinal research design are limited but support its theoretical principles. Boyd et al. (2011) demonstrated that job resources (procedural fairness and job autonomy) foretold psychological strain and job commitment over three years. The authors also state that job demands were indirect conjecturers of psychological strain. Another study conducted over three years by Hakanen et al. (2008), testified that positive and reciprocal cross-lagged relations were established between job resources and work engagement, therefore,

http://etd.uwc.ac.za/

reinforcing the motivational process of the JD-R model; they abstained from assessing the straining process in their research (Brough et al., 2013).

Schaufeli et al. (2009) reported on support for the strain and motivational processes over a year. Increases in job demands and decreases in job resources (with social support) foretold psychological burnout over time, whereas job resources foretold work engagement. The research limitation was the small homogenous sample size of Dutch managers (*n*= 201) (Brough et al., 2013).

The JD-R theory proposes that job demands and resources interrelate in foretelling employee well-being. Job resources can cushion the unwanted, negative influence of job demands on the strain. Social support, autonomy, and performance feedback can assist employees in managing high job demands to avoid burnout and health problems. Job demands—in job challenges—may reinforce the positive influence of job resources on engagement. This indicates that when there is a substantial number of tasks to be completed and when work tasks are multifaceted, job resources can increase work engagement. Employees accept their job challenges with a high level of energy during working settings. Comparably, when job tasks are intricate and necessitate the maximum conceivable energy and commitment, job resources can be used effectively to complete the task and reach demanding goals (Bakker, 2015).

Positive relationships exist between job demands and employee exhaustion, besides employees' work engagement and job resources (Salanova & Schaufeli, 2008). Employees may feel exhausted rather than disengaged when job demands are high. Conversely, when job resources are low, employees may be more disengaged than exhausted. When job demands are high and job resources are simultaneously low, employees are expected to be exhausted and disengaged. Johnson and Hall (1988) discern that when employees experience high job demands, low job control, low social support, and meagre rewards, they are in jeopardy of experiencing increased levels of psychological stress and cardiovascular conditions. Chung and Angeline

(2010) propose a method for involving employees and for them to engage in their work, employers should provide them with less demanding jobs, permitting them to decide on their tasks. Research revealed that engaged employees make a greater effort in their work while displaying higher levels of innovation than their non-engaged counterparts (Konermann, 2012).

3.4.4 Job demands and resources in context

While there has been an in-depth discussion on the studies regarding job demands and resources, it should also be in a study by Schaufeli, (2017) that job demands can be further divided into three categories. These categories include quantitative demands, qualitative demands, and organisational demands. Job resources can be divided into four categories, indicating social, work, organisational, and developmental resources, along with personal resources. This study observed two categories of resources only, indicating organisational and personal resources.

Quantitative demands, therefore, refer to elements, such as the number of tasks and the speed at which they can be accomplished. When quantitative work demands are elevated, work tasks will necessitate more time than what was planned for (Van Veldhoven, 2014). Qualitative demands focus on the skills and effort required to complete work tasks; for example, cognitive, emotional, or physical skills, and effort. Qualitative demands refer to the difficulty or complexity level needed to conduct a task (Bowling & Kirkendall, 2012). Organisational demands harm an individual's work outputs (Bakker et al., 2004). These demands are elements attained by aspects of the work environment.

Resources are categorised according to organisational and personal resources. Organisational resources are retrieved from external sources, such as supervisors or co-workers. These resources may include feedback, rewards, job control, participation, job security, and supervisor support (Demerouti et al., 2001). Personal

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resources focus on the observations and judgement of the individual (Hoy, 2004; Barrick et al., 2013), such as work meaningfulness, autonomy, self-efficacy, optimism, and organisational-based self-esteem (Xanthopoulou et al., 2009). Schaufeli and Taris (2014) identified various job demands in a critical overview of the JD-R model, as listed in Table 3.1.

Table 3.1: Job demands identified in a critical overview of the job demands-resources model

Job Demands

- Centralisation	- Pupils misbehaviour
- Cognitive demands	- Qualitative workload
- Complexity	- Reorganisation
- Computer problems	- Remuneration
- Demanding contacts with patients	- Responsibility
	- Risks and hazards
- Downsizing	- Role ambiguity
- Emotional demands	- Role conflict
- Emotional dissonance	- Sexual harassment
- Impersonal conflict	- Time pressure
- Job insecurity	- Unfavourable shift work pressure
- Negative spill-over from family to work	- Work pressure
	- Work home conflict
- Harassment by patients	- Work overload
- Performance demands	
- Physical demands	
- Problem planning	

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As aforementioned, job demands are defined as physical, mental, social, or organisational job elements needing constant physical and mental (cognitive and emotional) energy or skills; they are, therefore, linked to certain physiological and psychological costs (Bakker & Demerouti, 2014; 2007, p. 312).

Predictions indicate that job demands, as part of the de-energising process, have a powerful influence on exhaustion and cynicism burnout dimensions (Schaufeli & Bakker, 2004; Xanthopoulou et al., 2007). This is maintained by the proposal that employees with increased job demands with a shortage of resources are more susceptible to developing burnout and experience a decline in engagement levels (Hakanen et al., 2006). This can transpire in all categories of jobs and occupations (Bakker et al., 2004).

Considerable research is fixated on establishing that job stressors or demands are dangerous to the employee's health. Research reveals that not everyone experiences the damaging effects of demands. Demands can also instigate healthy, helpful outcomes (Quick et al., 1997; Simmons & Nelson, 2001).

Schaufeli and Taris (2014) indicate that job demands can either have a negative or positive effect on work engagement. Crawford et al. (2010) used the transactional theory of stress to further elaborate on this phenomenon. For example, how an individual would assess their job demands concerning their significance level to be a challenge or threat. Crawford et al. (2010), therefore, emphasise that *challenges* can be called stressful demands; however, they still endorse personal development, proficiency, and future gains.

These challenges include high workload, elevated levels of job responsibility, and time pressure. These demands are ways of learning, demonstrating abilities, and accomplishing results. The individual experiences eustress, a positive type of stress where the individual's "cognitive appraisal of the situation is seen to either benefit or

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improve the individual's well-being" (Rothman et al., 2005, p. 56). Here, stress endorses employee engagement (Nelson & Simmons, 2003).

Hindrances are observed as stressful job demands; therefore, impeding goal attainment, learning, and personal development. Examples include organisational politics, red tape, aggravations, role ambiguity, and role conflict. Such demands are restraints or barriers needlessly hindering individual advancement to goal attainment and rewards. Individuals become distressed, defined as a 'negative psychological response' to a stressor, signalled by the 'presence of negative psychological states' (Coetzee & Schreuder, 2013, p. 283). Hsieh and Wang (2012) confirm that job stress relates to burnout, fuelling poor work performance, and low job satisfaction, therefore, harming an employee's health. Crawford et al. (2010) promote the concept that certain job demands are more challenging, presented by certain hindrances, despite individual differences and experiences; people hold unique beliefs regarding the job demand level.

It is, therefore, crucial that employees' adequate job demands challenge them to stay engaged; however, this should not become a hindrance to their performance, menacing them to meet demands. Goleman (1995) contends that flow surfaces with individuals engaging in activities, challenging their capabilities. As the individual's skills surge, greater challenges must enter into flow; however, if a task is too simple, it becomes boring; if it is too challenging, it can cause apprehension rather than flow. Schaufeli and Taris (2014) identified job resources in a critical overview of the JD-R model (Table 3.2).

Table 3.2: Job resources identified in a critical overview of the job demands resources model

Job Resources

- Advancement	- Safety climate
- Appreciation	- Safety routing violations
- Autonomy	- Social support from colleagues
- Craftmanship	- Social support from supervisors
- Financial rewards	- Skills utilisation
- Goal clarity	- Strategic planning
- Information	- Supervisory coaching
- Innovative climate	- Task variety
- Job challenge	- Team cohesion
- Knowledge	- Team harmony
- Leadership	- Trust in management
- Opportunities for professional development	
- Participation in decision making	
- Performance feedback	
- Positive spill-over from family to work	
- Professional pride	
- Procedural fairness	
- Positive patient contacts	
- Quality of the relationship with the supervisor	
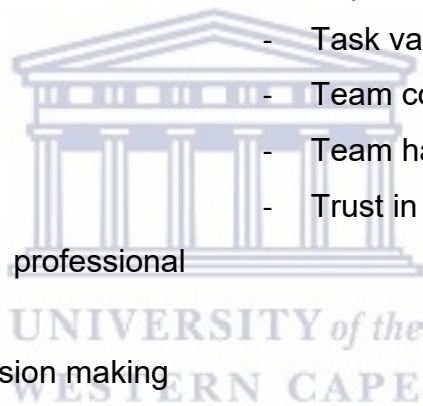
Job resources present the characteristics of tasks, supporting employees in dealing with job demands while help accomplishing their goals (Bakker & Demerouti, 2018). Job resources, therefore, influence employee well-being intrinsically or extrinsically (Alzyoud et al., 2014). Intrinsically, they stimulate employees' growth, where they learn while achieving simple human needs for autonomy, competence, and belongingness. Conversely, extrinsically involves job resources allowing employees to accomplish their work goals and even permitting them to complete the most arduous task; however, the employee becomes disengaged by the lack of performance feedback, job control, participation in decision-making, and social support (Demerouti et al., 2001). An employee's determination level, perseverance, and interest in work are contingent on the extent to which the organisation can provide the job resources required (Albrecht et al., 2018; Chung & Angeline, 2010).

Schaufeli and Bakker (2004), and Bakker and Demerouti (2007) suggest that in a resourceful atmosphere, comprising supportive peers and performance feedback, the probability of being fruitful in completing a task and accomplishing a work goal, may increase. A suitable supply of job resources might supplement an employee's work engagement level, while a deficiency can obstruct goal attainment; this may lead to staff with destructive and cynical attitudes towards their job tasks (Bakker & Albrecht, 2018; Alzyoud et al., 2014)

Studies also identify job resources becoming more noticeable, gaining their enthusiastic effort while workers are defied with great demands. Hakanen et al. (2005) conducted a study among a group of Finnish dentists, experiencing high job demands, such as workload; it was recognised that job resource changeability in the qualified abilities and interactions were imperative in maintaining work engagement (Alzyoud et al., 2014).

Employee retention is also a crucial aspect concerning job resources. Schaufeli and Bakker (2004) (cross-sectional study) reported that burnout can be predicted during

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a lack of job resources. De Lange et al. (2008) further established that low work engagement, job autonomy, and departmental resources affected employee turnover. Employees lacking resources would resign from their organisations and move to other organisations (De Braine & Roodt, 2010). The importance of HEIs is to ensure employees have the resources needed to conduct their tasks.
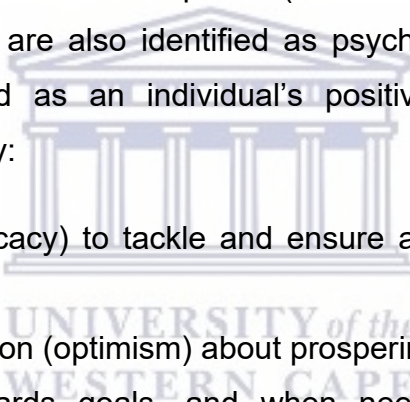
Schaufeli and Taris (2014) identified personal resources in a critical overview of the JD-R model (Table 3.3); however, a need exists to further validate and expand the research on personal resources within the model to empower practitioners to create and implement interventions. These interventions must aim at promoting employee engagement while ensuring employee well-being.

Table 3.3: Personal resources identified in a critical overview of the job demands-resources model

Personal Resources	
- Emotional and mental competencies	- Resilience
	- Organisation-based self-esteem
- Extraversion	- Optimism
- Hope	- Self-efficacy
- Intrinsic motivation	- Low neuroticism
- Value orientation (intrinsic/extrinsic values)	
- Regulatory focus (prevention and promotion focus)	
- Needs satisfaction (autonomy, belongingness, competence)	

A significant extension of the JD–R model is personal resources (Demerouti & Bakker, 2011). The initial and reviewed versions of the JD-R model only deliberated characteristics of the work environment; however, later included the personal resources aspect, coming into action. The reason for this is that most psychological methodologies accepted that human behaviour resulted from involvement between personal and environmental factors, therefore, their integration into the JD-R model. Personal resources are defined as the psychological characteristics or facets of the self, commonly connected to resiliency. It refers to an individual's skill of controlling and influencing the environment positively.

Comparable to job resources, personal resources are useful in achieving work goals; they arouse personal growth and development (Schaufeli, 2017; Schaufeli & Taris, 2014). Personal resources are also identified as psychological capital (PsyCap). PsyCap has been defined as an individual's positive psychological state of development categorised by:

i.   Confidence (self-efficacy) to tackle and ensure added effort to succeed at stimulating tasks
ii.   An optimistic attribution (optimism) about prospering
iii.   Be unrelenting towards goals, and when needed, readdress paths to objectives (hope) to prosper
iv.   Be supportive and bounce back even beyond (resilience) to attain success when confronted with difficulties and adversity (Luthanset al., 2006; Wingerden et al., 2016)

The PsyCap paradigm has been acknowledged as critical for an individual's work-related well-being (Luthans & Youssef, 2007), assisting individuals to accomplish their goals while arousing personal growth and development (Xanthopoulouet al., 2009). Hobfoll (1989) indicates that personal resources, such as the components of PsyCap, do not occur in isolation since people attempt to collect their resources. The

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build-up of resources will cause progressive personal outcomes, such as engagement (Gorgievsky & Hobfoll, 2008).

According to Xanthopoulou et al. (2009), in a longitudinal study, it was recommended that personal resources should be complementary to job resources and work engagement. Job resources, therefore, foretell personal resources and work engagement; personal resources and work engagement predict job resources. Evidence exists that personal resources can be conceptualised as moderators or outcomes in the JD–R model; however, it may have a more intricate function in transforming the work surroundings into positive or negative outcomes (Demerouti & Bakker, 2011).

3.4.5 Job crafting

The JD–R depicts dynamic interactions between a variety of job demands and resources. According to the JD–R model, interventions that encourage participants to optimise their job demands and resources can also increase work engagement and performance. According to Van Wingerden et al. (2017) job crafting interventions can adjust and enhance the demands and resources in employees' work environments, enabling them to attain their work-related objectives.

How a job is constructed has deep ramifications for an employee's psychological experience at work. A job is a collection of responsibilities and interactions banded together and allocated to an individual (Ilgen & Hollenbeck, 1992). ''job crafting'' has come through as a theoretical approach to broadening perspectives on job design and can embrace proactive changes that employees can make to their own jobs (Wrzesniewski & Dutton, 2001).

Job crafting, according to Wrzesniewski and Dutton (2001), can be called the practical variations employees make in their work tasks and their working interactions; for example, relationships with clients, colleagues, and their

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supervisors. Job crafting could also refer to a cognitive process where employees attempt to amend their outlook on work to make it more significant (Bakker & Demerouti, 2018).

Job crafting is, therefore, a bottom-up method where employees plan their job by pre-emptively amending facets and work associations to their personal desires and wishes (Wrzesniewski & Dutton, 2001). Job interactions in the Western world have altered radically in the last era. Employees are expected to manage themselves. What they can do about this is by being proactive, as managers are not physically available at work to offer support (Demerouti, 2014). Job strain will develop despite the job role or profession, such as where certain demands are high and certain resources are low; therefore, various studies express that with sufficient resources and tolerable demands, motivation and increased work performance are probable.

Tims et al. (2003) linked the JD-R theory to job crafting. Job crafting can employ changes that employees may use to help create equilibrium concerning their job demands and resources with their personal skills and needs (Tims & Bakker, 2010). Stimulated by Wrzesniewski and Dutton's (2001) assessment, rather than limiting job crafting to the shifting of tasks and associations, the conceptualisation of job crafting from the JD-R perspective expands task crafting to refer to job demands, and relational crafting to refer to job resources.

Job crafting is also acknowledged as a fundamental component of the JD-R theory, following job demands and (personal and work-related) resources (Bakker & Demerouti, 2014). Tims et al. (2012) have given job crafting functional potential by means of the job features of the JDR (JD-R) theory. With this theory, the authors postulate employees can craft their jobs by amassing social job resources, structural resources, complex job demands, and limiting hindrance job demands.

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Job crafting behaviour is identified as requesting feedback and coaching (increasing social resources), improving autonomy, generating prospects for professional development (increasing structural resources), initiating novel projects (increasing stimulating job demands), and decreasing work pressure (reducing hindrance job demands). Employees can improve the equilibrium between their job demands and resources through job crafting. Employees can, therefore, expand the fit among their jobs and their own requirements, talents, and desires at work. Staff that can escalate their resources and challenging job demands through job crafting, could increase their work engagement and performance (Bakker & Demerouti, 2018; Van Wingerden, 2016).

Employees proactively alter their job demands and resources, which better enhance the working environment; therefore, allowing a better fit between person and environment. Work becomes more stimulating and significant. Top-down organisational interventions to improve employee engagement and organisational performance have no significance (Biron et al., 2012); therefore, organisations identified that bottom-up redesign methods are inspired by job holders and should be endorsed and pooled with approaches initiated by the organisation (Demerouti & Bakker, 2014)

According to Demerouti et al. (2015) job crafting (mainly increasing job resources) is positively associated with supervisor ratings of contextual performance (i.e., helping others) through employee work engagement. Job crafting is positively correlated to supervisor ratings of creativity through work engagement and flourishing. It was also noted in current studies that job crafting interventions, such as training and self-goal setting, can benefit employee well-being and job performance (Gordon et al., 2016; Van den Heuvel, et al., 2015; Van Wingerden et al., 2016). Employees learning to craft jobs allow generating their own 'gain cycle' of resources and work engagement.

Although job crafting is a method brought about by self-initiation, leadership remains critical in influencing the opportunities and resources for such behaviours (Wrzesniewski & Dutton, 2001). Schaufeli (2015) indicated that leaders engaging, and those who build, reinforce and stimulate their followers, indirectly improve engagement levels by increasing followers' job resources.

3.4.6 Self-undermining

Bakker and Costa (2014) coined the term *self-undermining* and exclaims "behaviour that generates difficulties that could undercut performance" (p. 115). This is often the result of job stress that impacts the employee as the employee finds it difficult to overcome obstacles as they lack the energy resources to address the demands (Bakker & Wang, 2020). Thus, employees experiencing high job strain intensities (prolonged exhaustion) communicate poorly, make errors and generate conflicts, adding up to the existing high job demands (Bakker, 2015). In the JD-R theory, harmful job strain led to self-undermining behaviours, causing increased job demand levels, and even greater job strain levels.

Bakker and Wang (2016) denote, that employees partaking in self-undermining behaviours (i.e., creating tension, misunderstanding, and conflict) indicated greater levels of work strain and emotional demands, remained fatigued and scored inferior results on supervisor ratings of job performance. Self-undermining presents the ramifications of increased job strain levels, causing a loss sequence of high job demands and job stress (Bakker & Demerouti, 2018).

The current study excluded the self-undermining behaviour aspect. The reason for this is that the emphasis of this study was to use a job crafting intervention, focusing on positive psychology and motivational processes. The job demands and resources are discussed in context, followed by the JD-R interventions and the influence thereof below (Section 3.5).

3.5   Job demands-resources interventions in the work context

Crucial aspects should be considered regarding intervention execution. Research indicates that achieving an intervention is contingent on the fit of the intervention and the predicted change; similarly, to the extent members are included in intervention decision-making (Heaney, 2003). Other significant elements are the content of an intervention programme, the value that the trainers commit to leaders, employee enthusiasm, and the organisation's commitment (Burke & Hutchins, 2007). Communication also holds a vital function by sharing concise material about goals ahead of time with individuals in an intervention programme. This increases the probability of a fruitful intervention (Kraiger et al., 1995). A proper training setting can also strengthen the intervention's success. Knowledge gained at the workplace is more effective than learning at an external location, as direct associations can be made to the working situation (Kessels, 1993).

The JD-R theory proposes that work engagement and performance can be nurtured through interventions, encouraging individuals to heighten their job demand levels and (job and personal) resources (Bakker & Demerouti, 2014). The JD-R theory indicates that these interventions can comprise individual and organisational change facets. For example, encouraging an employee's strong points by using online interventions or reinforcing an organisation's strengths through group training sessions. The JD-R theory suggests two intervention goals. The first focuses on enhancing personal resources and amending job demands and job resources. An illustration of an intervention designed to improve personal resources is training an individual's resilience and aptitude to deal with pressure. Job crafting is an intervention focused on altering job demands and job resources.

Positive organisational interventions permitting the JD-R theory are divergent groupings of intervention levels (individual versus organisational) and intervention targets (the working environment versus the person). Within this framework, a JD-R

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intervention can include a mixture of top-down (instigated by management) and bottom-up (instigated by employees) methods. The JD-R intervention as the best fit depends on the problem or dispute about an individual or organisation (Van Wingerden, 2016). Van Wingerden (2016) used three interventions based on the JD-R theory to methodically evaluate:

i. An intervention to reinforce personal resources
ii. A job crafting intervention to strengthen job demands and job resources
iii. An intervention to improve job demands and both job and personal resources (Figure 3.10).

The various interventions include:

i. Top-down
ii. Bottom-up
iii. An integrated approach comprising control groups (Van Wingerden, 2016).

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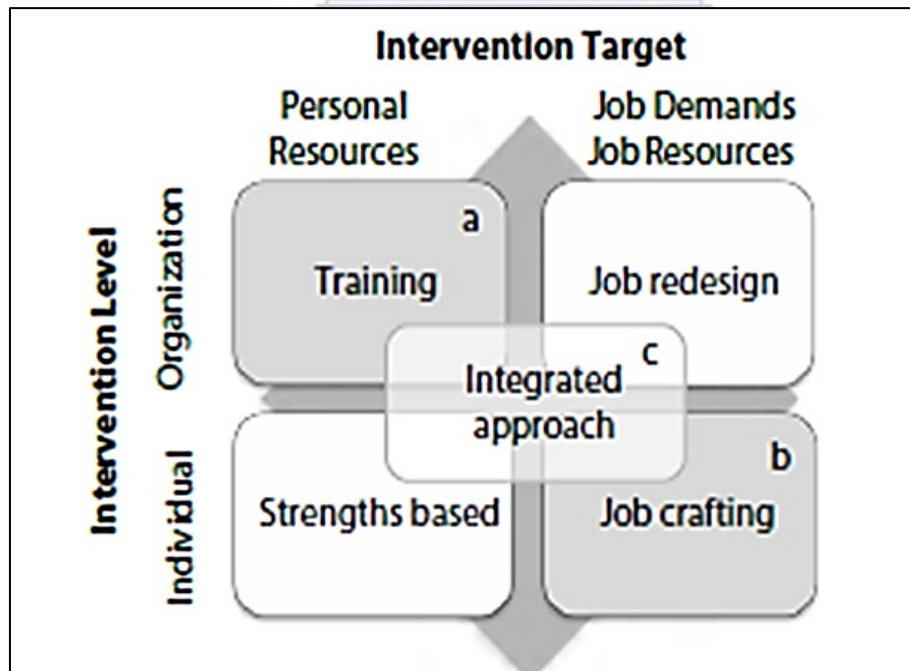
Figure 3.10: The job demands-resources intervention targets

Source: Van Wingerden (2016).

From an intervention viewpoint, increased job demands with limited job resources add to burnout. Although adequate resources to perform job functions (and not low job demands) produce work engagement. By expanding resources, such as social support, job control, and feedback, burnout is halted while nurturing engagement. In disparity, decreasing demands, such as work overload, conflicts and job uncertainty, affects only on burnout but not on work engagement. The basis for this is that even though job demands can cause stress, they can also stimulate to some point. Decreasing job demands would lead to less challenging jobs and, therefore, a lower-level work engagement. For example, a tight deadline might arouse performance (Schaufeli, 2017). The interventions were reviewed from an organisational and individual level within the work context.

3.5.1 Organisational-level interventions

The organisational-level interventions centre on employee groups. These interventions comprise job redesign and training programmes. Under the JD–R theory, three interventions were suggested:

i.   **Elevating job demands**: Increased job demands expend considerable energy, it is essential to inspect alternate methods to lessen these, such as role uncertainty, job insecurity, and conflict. These hindrance demands cause stress; workers observe these as unnecessarily hindering personal development and goal achievement (Cavanaughet al., 2000). Employees regard job challenge demands as hurdles to be overcome. Challenge demands, such as work pressure and difficult tasks, are linked to work engagement (Crawford et al., 2010).

Interventions to decrease hindrance demands include:

- Fair processes should be applied during organisational change
- Educating teams and departments to integrate challenge demands with sufficient job resources

ii. **Improving job resources**: Job resources, such as social support and performance feedback, can be improved by remodelling the work environment or through training. For instance, if the work surroundings are planned such that employees frequently meet, they will be presented with opportunities to discuss information and exchange feedback. Employees may learn how to extract feedback from their work results. Managers will be educated on how to deliver feedback suitably. As with job demands, it is critical to start the intervention with the assessment of the most significant job resources needing consideration (Bakker & Demerouti 2014; Bakker et al., 2013).

iii. **Nurturing personal resources**: Research revealed that personal resources can be taught, such as positivity, pliability, and self-efficacy (Demerouti et al., 2011, Luthans et al., 2006). When an organisational assessment designates a shortage of crucial personal resources in large employee groups, organisations could resolve to organise on-the-job training. During this training, employees obtain knowledge on cultivating their personal resources in their day-to-day work procedures. They gain new proficiencies that help them perform their everyday tasks (Luthans et al., 2006).

3.5.2 Individual-level interventions

Organisations can observe the precise requirements and difficulties employees may experience by using individual methods. Employees might encounter hindrance

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demands owing to certain life events. Likewise, employees may have a shortfall in a certain job or personal resources because of alterations in the organisation or their personal lives. It was proposed that organisations use Internet versions of JD–R questionnaires with personalised feedback to enlighten employees regarding their most significant job demands and resources (Bakker & Demerouti, 2007, Bakker et al., 2013). This evidence could be the inception of a change practice directed by a personal mentor. Additional interventions are:

i. Job crafting training, where employees are educated on how to take initiative and alter their own work surroundings (Thomas et al., 2020; Tims et al., 2012, Wrzesniewski & Dutton 2001)

ii. Strengths use training, where employees are taught to establish personal objectives and to use their strengths at work in original ways (Linley et al., 2006)

iii. Recovery training, where employees are taught to identify the best undertakings in assisting them to recuperate from their work-related efforts (Hahnet al., 2011). Recovery training might also comprise relaxation methods or mindfulness exercises (Bakker, et al., 2014).

Numerous redesign interventions described in the literature use a top-down approach. This approach considers the same job features for all employees, despite the difference in significance of each attribute to these characteristics. Job crafting can be deliberated as a bottom-up method beginning precisely from the requirements of individual employees. The outcome of this is that each employee might alter various job characteristics contingent on their personal needs, resulting in a better personal environment-fit, a higher level of well-being, and individual and organisational performance. Employees and their organisations may benefit from interventions aimed at encouraging job crafting (Le Blanc et al., 2017).

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3.5.3 Outcomes of job crafting Interventions

The intervention used in the current study is modelled upon that described by Van den et al. (2012). They implemented their job crafting intervention in a police department. The intervention included training workshops, goal-setting exercises, longitudinal action plans, and reflection. The authors concluded that the intervention positively affected work engagement (e.g., participants reported experiencing improved relationships with their superiors, with a better two-way communication flow).

Gordon et al. (2018) used a similar study design and intervention but applied them to employees of a health care organisation. They established that job crafting can improve employee well-being and job performance. Other forms of job crafting interventions include the Michigan Job Crafting Exercise™ (Berg, Dutton, & Wrzesniewski, 2013) and adaptations thereof applying the JD-R model principles (Van Wingerden et al., 2017).

According to Van Wingerden et al. (2017), when an employee's job crafting behaviour is stimulated, it can cause an increase in their job and personal resources according to the JD-R theory (Bakker & Demerouti, 2014). The study design was based on the Michigan Job Crafting Exercise (JCE) (Berg et al., 2008). Specifically, the job crafting intervention with exercises and goal setting. This intervention is aimed at increasing social job resources, challenging job demands, structural job resources, and decreasing hindering job demands. It was applied over a longitudinal period to teachers in the education sector. The job crafting intervention occurred three times with nine weeks in between the first and second measurements, and one year in-between the second and third measurements. Results indicated that the intervention had a considerable influence on participants' job crafting behaviours, at time two and time three. This suggests that it takes time for increased job crafting behaviour to be effective.

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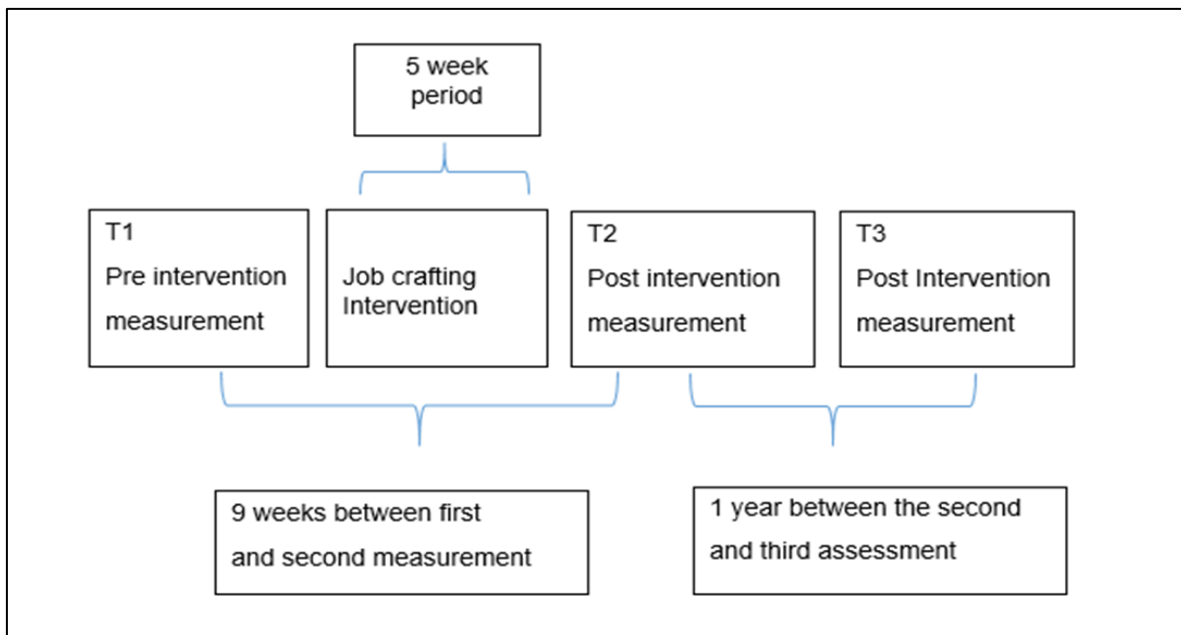
Figure 3.11: A longitudinal job crafting intervention conducted over one year

Source: Van Wingerden et al. (2017, p. 111).

Similarly, Van Wingerden, Derks, and Bakker (2017) describe a job crafting intervention based on the original Michigan JCE and operationalised using principles of the JD-R model (i.e., the intervention comprised exercises and goal setting aimed at increasing social and structural job resources and increasing challenging job demands). The intervention comprised three training sessions held over six weeks. The first two sessions transpired on one day, and the third (half-day) session four weeks later (Figure 2.1). Within this intervention, participants are informed that the goals they set after Session 2 should be proactive, feasible, geared towards short-term outcomes, and based on their Session 1 and 2 visualisations of how good aspects of their job situation fit their motives, strengths, and passions. These formulated goals are refined and discussed in a group setting during Session 2. Towards the end of Session 2, specific job crafting activities are proposed for each

participant (planning). Between the end of Session 2 and the beginning of Session 3, participants implement the plans to achieve their goals (striving).
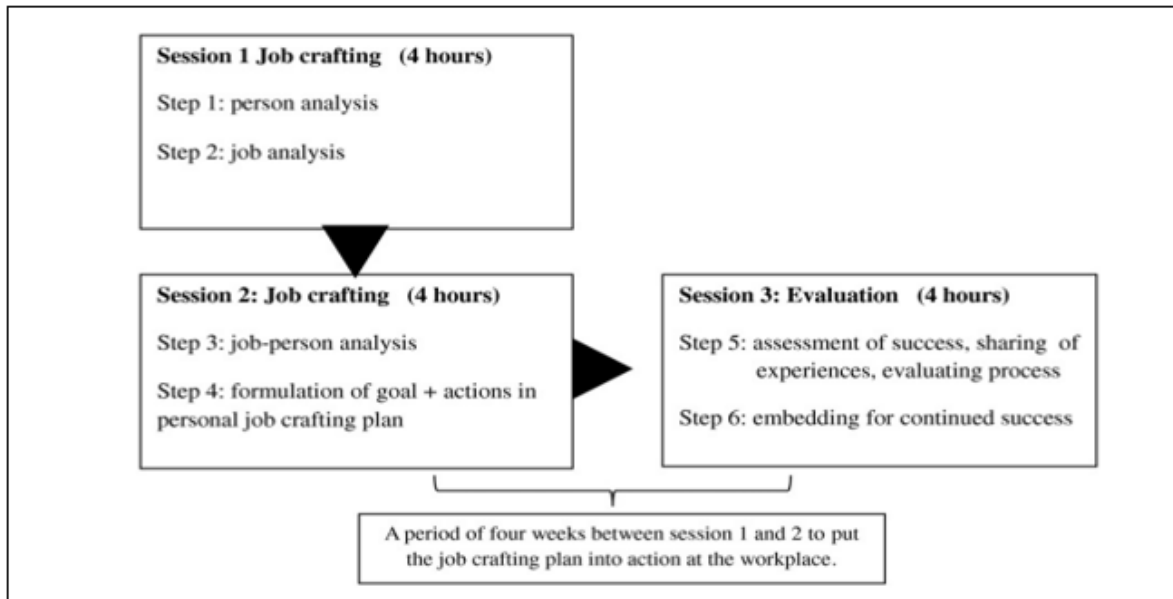
Figure 3.12: A three-session, six-step job crafting intervention design

Source: Van Wingerden et al. (2017, p. 168).

According to Knight et al. 2021, a less intense knowledge-reflection intervention and a more intense, knowledge-reflection-action intervention involving completing job crafting boosts over four weeks were initiated. Working professionals and managers studying towards an MBA formed the sample group. The intervention comprised three training sessions, held over ten weeks. The first session occurred on one day, and the second session was presented four weeks later, including only the knowledge-reflection-action group (Figure 2.1).

Both groups received the same work design and job crafting education. The less intense intervention group completed the Michigan JCE; they were invited to participate in each of the three, 'core', online questionnaires. The intention was to

make this a less intensive intervention; therefore, individuals were not specifically instructed to initiate an individual job crafting plan or conduct activities aimed at achieving specific job crafting goals.

Unlike the knowledge-reflection group, this exercise was followed by a briefing, explaining that the job crafting boosts individuals were invited to complete tasks over the four-week intervention period. Individuals were encouraged to complete a target of three boosts a week during the four-week 'action' period of the intervention, reminded each week to engage in these boosts by the course tutor. Participants in the less intense knowledge-reflection intervention did not receive this list and were not encouraged weekly to engage in job crafting activities following The Michigan Exercise.
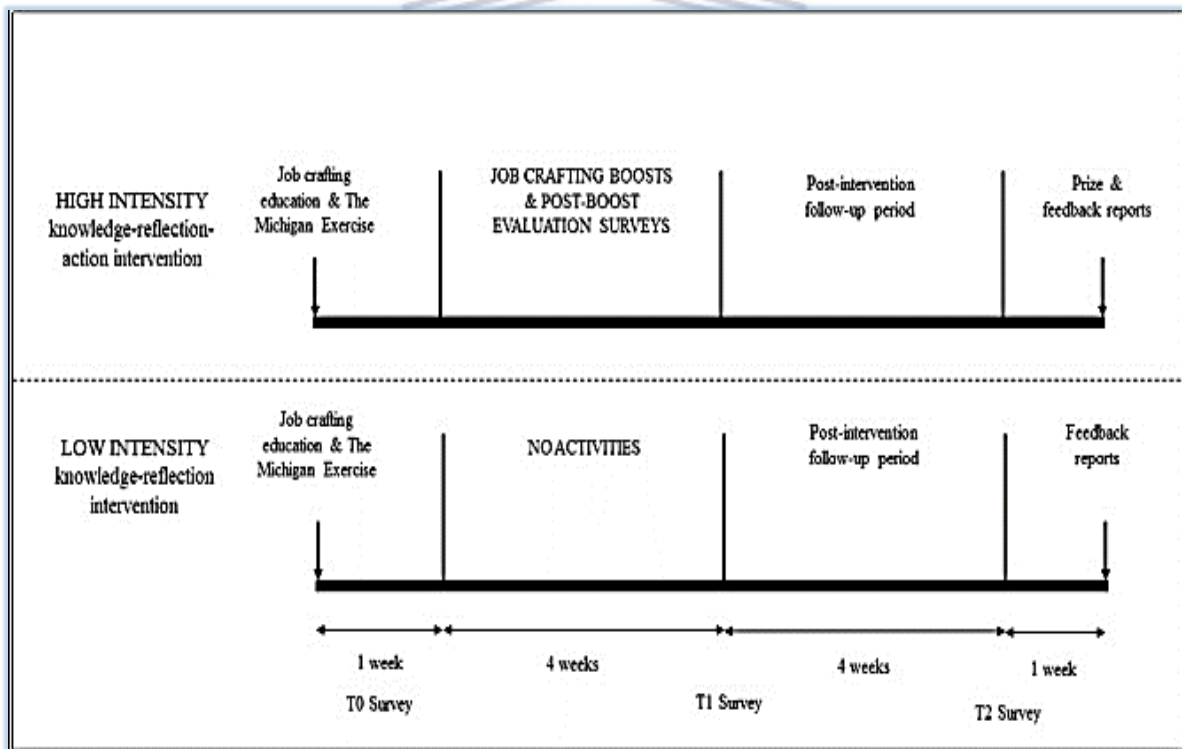
Figure 3.13: Timeline and procedure for both knowledge-reflection and knowledge-reflection-action interventions

Source: Knight et al. (2021, p.7).

The study outcomes imply that activities to reduce hindering demands could be targeted at those with high initial workloads, whereas activities to increase job resources and challenging job demands could be targeted at those with more manageable initial workloads. This could affect health, well-being, and performance in both cases. Those with high workloads gain control over their work, and those with lower workloads gain work motivation. This supports the JD-R theory while emphasising the positive relationships between job resources, moderate demands, work engagement, and performance (Knight et al., 2021).

Schaufeli (2017) identifies the JD-R model as straightforward and empirically validated. The model identifies connections regarding job (and personal) components, leadership, employee well-being, and outcomes. Briefly, it indicates that reducing job demands, increasing job (and personal) resources, and encouraging (engaged) leadership, avoid burnout and escalating work engagement. Less negative and more positive outcomes are, therefore, accomplished for the employee and the organisation. Job demands and resources elicit health deficiencies and motivational progression; therefore, their assessment is paramount (Schaufeli, 2017).

The JD-R model does not emanate without its restrictions, despite its popularity. The model defines correlated concepts but does not compellingly stipulate the reasons for their connection. This difficulty can be resolved by relying on harmonising with more detailed and often well-established philosophies (Taris & Schaufeli, 2016).

The need for a job demand and resource intervention approach from an organisational perspective is, therefore, clear to include the integration of organisational and individual needs while considering the context.

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The JD-R framework and its underlying variables have been discussed. The influence of demanding workloads on academics and their significance on HEIs must be considered. According to the JD-R model, the subsequent sections of the literature review summarise academic job demands and resources in the HE sector and how an upsurge of demands and a lack of resources further influenced an academic's well-being.

3.6   Academics' job demands and resources in higher education

3.6.1   Job demands

Academic work is distinguished as self-managed, intrinsically motivating, and highly individualised. This work, therefore, necessitates prominent levels of personal commitment (Bellamy, et al., 2003; Langford, 2010; Lyons & Ingersoll, 2010; Oshagbemi, 2000; Van Theron et al., 2014). Dhanpat et al. (2019) suggest that academic employees may experience distinctive challenges and, therefore, be exposed to fluctuating pressures compared to their non-academic counterparts (for example, employees within the corporate sector).

University academic staff functions multifacetedly in a progressively challenging setting. A reason for this is that universities are the only establishments concentrated on binary core functions. These aspects explore knowledge creation and transmission through research and teaching progression (Romainville, 1996). The work life of a university academic staff member is primarily outlined and fashioned by obligations and performance in these areas (Houston et al., 2006).

South African HEIs have been exposed to plentiful changes over the past two decades. Some changes have become predominant through upsurges in student enrolment, escalations in entrepreneurship, funding and liability alterations, augmented significance of performance-based incentives, and amplified prominence of the HE staff's competence (Ntshoe & De Villiers, 2008). The ramifications of this

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are that academics' work has become more emotionally demanding, and disjointed, implying a loss of professional autonomy, academic identity, and psychological ownership (Kinman & Johnson, 2019; Bitzer, 2008; Ylijoki, 2013; Ylijoki & Ursin, 2013).

According to Barkhuizen and Rothmann (2008), academic staff job demands can be accredited to a sizeable number of elements. The elements comprise work overload; time restraints; absence of promotional opportunities; inadequate recognition; insufficient salaries; altering job roles; poor management; a lack of involvement from the management; scarce job resources and limited funding; job uncertainty; disparity in systems; a lack of regular feedback (Barkhuizen et al., 2017; Barkhuizen et al., 2014). Researchers observed increased emotional demands, student misbehaviour, and the supposed low standing of the occupation (Erdem & Kocyigit, 2019; Konermann-van Hunsel, 2012; Hakanen et al., 2006; Carlson & Thompson, 1995; Burke & Greenglass, 1994; Kyriacou & Sutcliffe, 1978).

Bezuidenhout and Cilliers further maintained (2010) that academics in South Africa are hard-pressed to increase their research output while managing larger classes as lecturers besides overseeing postgraduate scholars. While several academics may deliberate themselves to be researchers, they must perform as lecturers, causing frequent challenges (De Bruin & Taylor, 2005). Academics' job demands have intensified, whereas support and other resources declined. This decline harms academics' health and well-being (Barkhuizen et al., 2013; Mouton, 2010; Kinman, 2008; Pienaar & Bester, 2008; Rothmann et al., 2008; Coetzee & Rothmann, 2005).

Studies conducted within the academic sector confirm that occupational stress has increased. The main stressors emphasised comprise hefty workloads, time, resource restrictions, extended working hours, inadequate salary, poor communication, role uncertainty, lack of acknowledgement, striving for publication, ensuring that support for students is provided, and staying abreast of technological

developments. Conversely, regardless of reporting elevated stress levels and increased demands, evidence suggests that academics also achieve substantial satisfaction from their work (Rothmann & Essenko, 2007; Winefield et al., 2003; Viljoen & Rothmann, 2002).

Teaching in the academic context has been deliberated to be one of the most stressful professions (Konermann-van Hunsel, 2012; Hakanen et al., 2006; Carlson & Thompson, 1995; Burke & Greenglass, 1994; Kyriacou & Sutcliffe, 1978). Studies reveal how increased teaching commitments (Tham & Holland, 2018) and pressure to obtain external funding have become the foundations of job-related stress for academics. Prominent role conflicts, such as teaching demands, research, and administration, are linked to greater levels of job dissatisfaction and apprehension (Winefield et al., 2008; Sonnentag & Frese, 2013; Winefield et al., 2003; Gillespie et al., 2001; Kinman, 2001).

A study in Australia among academics established that research and teaching staff in universities work extended hours to manage their workloads and are the most discontented individuals. The study outcome indicates that 50% of the academic workforce in Australian universities consider moving to overseas universities or vacating the HE sector within 10 years. Similarly, in other parts of the world, such as Jordan, it was established that 776 university professors with a PhD from Jordanian universities resigned from their organisations between September 2007 and September 2008; this amount comprised 17% of the professors employed at universities.

Reasons for these academics leaving the universities include a lack of job satisfaction. The head of the Jordanian Association for Scientific Research (JASR), emphasises that limited organisational sustenance in public universities in Arab countries affected staff retention when compared to other universities. Here,

academic staff have minimal financial funding to conduct their research (Alzyoud et al., 2014).

Barkhuizen (2005), in a study among South African HEIs, indicated that academics working over 50 hours a week had higher levels of fatigue, experiencing increasing job demands. Other research recognised that academics functioning in more senior positions, such as associate professors, experienced more role overload and job demands than junior lecturers did (Barkhuizen, 2005; Winter, Taylor & Sarros, 2000).

3.6.2   Job resources

Considering all the demands academics encounter, it is, therefore, vital to emphasise that job resources can help alleviate some stress and pressure (Mudrak et al., 2019). According to Alzyoud (2016), the JD-R model directs that job resources are not only to assist academics in dealing with job demands, but they contribute uniquely to employees' wellness. Job resources are aspects fulfilling basic human needs. It may hold an intrinsic motivational role when fostering learning and development. These resources may also hold an extrinsic motivational role when helping to achieve work goals (Schaufeli & Bakker, 2004). Job resources can be derived from the organisation, the social relations at work, the way work is organised, and the task (Herbert, 2011). Job resources in HE were observed to include social support, growth opportunities, performance feedback, job security, and opportunities for advancement (Nurendra, 2018; Alzyoud, 2016).

Barkhuizen et al. (2014) discussed positive structural factors, such as autonomy and job control, role clarity, information availability, job variety, focus on innovation or growth, and personal development opportunities as factors positively associated with work engagement and superior job performance in HE (Mudrak et al., 2019; Awang et al., 2015; Wärnichet al., 2015)—flourishing. Janse van Rensburg et al. (2018) and Xanthopoulou et al. (2007) remark that employees with supportive colleagues,

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receiving quality coaching, feedback, opportunities for professional development, and more autonomy are more inclined to be vigorous and dedicated to their work (Kotze, 2017).

Sonnentag (2017) further remarked that work engagement requires favourable work conditions in job resources and constructive personal resources. In a study among academic employees, prominent levels of personal resources, such as self-efficacy and elevated levels of job resources, such as social support confirmed highly engaged staff, even when they lacked positive task characteristics, such as regular feedback, autonomy, or task significance. Several personal resources are antecedents of work engagement, identified and empirically investigated, such as coping style, being problem-focused (Storm & Rothmann, 2003), self-efficacy, optimism, organisational self-esteem, and resilience (Kotze, 2017; Bakker et al., 2006; Xanthopoulou et al., 2007).

Academic workplaces developed several positive social features as crucial determinants of academics' job satisfaction. These features include university atmosphere, sense of community, relationships with colleagues (Lacy & Sheehan, 1997), perceived quality of students (Bentleyet al., 2013), the effectiveness of administration, and technical/administrative support (Bentley et al., 2013; Rosser 2004), quality of academic leadership (Fredman & Doughney, 2012), and social reputation of academics in society (Shin & Jung 2014). Academics' autonomy and influence over their work signify another vital work environment feature affecting job satisfaction directly (Yee, 2018; Bentley et al., 2013)

Job resources are essential to ensure the fulfilment of employees' psychological well-being (Mudrak et al., 2018; Parker & Hyett, 2011). Job resources aid in reducing job demands; therefore, when job resources are lacking, the job demands will remain high, fostering burnout (Schaufeli & Bakker, 2004). Leaders can create a supportive climate and prevent employee burnout by showing concern for employees' well-

being, valuing their work, helping their career development (Mudrak et al., 2018; Paterson et al., 2014), and refraining from intruding into their personal lives by inappropriately adjusting schedules and workloads and unfairly increasing job demands (Fontinha et al., 2019; Dollard & Bakker, 2010). Elevated levels of employer and supervisor care, implying understanding and responsiveness, help employees cope with demands and avoid emotional exhaustion. Previous studies in HEIs displayed that workplace resources were adversely related to emotional exhaustion and cynicism (Dhanpat, 2019; Nurendra, 2018; Alzyoud 2016).

Academics with high resources will provide their own inventory so they can better cope with high demands of working conditions pressure as they hold a lower burnout (Bakker, Demerouti, Hakanen, Xanthopoulou, 2007; Nurendra, 2018). Academics, therefore, need job resources to adapt to the demands placed on them and to accomplish employment goals (Nurendra, 2018).

Changes in composing an academic job function are observed. These changes had adverse effects on staff members; therefore, it is imperative to consider an academic employee's well-being needs and for various resources to be implemented to attempt to alleviate some demands employees experience.

3.7   Summary

The study closely observed the demand and resource dimensions associated with HE in the preceding section of the literature review. First, relevant models of job stress and work motivation that informed the development of the JD-R model and its conceptualisation of job demands and resources are discussed. The JD-R model's dimensions are also presented. The presentation includes personal resources, self-determination, and job crafting. The JD-R model also incorporated interventions that could be used to manage job demands while increasing job resources.

The Job demand and resources model is discussed, considering its influence on the HEI academics' job aspects. Central constructs of the study, such as job demands experienced by academics and job resources to engage staff, are discussed. These constructs concern an academic employee's stress, job satisfaction, engagement levels, and well-being. The current review further explains how studies using the JD-R model assisted those individuals experiencing elevated levels of strain, assisting in increasing their engagement levels. This chapter informs the subsequent chapter, focusing on a systematic review of job demands and resources among academics within the HE sector.

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References

Albrecht, S., Breidahl, E., & & Marty, A. (2018). Organizational resources, organizational engagement climate, and employee engagement. *Career Development International, 23*(1), pp. 67-85. https://doi.org/10.1108/CDI-04-2017-0064

Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's Two-Factor Theory. *Life Science Journal*, *14*(5), 12-16. https://doi.org/10.7537/marslsj140517.03.

Awang, A., Ibrahim, I. I., Nor, M. N. M., Razali, M. F. M., Arof, Z. M., & Rahman, A. R. A. (2015). Academic Factors and Turnover Intention: Impact of Organization Factors. *Higher Education Studies*, *5*(3), 24-44. https://doi.org/10.5539/hes.v5n3p24

Alzyoud, A. A. Y. Othman, S. Z., & Mohd Isa, M. F. (2015). Examining the Role of Job Resources on Work Engagement in the Academic Setting. *Asian Social Science, 11*(3), 103-110. http://doi.org/10.5539/ass.v11n3p103

Bakker, A. B. & Albrecht, S. (2018). Work engagement: current trends. *Career Development International*, *23*(1), pp. 4-11. https://doi.org/10.1108/CDI-11-2017-0207

Bakker, A. B. & Costa, P. (2014). Chronic job burnout and daily functioning: A theoretical analysis. *Burnout Research*, *1*, 112–119. https://doi.org/10.1016/j.burn.2014.04.003

Bakker, A. B. & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*, 309-328. https://doi.org/10.1108/02683940710733115

Bakker, A. B. & Demerouti, E. (2010). The Job Demands-Resources model: state of the art, Utrecht University, Department of Social and Organizational Psychology, Utrecht, The Netherlands, Northouse, P. G. (2010). *Leadership: Theory and practice* (5th ed.). Thousand Oaks, CA: Sage.

Bakker, A. B. & Demerouti, E. (2014). Job demands-resources theory. *Work and Wellbeing, 3*(2), 1-28. https://doi:10.1002/9781118539415.wbwell019

Bakker, A. B. & Demerouti, E. (2016). 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 wellbeing*. Salt Lake City, UT: DEF Publishers. DOI:nobascholar.com

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 43*(1), 83-104. https://doi.org/10.1002/hrm.20004

Bakker, A. B. & Oerlemans, W. G. M. (2019). Daily job crafting and momentary work engagement: A self-determination and self-regulation perspective. *Journal of Vocational Behavior, 112,* 417–430. https://doi.org/10.1016/j.jvb.2018.12.005

Bakker, A. B. & Wang, Y. (2020). Self-undermining behavior at work: Evidence of construct and predictive validity. *International Journal of Stress Management, 27*(3), 241–251. https://doi.org/10.1037/str0000150

Bakker, A. B. (2015). A Job Demands-Resources Approach to Public Service Motivation. *Public Administration Review*, *75*(5), 723–732. https://doi.org/10.1111/puar.12388

Bakker, A., Demerouti, E., Hakanen, J., & 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

Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E. A. Locke (Ed.), *Handbook of principles of organizational behavior* (pp. 120–136). Oxford, United Kingdom: Blackwell.

Barkhuizen, E. N. & Rothmann, S. (2008). Occupational stress of academics in South African higher education institutions, *South African Journal of Psychology, 28,* 2, 321-336. https://hdl.handle.net/10520/EJC98489

Barkhuizen, E. N. (2005). *Work wellness of academic staff in higher education institutions.* Unpublished Doctoral Thesis, Northwest University. http://hdl.handle.net/10394/713

Barkhuizen, E. N., Rothmann, S., & Van de Fijver, F. (2013). Burnout and engagement of academics in higher education institutions: Effects of Dispositional Optimism. *Stress & Health.* 2013 Aug 16. https://doi: 10.1002/smi.2520.

Barkhuizen, N., Lesenyeho, D., & Schutte, N. (2020). Talent retention of academic staff in South African higher education institutions. *International Journal of Business and Management Studies, 12*(1), 191-207. Retrieved from https://dergipark.org.tr/en/pub/ijbms/issue/52544/676826

119

Barkhuizen, N., Roodt, E., & Schutte, N. (2014). Talent Management of Academics: Balancing Job Demands and Job Resources. *Mediterranean Journal of Social Sciences*, *5*(20), 2039-2117. Retrieved from https://www.richtmann.org/journal/index.php/mjss/article/view/3949

Barkhuizen, N., Schutte, N., & Nagel, L. (2017). Talent management, organisational satisfaction and turnover intentions of academic staff. *Changing business environment: Gamechangers, opportunities and risk*s, *4*(4), 22-30. ISSN: 2520-6486

Bellamy, S., Morley, C., & Watty, K. (2003). Why business academics remain in Australian universities despite deteriorating working conditions and reduced job satisfaction: An intellectual puzzle. *Journal of Higher Education Policy and Management*, *25*(1), 13–28. https://doi.org/10.1080/13600800305740

Bentley, P. J., Coates, H., Dobson, I. R., Goedegebuure, L., & Meek, V. L. (eds) (2013). Introduction: Satisfaction around the world? *In Job satisfaction around the academic world* (pp. 1–11). Dordrecht: Springer.

Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2013). Job crafting and meaningful work. In B. J. Dik, Z. S. Byrne, & M. F. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 81–104). American Psychological Association. https://doi.org/10.1037/14183-005

Berg, J. M., Dutton, J. E., Wrzesniewski, A., & Baker, W. E. (2008). Job crafting exercise (pp. 1–8). *Center for Positive Organizational Scholarship, Ross School of Business, University of Michigan, Theory-to-Practice Briefing. Retrieved December*, *14*, 2018.

Bezuidenhout, A. & Cilliers, F. (2010). Burnout, work engagement and sense of coherence in female academics in higher-education institutions in South Africa. *SA Journal of Industrial Psychology 36*(1), 1-10. https://hdl.handle.net/10520/EJC89197

Biron, C., Karanika-Murray, M., & Cooper, C. L. (eds) (2012). *Improving organizational interventions for stress and well-being:* Addressing process and context. London: Routledge.

Bitzer, E. M. (2008). The Professoriate in South Africa: Potentially risking status inflation. *South African Journal of Higher Education, 22*, 2, 265-281. https://hdl.handle.net/10520/EJC37446

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: An International Review, 60*(1), 112–140. https://doi.org/10.1111/j.1464-0597.2010.00429.x

Brewster, L., Jones, E., Priestley, M., Wilbraham, S. J., Spanner, L., & Hughes, G. (2021). Look after the staff and they would look after the students cultures of wellbeing and mental health in the university setting. *Journal of Further and Higher Education, 4*, 548-560. https://doi.org/10.1080/0309877X.2021.1986473

Brough, P., Timms, C., Siu, O., Kalliath, T., O'Driscoll, M. P., Sit, C. H. P., Lou, D., & Lu, C. (2013). Longitudinal application of the Job Demands-Resources model to psychological strain and engagement in cross-national samples. *Human Relations, 66*(10), 1311–1335. https://doi.org/10.3390/ijerph18042072

Bryman, A. (2007). Effective leadership in higher education: a literature review. *Studies in Higher Education, 32*(6) 693–710. https://doi.org/10.1080/03075070701685114

Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human resource development review*, *6*(3), 263-296. https://doi.org/10.1177/1534484307303035

Burke, R. J. & Greenglass, E. R. (1994). Towards an understanding of work satisfactions and emotional well-being of school-based educators. *Stress medicine, 10*(3), 177-184. http://dx.doi.org/10.1002/smi. 2460100307.

Carlson, B. C. & Thompson, J. A. (1995). Job burnout and job leaving in public school teachers: Implications for stress management. *International journal of stress management, 2*(1), 15-29. https://doi.org/10.1007/BF01701948

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology, 85,* 65–74. https://doi.org /10.1037/0021-9010.85.1.65

Chen, S., Westman, M., Stevan, E., & Hobfoll, S. E. (2015). The Commerce and Crossover of Resources: Resource Conservation in the Service of Resilience, *Stress Health*, *31*(2), 95–105. http://doi.org/10.1002/smi.2574.

Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods, 4,* 62–83. http://doi.org/10.1177/10944281014100

122

Chung, N. G. & Angeline, T. (2010). Does work engagement mediate the relationship between job resources and job performance of employees? A*frican Journal of Business Management,* *4*(9), 1837-1843. http://www.academicjournals.org/AJBM

Coaldrake, P. & Stedman, L. (1999). Academic work in the twenty-first century: Changing roles and policies. *Occasional Paper Series, Department of Education, Training and Youth Affairs*, Australia.

Coetzee, M. & Schreuder, A. M. G. (2013). *Careers: An organisational perspective* (4th ed.). Cape Town: Juta & Co Ltd.

Coetzee, S. E. & Rothmann, S. (2005). Occupational stress, organisational commitment and ill health of employees at a higher education institution in South Africa, *South African Journal of Industrial Psychology, 31*(1), 47–54. https://hdl.handle.net/10520/EJC89035

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,* 834–848. http://dx.doi.org/10.1037/a0019364

Dartey-Baah, K. & Amoako, G. K. (2011). Application of Frederick Herzberg's Two-Factor theory in assessing and understanding employee motivation at work: a Ghanaian Perspective. *European Journal of Business and Management*, *3*(9), 1-8. https://www.iiste.org/ISSN 2222-2839 (Online)

De Braine, R. & Roodt, G. (2010). The Job Demands-Resources model as predictor of work identity and work engagement: A comparative analysis. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, *37*(2), Art. #889, 11 pages. https://doi.org/10.4102/sajip.v37i2.889

123

De Bruin, G. P., & Taylor, N. (2005). Development of the sources of work stress inventory. *South African Journal of Psychology*, *35*(4), 748-765. https://doi.org/10.1177/008124630503500408

De Jonge, J., Bosma, H., Peter, R., & Siegrist, J. (2000). Job strain, effort-reward imbalance and employee well- being: a large-scale cross-sectional study. *Social Science & Medicine*, *50*, 1317-1327. https://doi.org/10.1016/S0277-9536(99)00388-3

De Lange, A. H., De Witte, H., & Notelaers, G. (2008). Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work & Stress*, *22*(3), 201−223. https://doi.org/10.1080/02678370802390132

De Wit, H. & Altbach, P. G. (2021). Internationalization in higher education: global trends and recommendations for its future. *Policy Reviews in Higher Education*, *5*(1), 28-46. https://doi.org/10.3390/su12052107

Demerouti, D. (2014). Design Your Own Job Through Job Crafting. *European Psychologist*, *19*(4), 237–247. https://doi.org/10.1027/1016-9040/a000188

Demerouti, E. & Bakker, A. B. (2014). Job crafting. In M. C. W. Peeters, J. De Jonge, & T. W. Taris (Eds.). *An introduction to contemporary work psychology* (pp. 414– 433). Chichester, UK: Wiley-Blackwell.

Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. SA Journal of Industrial Psychology, 37(2), 01-09. https:// doi.org/10.4102/ sajip.v37i2.974

124

Demerouti, E., Bakker, A. B., & Gevers, J. (2015). Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior, 91,* 87-96. https://doi.org/10.1016/j.jvb.2015.09.001

Demerouti, E., Bakker, A. B., & Halbesleben, J. R. B. (2015). Productive and counterproductive job crafting: A daily diary study. *Journal of Occupational Health Psychology, 20*, 457–469. https://doi.org/10.1037/a0039002

Demerouti, E., Bakker, A. B., & Xanthopoulou, D. (2019). Job Demands-Resources theory and the role of individual cognitive and behavioral strategies. In T. Taris, M. Peeters, & H. De Witte (Eds.), *The fun and frustration of modern working life: Contributions from an occupational health psychology perspective* (pp. 94-104). Antwerp, Belgium: Pelckmans Pro.

Demerouti, E., Bakker, A., Nachreiner, F., & Schaufeli, W. (2001). The Job Demands-Resources model of burnout. *The Journal of Applied Psychology, 86*, 499-512. https://doi.org 10.1037/0021-9010.86.3.499

Dhanpat, N., De Braine, R., & Geldenhuys, M. (2019). Preliminary development of the Higher Education Hindrance Demands Scale amongst academics in the South African context. S*A Journal of Industrial Psychology*, *45*(0), 2071-0763. https://hdl.handle.net/10520/EJC-1720168513

Dollard, M. F. & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of occupational and organizational psychology, 83*(3), 579-599. https://doi.org/10.1348/096317909X470690

Erdem, C. & Kocyigit, M. (2019). Student Misbehaviors Confronted by Academics and Their Coping Experiences. *Educational Policy Analysis and Strategic Research*, *14*(1), 98-115. https://doi.org/10.29329/epasr.2019.186.6

125

Fontinha, R., Easton, S., & Van Laar, D. (2019). Overtime and quality of working life in academics and nonacademics: The role of perceived work-life balance. *International Journal of Stress Management*, *26*(2), 173. https://doi.org/10.1037/str0000067

Fried, Y. & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, *40*, 287-322. https://doi.org/10.1111/j.1744-6570.1987.tb00605.x

Gibbs, G., Knapper, C., & Piccinin, S. (2009). Departmental Leadership of Teaching in Research-Intensive Environments. *Research and Development Series.* London: Leadership Foundation for Higher Education.

Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work & Stress, 15*, 53-72. http://dx.doi.org/10.1080/02678370110062449.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.

Gordon, H., Demerouti, E., LeBlanc, P., Bakker, A. B., Bipp, T., & Verhagen, M. (2016). Bottom-up job (re)design: *The impact of job crafting interventions on work engagement and performance.* Manuscript submitted for publication.

Gorgievsky, M. J. & Hobfoll, S. E. (2008). Work can burn us out and fire us up: conservation of resources in burnout and engagement. In J.R.B. Halbesleden, (Ed.), *Handbook of Stress and Burnout in Healthcare*. (pp.7-22). Hauppauge, NY: Nova Science Publishers.

Goss, H. B., Cuddihy, T. F., & Michaud-Tomson, L. (2010). Wellness in higher education: A transformative framework for health related disciplines. Asia-Pacific. *Journal of Health, Sport and Physical Education, 1*(2), 29-36. https://doi.org/10.1080/18377122.2010.9730329

Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. J*ournal of applied psychology, 93*(1), 108. https://doi.org/10.1037/0021-9010.93.1.108

Guthrie, S., Lichten, C., Van Belle, J., Ball, S., Knack, A., & Hofman, J. (2017). *Understanding Mental Health in the Research Environment*. Rand Corporation. Available at https://www.rand.org/pubs/research_reports/RR2022.html

Hackman, J. R. & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organisational Behaviour and Human Performance, 16*, 250-279. https://doi.org/10.1016/0030-5073(76)90016-7

Hackman, J. R. & Oldham, G. R. (1980). *Work redesign*. Boston: Addison-Wesley.

Hahn, V. C., Binnewies, C., Sonnentag, S., & Mojza, E. J. (2011). Learning how to recover from job stress: effects of a recovery training program on recovery, recovery-related self-efficacy, and wellbeing. *Journal of Occupational Health Psychology, 16*, 202–16. https://doi.org/10.1037/a0022169

Hakanen, J. J., Bakker, A. B., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sciences, 113*(6), 479-487.http://dx.doi.org/10.1111/j.1600-0722.2005.00250.x

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*(6), 495-513. http://dx.doi.org/10.1016/j.jsp.2005.11.001

Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior 73*(1), 78–91. https://doi.org/10.1016/j.jvb.2008.01.003

Heaney, C. A. (2003). Worksite health interventions: Targets for change and strategies for attaining them. In J. C. Quick & L. E. Tetrick (Eds.). *Handbook of occupational health psychology,* (pp. 305–323). Washington, DC: American Psychological Association.

Herzberg, F. (1966). *Work and the nature of man*. Cleveland: World Publishing Company.

Herzberg, F., Mausner, B., & Snydermann, B. (1959). *The motivation to work*. New York: Wiley

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing Conservation of Resources theory. *Applied Psychology: An International Review, 50*(3), 337-370. http://dx.doi.org/10.1111/1464-0597.00062

Hobfoll, S. E. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational Organisational Psychology, 84*, 116–22. https://doi.org/10.1111/j.2044-8325.2010.02016.x

Hobfoll, S. E., Halbesleben, J., Neveu, J., & Westman, M. (2018). Conservation of Resources in the Organizational Context: The Reality of Resources and Their

128

Consequences. *Annual Review of Organizational Psychology and Organizational Behavior, 5*, 103–28. https://doi.org/10.1146/annurev-orgpsych-032117-104640

Houston, D., Meyer, L. H., & Paewai, S. (2006). Academic Staff Workloads and Job Satisfaction: Expectations and values in academe. *Journal of Higher Education Policy and Management*, *28*(1), 17-30. https://doi.org/10.1080/13600800500283734

Hsieh, Y. & Wang, M. (2012). The moderating role of personality in HRM – From the influence of job stress on job burnout perspective. *International Management Review, 8*(2), 5-17. Retrieved from http://www.usimr.org/IMR-2-2012/v8n212-art1.pdf

Ilgen, D. R. & Hollenbeck, J. R. (1992). The structure of work: Job design and roles. In M. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 165–207). Palo Alto, CA: Consulting Psychologists Press.

Janse van Rensburg, C., Rothmann, S., & Diedericks, E. (2018). Job demands and resources: Flourishing and job performance in South African universities of technology settings. J*ournal of Psychology in Africa, 28*(4), 291-297. https://doi.org/10.1080/14330237.2018.1501881

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. https://doi.org/10.2105/ajph.78.10.1336

Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. Research in Organizational Behavior, 19,151–188.

Karasek, R. A. & Theorell, T. (1990). *Healthy Work: Stress, Productivity, and the Reconstruction of Working Life*. New York: Basic Books

Karasek, R. A. (1979). Job demands, job decision latitude and mental strain: Implications for job design. *Administrative Science Quarterly, 24*, 285-308. https://doi.org/10.2307/2392498

Kessels, J. W. M. (1993). Towards design standards for curriculum consistency in corporate education. PhD Thesis. University of Twente

Kinman, G. (2001). Pressure points: A review of research on stressors and strains in UK academics. *Educational Psychology, 21*, 473-492. http://dx.doi.org/10.1080/01443410120090849

Kinman, G. (2008). Work stressors, health and sense of coherence in UK academic employees. Educational Psychology. *An International Journal of Experimental Educational Psychology, 28(7)* 823-835. https://doi.org/10.1080/01443410802366298

Koen, C. (2003). Challenges and Pressures Facing the Academic Profession in South Africa. In: Altbach P.G. (eds). *The Decline of the Guru.* Palgrave Macmillan, New York. https://doi.org/10.1057/9781403982568_11

Konermann-van Hunsel, J. F. E. (2012). Teachers' work engagement: A deeper understanding of the role of job and personal resources in relationship to work engagement, its antecedents and its outcomes. Retrieved January 25, 2013, from http://doc.utwente.nl/7900/l/thesis_J_Konermann.pdf

Knight, C., Tims, M., Gawke, J., & Parker, S. K. (2021). When do job crafting interventions work? The moderating roles of workload, intervention intensity,

and participation. *Journal of Vocational Behavior, 124*, 103522. https://doi.org/10.1016/j.jvb.2020.103522

Kraiger, K., Salas, E., & Cannon-Bowers, J. A. (1995). Measuring knowledge organization as a method -for assessing learning during training. *Human Relations, 37,* 804-816. https://doi.org/10.1518/001872095778995535

Kyriacou, C. & Sutcliffe, J. (1978). Teacher stress: Prevalence, sources, and symptoms. British *Journal of Educational Psychology*, *48*(2), 159-167. http://dx.doi.org/10.1111/j.2044-8279.1978.tb02381.x

Lacy, F. J. & Sheehan, B. A. (1997). Job satisfaction among academic staff: An international perspective. *Higher Education*, *34*(3), 305–322. https://doi.org/10.1023/A:1003019822147

Langford, P. H. (2010). Benchmarking work practices and outcomes in Australian universities using an employee survey. *Journal of Higher Education Policy and Management, 32*(1), 41-53. https://doi.org/10.1080/13600800903440543

Le Blanc, P. M., Demerouti, E., & Bakker, A. B. (2017). Better? Job crafting for sustainable employees and organizations. *An introduction to work and organizational psychology: An international perspective*, p.48. https://doi.org/10.1002/9781119168058.ch3

Lindsley, D. H., Brass, D. J., & Thomas, J. B. (1995). Efficacy-performance spirals: A multilevel perspective. *Academy of Management Review, 20,* 645-678. https://doi.org/10.5465/amr.1995.9508080333

Linley, P. A., Harrington, J. S., & Wood, A. M. (2006). Positive psychology: Past, present, and (possible) future. *The journal of positive psychology, 1*(1), 3-16. https://doi.org/10.1080/17439760500372796

131

Little, L. M., Simmons, B. L., & Nelson, D. L. (2007). Health Among Leaders: Positive and Negative Affect, Engagement and Burnout, Forgiveness and Revenge. *Journal of Management Studies, 44*(2), 243-260. https://doi.org/10.1111/j.1467-6486.2007.00687.x

Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist?. *Computers in human behavior, 23*(1), 825-841. https://doi.org/10.1016/j.chb.2004.11.012

Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics and job satisfaction. *Journal of Applied Psychology*, *70*, 280-289. https://doi.org/10.1037/0021-9010.70.2.280

Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. J. (2006). "Psychological capital development: toward a micro-intervention". *Journal of Organizational Behavior*, *27*(3), 387-393. https://doi.org/10.1002/job.373

Lyons, M. & Ingersoll, L. (2010). Regulated autonomy or autonomous regulation? Collective bargaining and academic workloads in Australian universities. *Journal of Higher Education Policy and Management*, *32*(2), 137–148. https://doi.org/ 10.1080/13600800903440592

Mapesela, M. & Hay, D. H. R. (2006). The effect of change and transformation on academic staff and job satisfaction: A case of a South African University. *Higher Education*, *52*, 711–747. https://doi.org/10.1007/s10734-004-6821-7

Marmot, M., Siegrist, J., Theorell, T., & Feeney, A. (1999). Health and the psychosocial environment at work. In: Marmot, M.G., Wilkinson, R. (Eds.), *Social Determinants of Health*. Oxford University Press, Oxford.

Melamed, S., Shirom, A., Toker, S., Berliner, S., & Shapira, I. (2006). Burnout and risk of cardiovascular disease: evidence, possible causal paths, and promising research directions. *Psychological bulletin, 132*(3), 327. https://doi.org/10.1037/0033-2909.132.3.327

Morrish, L. (2019). Pressure vessels: *The epidemic of poor mental health among higher education staff*. Oxford: Higher Education Policy Institute. https://www.hepi.ac.uk/2019/05/23/pressure-vessels-the-epidemic-of-poor-mental-health-among-higher-education-staff/. Accessed 30 March 2022

Mouton, J. (2010). *African experience with collaborative graduate programmes*. Research report, Stellenbosch: University of Stellenbosch.

Mudrak, J., Zábrodská, 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. https://doi.org/10.1007/s11162-017-9467-x

Nelson, D. L. & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. In J. C. Quick, & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 97-119). Washington, DC: American Psychological Association.

Ng'ethe, J. M., Namusonge, G. S., & Iravo, M. A. (2012). Influence of leadership style on academic staff retention in public universities in Kenya. *International Journal of Business and Social Science*, *3*(21), 297–302. https://www.semanticscholar.org/paper/Influence-of-Leadership-Style-on-Academic-Staff-in-Ng%E2%80%99ethe/a8a7338ab24d967d91ef54daf488914b464345c1

Ntshoe, I. & De Villiers, P. (2008). Steering the South African higher education sector towards transformation. *Perspectives in Education*, *26*(4), 17-27. https://hdl.handle.net/10520/EJC87500

Oshagbemi, T. (2000). Gender differences in the job satisfaction of university teachers. *Women in Management Review*, *15*(7), 331–343. https://doi.org/10.1108/ 09649420010378133

Ostry, A. S., Kelly, S., Paul A Demers1, P. A., Cameron Mustard, C., & Hertzman, C. (2003). A *comparison* between the effort-reward imbalance and demand-control models, *BMC Public Health*, *3*(1), 1-9. https://doi.org/10.1186/1471-2458-3-10

Paterson, T. A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychological capital and supervisor support. *Journal of Organizational Behavior, 35*(3), 434-446. https://doi.org/10.1002/job.1907

Pelfrene, E., Vlerick, P., Mak, R. P., De Smet, P., Kornitzer, M., & De Backe, G. (2001). Scale reliability and validity of the Karasek 'Job Demand-Control-Support' model in the Belstress study. *Work & stress, 15*(4), 297-313. https://doi.org/10.1080/02678370110086399

Petrou, P., Demerouti, E., Peeters, M. C. W., Schaufeli, W. B., & Hetland, J. (2012). Crafting a job on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior, 33*, 1120–1141. https://doi.org/10.1002/job.1783

Pienaar, C. & Bester, C. L. (2008). The retention of academics in the early career phase: Empirical research. *SA Journal of Human Resource Management, 6(2)*, 32-41. https://hdl.handle.net/10520/EJC95871

Pierce, J. L., Gardner, D. G., Cummings, L. L., & Dunham, R. B. (1989). Organizational-based self-esteem: Construct definition, measurement, and validation. *Academy of Management Journal, 32*, 622–648. https://doi.org/10.5465/256437

Popescu, F. (2015). South African globalization strategies and higher education. *Procedia - Social and Behavioral Sciences, 209*, 411 – 418. https://doi.org/10.1016/j.sbspro.2015.11.212

Quick, J. C., Quick, J. D., Nelson, D. L., & Hurrell, J. J. (1997). Preventative stress management in organisations. Washington DC: American Psychological Association. Ramsden, P. (1998). Managing the Effective University. *Higher Education Research and Development, 17*(3), 347-370. https://doi.org/10.1080/0729436980170307

Robbins, S. P., Judge, T. A., Odendaal, A., & Roodt, G. (2016). *Organisational behaviour: Global and Southern African perspectives.* 3rd Edition. Pearson Holdings Southern Africa, Cape Town.

Romainville, M. (1996). Teaching and research at university: A difficult pairing. *Higher Education Management*, *8*, 135–144. ISSN: ISSN-1013-851X

Rosser, V. J. (2004). Faculty members' intentions to leave: A national study on their worklife and satisfaction. *Research in Higher Education*, *45*(3), 285–309. https://doi.org/10.1023/B:RIHE.0000019591.74425.f1

Rothmann, S., Barkhuizen, N., & Tytherleigh, M. (2008). A model of work-related health for academic staff in South African higher education institutions. *South

African Journal of Higher Education, *22(2),* 404-422. https://hdl.handle.net/10520/EJC37437

Rothmann, S., Steyn, L. J., & Mostert, K. (2005). Job stress, sense of coherence and work wellness in an electricity supply organisation. *South African Journal of Business Management, 36*(1), 55-63. https://hdl.handle.net/10520/EJC22273

Salanova, M. & Schaufeli, W. B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *International Journal of Human Resource Management, 19*(1), 116-131. https://doi.org/10.1080/09585190701763982

Salanova, M., Schaufeli, W. B., Xanthopoulou, D., & Bakker, A. B. (2010). The gain spiral of resources and work engagement: Sustaining a positive worklife. In A. B. Bakker (Ed.) & M. P. Leiter, Work engagement: *A handbook of essential theory and research* (p. 118–131). Psychology Press.

Samad, A. (2015). Towards an Understanding of the Effect of Leadership on Employee Wellbeing and Organizational Outcomes in Australian Universities. *The Journal of Developing Areas, 49*(6), 441-448. https://doi.org/10.1353/jda.2015.0121.

Sathye, M. (2004). Leadership in Higher Education: A Qualitative Study. Forum: *Qualitative Social Research*, *5*(3), 26. https://doi.org/10.17169/fqs-5.3.571

Schaufeli, W. B. (2017). Applying the Job Deman*ds-Resources model: A 'how to'* guide to measuring and tackling work engagement and burnout. *Organizational Dynamics, 46*, 120—132. https://doi.org/10.1016/j.orgdyn.2017.04.008Get

136

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

Semmer, N. K. (2003). Job stress interventions and organization of work. In J. C. Quick & L. E. Tetrick (Eds.). *Handbook of occupational health psychology,* (pp. 325–354). Washington, DC: American Psychological Association.

Shin, J. C. & Jung, J. (2014). Academics job satisfaction and job stress across countries in the changing academic environments. *Higher Education,* 67, 603–620. https://doi.org/10.1007/s10734-013-9668-y

Siddique, A., Aslam, H. D., Khan, M., & Fatima, U. (2011). Impact of academic leadership on faculty's motivation, and organizational effectiveness in higher education system. *International Journal of Academic Research*, *3*(3), 730-737. http://www.ijar.lit.az/

Siegrist, J. (1996). Adverse health effects of high-effort/low- reward conditions. *Journal of Occupational Health Psychology*, *1*, 27-41. https://doi.org/10.1037/1076-8998.1.1.27

Siegrist, J. (1998). Adverse health effects of effort-reward imbalance at work: theory, empirical support and implications for prevention. In: Cooper, C.L. (Ed.), *Theories of Organizational Stress*. Oxford University Press, Oxford, pp. 190-204.

Siegrist, J., Peter, R., Junge, A., Cremer, P., & Seidel, D. (1990). Low status control, high effort at work and ischemic heart disease: Prospective evidence from blue-collar men. *Social Science & Medicine,* *31*(10), 1127-1134. https://doi.org/10.1016/0277-9536(90)90234-J

137

Simmons, B. L. & Nelson, D. L. (2001). Eustress at Work: The Relationship between Hope and Health in Hospital Nurses. *Health Care Management Review, 26*, 7-18.

Sonnentag, S. & Frese, M. (2013). Stress in Organizations. In N. W. Schmitt, S. Highhouse, & I. B. Weiner (Eds.), *Handbook of Psychology: Industrial and organizational psychology* (pp. 560-592). John Wiley & Sons, Inc.

Scheier, M.F. & Carver, C.S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy Research, 16*, 201–228. https://doi.org/10.1007/BF01173489

Storm, K., & Rothmann, S. (2003). The relationship between burnout, personality traits and coping strategies in a corporate pharmaceutical group. *Sa Journal of industrial psychology*, *29*(4), 35-42. https://hdl.handle.net/10520/EJC88979

Taber, T. D. & Taylor, E. (1990). A review and evaluation of the psychometric properties of the job diagnostic survey. *Personnel Psychology*, *43*, 467-500. https://doi.org/10.1111/j.1744-6570.1990.tb02393.x

Taris, T. W. & Schaufeli, W. B. (2016). *The Job Demand-Resources Model*. John Wiley & sons, Ltd.

Tham, T. L. & Holland, P. (2018). What do business school academics want? reflections from the national survey on workplace climate and well-being: Australia and New Zealand. *Journal of Management & Organization, 24*(4), 492–499. https://doi.org /10.1017/jmo.2018.3

Thomas, E. C., Du Plessis, M., & Thomas, K. G. F. (2020). An evaluation of job crafting as an intervention aimed at improving work engagement. *SA Journal*

138

of *Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, *46*(0), a1703. https://hdl.handle.net/10520/EJC-1f3dea7ef3

Tims, M. & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *South African Journal of Industrial Psychology, 36*, 1–9. https://hdl.handle.net/10520/EJC89228

Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior, 80, 173-186.* https://doi.org/10.1016/j.jvb.2011.05.009

Trougakos, J. P., Beal, D. J., Cheng, B. H., Hideg, I., & Zweig, D. (2015). Too drained to help: A resource depletion perspective on daily interpersonal citizenship behaviors. *Journal of Applied Psychology*, *100*, 227–236. https://doi.org/10.1037/a0038082

Van den Heuvel, M., Demerouti, E., & Peeters, M. C. W. (2012). Succesvol job craften door middel van een groepstraining /*Successful job crafting through group training*. In J. De Jonge, M. C. W. Peeters, S. Sjollema, & H. De Zeeuw (Eds.), Scherp in Werk (pp. 7–20). Assen: Van Gorcum.

Van den Heuvel, M., Demerouti, E., & Peeters, M. C. W. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology, 88,* 511-532. https://doi.org/10.1111/joop.12128

Van Heerden, J. H., Bohlmann, H. R., Giesecke, J. A., Makochekanwa, A., & Roos, E. L. (2007). *Higher Education Impact: Universities in the South African Economy*. Higher Education South Africa, Pretoria.

Van Niekerk, F. & Geertsema, J. C. (2009). Strategies for university improvement: The research profile change at a South African non-research-intensive university. *South African Journal of Higher Education*, *23*(5), 912–934. https://hdl.handle.net/10520/EJC37566

Van Theron, M., Barkhuizen, N., & Du Plessis, Y. (2014). Managing the academic talent void: Investigating factors in academic turnover and retention in South Africa. *SA Journal of Industrial Psychology, 40*(1), 1–14. https://doi.org/10.4102/sajip. v40i1.1117

Van Wingerden, J. (2016) June 16). *Job Demands-Resources Interventions*. Erasmus University Rotterdam. Retrieved from http://hdl.handle.net/1765/93132

Van Wingerden, J., Bakker, A. B., & Derks, D. (2016). A test of a Job Demands-Resources intervention. *Journal of Managerial Psychology, 31*(3), 686-701. https://doi.org/10.1108/JMP-03-2014-0086

Van Wingerden, J., Bakker, A. B., & Derks, D. (2017). Fostering employee well-being via a job crafting intervention. *Journal of Vocational Behavior, 100*, 164–174. https://doi.org/10.1016/j.jvb.2017.03.008

Van Wingerden, J., Derks, D., Bakker, A. B., & Dorenbosch, L. (2013). Job crafting in schools for special education: A qualitative analysis. *Gedrag & Organisatie*, *26*, 85–103. http://resolver.tudelft.nl/uuid:92fb8a18-fc71-4fab-aa4c-b7a96c57115c

Van Wingerden, J., Derks, D. and Bakker, A. B. (2017). The impact of personal resources and job crafting interventions on work engagement and performance. *Human Resource Management, 56*(1), 51-67. https://doi.org/10.1002/hrm.21758

Van Yperen, N. W., & Snijders, T. A. B. (2000). A multilevel analysis of the demands-control model: Is stress at work determined by factors at the group level or the individual level? *Journal of Occupational Health Psychology, 5*, 182–190. https://doi.org/10.1037//1076-8998.5.1.182

Winefield, A. H., Boyd, C., Saebel, J., & Pignata, S. (2008). *Job stress in university staff: An Australian research study*. Bowen Hills, Quensland: Australian Academic Press.

Winefield, A. H., Gillespie, N. A., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). Occupational stress in Australian university staff: Results from national survey. *International Journal of Stress Management, 10*, 51-63. http://dx.doi.org/10.1037/1072-5245.10.1.51

Winter, R., Taylor, T., & Sarros, J. (2000). Trouble at mill: Quality of academic work life issues within a comprehensive Australian university. *Studies in Higher Education*, *25*, 279–294. https://doi.org/10.1080/713696158

Wrzesniewski, A. & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review, 26,* 179-201. https://doi.org/10.5465/amr.2001.4378011

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. https://doi.org/10.1016/j.jvb.2008.11.003

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*, 121−141. https://doi.org/10.1037/1072-5245.14.2.121

141

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. https://www.ruijass.com/wp-content/uploads/2017/10/2-002LCY-Final.pdf

Ylijoki, O. H. & Ursin, J. (2013). The construction of academic identity in the changes of Finnish higher education. *Journal for Studies in Higher Education, 14*(5), 495-506. https://doi.org/10.1080/03075079.2013.833036

Ylijoki, O. H. (2013). Boundary-work between work and life in the/ high-speed university. *Studies in Higher Education*, *38*(2), 242-255. https://doi.org/10.1080/03075079.2011.577524

CHAPTER 4: JOB DEMANDS AND ACADEMIC STAFF RESOURCES WITHIN HIGHER EDUCATION INSTITUTIONS—A SYSTEMATIC REVIEW
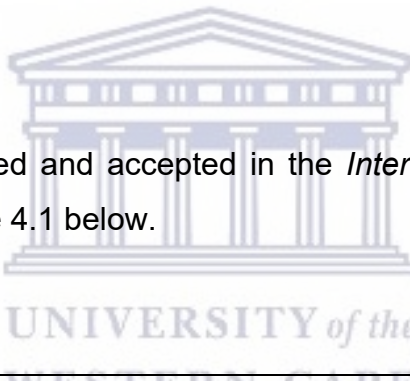
4.1 Introduction

The previous chapter reviewed empirical job demands and resources literature. The sources were further contextualised within the HE sector. The chapter introduces Phase I of the study. This chapter presents the systematic review findings, observing the empirical research recorded on job demands and resources, based on the JDR model in HE. HEIs will be able to target job demands and resources for their employees. Developing specific interventions will be enabled (Article 1).

4.2 Publication details

Article 1 has been submitted and accepted in the *International Journal of Higher Education*, detailed in Table 4.1 below.

Table 4.1: Article details

Title	A systematic review of the job demands and resources of academic staff within higher education institutions
Authors	Naidoo-Chetty, M, Du Plessis, M
Year	2021
Journal	International Journal of Higher Education
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4.3 Journal overview

The manuscript was published in the *International Journal of Higher Education*. This open access stored under *Sciedu Press* is a medium for articles of interest to researchers and practitioners in HE. The journal attempts to publish original hypothetical and theoretical research articles, providing exploratory insights into the fields of educational theory, teaching methods, instructional design, student management, and case studies at undergraduate and graduate levels. The editorial board aims to publish high-quality research or review papers focusing on teaching, research, training, and applied work in HE.

4.4 Published article

Systematic review of the job demands and resources of academic staff within higher education institutions

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Abstract

The Higher Education sector has been through an array of changes, such as globalisation, massification, lack of job security, decolonisation and a number of technological advancements. These changes have impacted academic workload and have increased work pressure with resultant effects on family and work life balance. A review of the existing literature indicates a lack of clarity when it comes to the job demands and job resources inherent to the academic occupation. In order to determine the job demands and job resources of academics, a systematic review of empirical literature is warranted. This paper systematically reviewed empirical research published from 2014 to 2019 investigating job demands and resources based on the job demands-resources model in the higher education environment. Six articles were identified that met the criteria for inclusion. Thus, a list of quantitative, qualitative and organisational job demands as well as organisational and personal resources specific to the academic environment were identified. This will allow Higher Education Institutions to provide targeted development of job resources and mitigation of job demands for their academic employees and enable the development of specific interventions.

Keywords: job demands, job resources, higher education, academics, systematic review

4.4.1 Introduction

Higher education institutions are facing major transformation challenges globally. Student registrations have risen considerably over the past few years and it would

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appear that academics are furthermore expected to take on more administrative and management duties (CHE, 2010; Ntshoe & De Villiers, 2008). Current statistics reveal that the job demands of academics have escalated (due to the forces of internationalisation and open-learning technology, for example) whilst the levels of support and other resources have declined (Council of Higher Education, 2016; Barkhuizen, 2005). Therefore, higher education institutions no longer provide the low-stress environment they once did (Gillespie, Walsh, Winefield, Dua & Stough, 2001). Academic employees within higher education institutions are experiencing an overload of job demands, however, they have a shortage of response capabilities, especially when it comes to finances (Viljoen & Rothmann, 2002). Further demands experienced comprise of hefty workloads, time andresource restrictions, extended working hours, poor pay, poor communication, role uncertainty, lack of acknowledgement, striving for publication, ensuring that support for students are provided and staying abreast of technological developments (Dhanpat, de Braine & Geldenhuys, 2019; Mushemeza, 2016; Ngoc, Hoang & Hung, 2020). University teaching is known to be stressful (Han, Yin, Wang & Bai, 2019), and that the job demands of faculty members, in terms of stressors, are closely associated to negative outcomes, including dissatisfaction and greater likelihood of burnout (Renshaw, Long & Cook, 2015). Regardless of reporting high levels of stress and increased demands, there is some evidence that academics also achieve a substantial amount of satisfaction from their work (Rothmann & Essenko, 2007).

Job resources are those elements that assist when job demands become too much (Demerouti, Bakker, Nachreiner & Schaufeli, 2001). The Job Demands-Resources (JD-R) model puts forward that resources play an integral part in the prevention health-impairment process, but can equally act as an antecedent to motivation related outcomes such as enhanced commitment and dedication (Mostert, 2011). The JD-R theoretical framework places employee well-being at the focal point as well as considering employee behaviour and organisational outcomes such as

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absenteeism, productivity, organisational citizenship and client gratification (Bakker & Demerouti, 2018). Employees are consequently respected in their own right as they can safeguard other resources, thus preventing a future loss of resources and the improvement of the process of future resource gain (Hakanen, Peeters & Perhoniemi, 2011). By associating job demands with adequate job resources, individuals can challenge themselves to engage in tangible and more demanding professional undertakings, thereby enhancing the pleasure of performing tasks. Similarly, if there are greater demands and scarce resources, there would be a greater chance of illness and strain amongst employees (Schaufeli, Salanova, González-Romá & Bakker, 2002).

The JD-R model captures the dynamic interaction between job demands and job resources. Specifically, it maintains that when employees have an adequate level of job resources that assist them in successfully coping with their job demands, it spurs an extrinsic and intrinsic motivational process that leads to higher levels of engagement (Byrne & MacDonagh, 2017). This is in line with the Conservation of Resources theory (COR; Hobfoll, 2002) that states that individuals actively strive to obtain, preserve, and protect their resources, including objects, personal characteristics, conditions, and energies (Chen, Westman & Eden, 2009). The COR theory suggests that resource depletion is psychologically harmful and can result in reduced levels of well-being while the availability of resources contributes to mental health (Janse Van Rensburg, Rothmann & Diedericks, 2018).

Accordingly, psychological stress occurs when individuals' resources are depleted or threatened, or when they fail to gain resources after resource investment. Persons who lose resources experience actual stress, or when resources are threatened, they will experience anticipatory stress before any actual resource loss occurs (Chen et al., 2009).

Job demands can be classified based on the volume (quantitative demands) and complexity/difficulty (qualitative demands). Quantitative demands are related to the number of tasks and the speed at which it can be accomplished. Thus when quantitative work demands are elevated, work tasks will necessitate more time than what was planned for (van Veldhoven, 2014). Qualitative demands focuses on the type of skills and/or effort required to complete work tasks. For example, cognitive, emotional or physical skills and/or effort. It refers to the level of difficulty or complexity that is needed to carry out the job (Bowling & Kirkendall, 2012). In addition, demands can also be classified as organisational demands. These types of demands impact individual performance negatively in terms of work outputs (Bakker, Demerouti & Verbeke, 2004). Similarly, job resources can be classified as organisational and personal resource, depending on the source of the resource (Schaufeli & Taris, 2014).

One of the main assumptions of the JD-R model is that every occupation has its own specific risk factors associated with job-related stress (Demerouti & Bakker, 2011). It is therefore important to understand what demands and resources exist in the academic environment. Due to the fragmented nature literature of job demands and job resources inherent to the academic occupation, the current study aimed to synthesise literature through a systematic review to provide a clearer picture of the contemporary demands and resources of the academic. The review further included an exploration of the empirically established influence of job demands and resources on individual and organisational outcomes. The objectives of the study were therefore to:

1) To determine what job demands, job resources and associated outcomes relevant to the academic role have been studied; and
2) To review the empirically tested relationships between academic job demands and resources and consequences.

4.4.2 Methodology

4.4.2.1 Research design

A systematic review was undertaken to identify published literature on job demands and resources within the Higher Education Sector. A systematic review uses a clear algorithm, as opposed to a heuristic, to achieve a search and critical appraisal of the literature (Arksey & O'Malley, 2005).

4.4.2.2 Eligibility criteria

Studies were included if the desired criteria were satisfied, i.e. a focus on job demands and/or job resources of academic staff and utilising the JD-R model as theoretical framework. In addition, studies that included academics as the target audience were sought, and the time frame of 2014 − 2019 was considered. This time period was chosen to reflect recency of job demands and resources within the Higher Education context. The British Council report on Higher Education (2012) estimated a 1.4% growth in global Higher Education enrolments between the period of 2011 and 2020; thus numerous changes between 2014 − 2019 are estimated ("Higher education global trends and emerging opportunities to 2020", 2012). Within the South African context the period from 2014 was characterised by student protest actions that resulted in mental and emotional demands for academics (Du Plessis, 2020).

The systematic review excluded all studies that was not in English. Studies that were not included in the subscribed or open access databases of the researchers' library access were not considered for the systematic review. This could potentially reduce the body of knowledge that is being used for the study and thus could impact the study and the findings.

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4.4.2.3   Search strategy

The following databases, Science direct, Scopus, Sage, Sabinet, Ebscohost, Emerald Insight and Wiley online was chosen due to their relevance to the topic. These databases were systematically searched by two reviewers in November 2019. A preliminary search of these databases revealed that these databases contained appropriate and current evidence pertaining to the review. The following keywords were used in the current study: 'Job demands, Job resources, higher education, university, college, academic staff'. Strings of keywords were created using The Boolean operator 'AND' and was entered in to 'All fields' in the respective database. The Boolean strings of keywords and search terms are presented below:

The Boolean strings of keywords and search terms are as follows:
   (1) job demands AND higher education
   (2) job demands AND higher education AND academics
   (3) job demands AND university
   (4) job resources AND higher education
   (5) job resources AND higher education AND academics
   (6) job demands AND (higher education* OR college* OR university* OR higher education institutions*)
   (7) job demands AND university teachers
   (8) job resources AND university teachers
   (9) job demands AND higher education professionals
   (10) job demands AND higher education professionals

Limiters were applied consistently to all searches. These limiters included peer-review, full-text, English medium, published between 2014 − 2019.

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4.4.2.4   Study selection

The target population considered for this study was required to include academic staff currently employed at a higher education institution. Both international and national studies of qualitative, quantitative and mixed methodology designs were considered for inclusion in the review. Studies were further required to report on the target population, setting, and the identified job demands and or the job resources that the academic staff were experiencing. As this study embodies a systematic review methodology, other systematic reviews were excluded from the study. Additionally, studies not focused on academics as the target population, and that is not set within a higher education setting or does not include primary data was not considered for review.

The full-text of potential studies were assessed for methodological quality using the PRISMA critical appraisal tool. The PRISMA critical appraisal tool consists of four dimensions (1) Identification; (2) Screening; (3) Eligibility; and (4) Included (Moher, Liberati, Tetzlaff, Altman, 2009). The PRISMA appraisal tool was rated using dichotomous scale of yes (1) or no (0) resulting in a composite score indicating the methodological quality and reporting on the intervention. Articles that scored less than 70% were omitted demonstrating that they were poorly developed or executed. All three levels of review were conducted by two researchers working independently. If there were any discrepancies regarding the inclusion criteria, they were discussed by reviewers. If no compromise was reached, a third independent reviewer was consulted.

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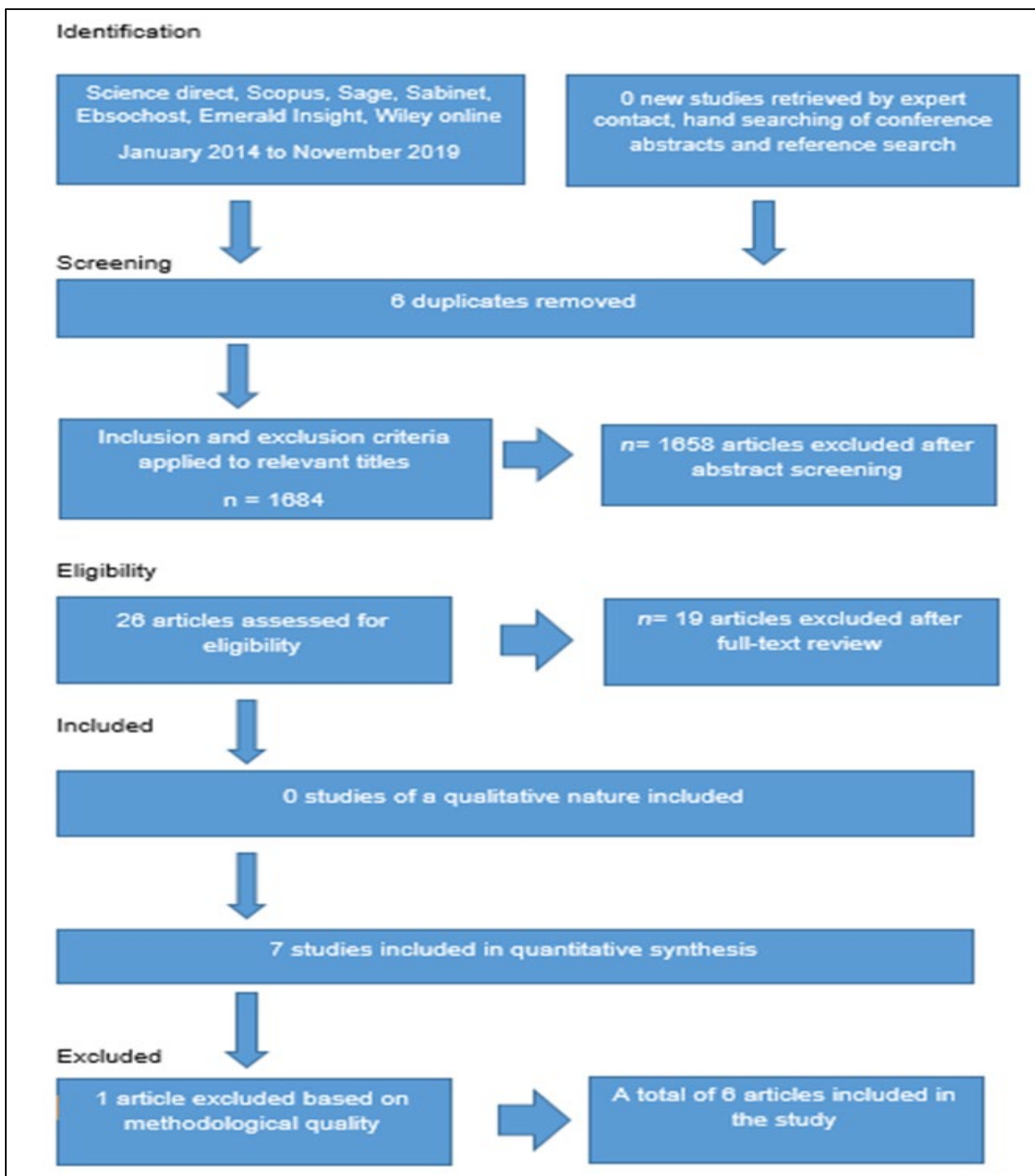
Figure 4.1: Methodological quality assessment

4.4.3 Data extraction

A data extraction sheet developed by Isaacs, Roman, Savahl and Sui (2018) was adapted for the extraction of data from included studies. The data extraction sheet consists of six categories namely, (1) authors and year; (2) method target population; (3) job demands; (4) job resources; (5) consequences (Lack of Job resources and too many demands); and (6) aim of the study. The results of the data extraction is reported in Table 1.

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Table 4.1: Data extraction

Authors & Year	Target population and method	Job demands	Job resources	Consequences	Aim of the study
1. Alzyoud (2016)	Four Jordanian HE institutions (n=532) Quantitative method	Academic workload Work pressure	Autonomy Social support Performance feedback	**Of job resources:** ↑Work engagement ↑Job satisfaction **Of job demands:** ↓Work engagement ↓Job satisfaction Job satisfaction mediates the relationship between job demands and job resources, and work engagement	To determine the extent to which job satisfaction mediated the relationship between job demands-resources and work engagement of academic staff

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Authors & Year	Target population and method	Job demands	Job resources	Consequences	Aim of the study
2. Mudrak et al. (2018)	The study participants were (n=1389) full-time faculty members employed in public universities in the Czech Republic. Quantitative method	Job insecurity Work-family conflict Quantitative demands (extended hours of working)	Support from supervisors Support from colleagues Influence over their work (Autonomy)	**Of job resources:** ↑Work engagement ↑Job satisfaction **Of job demands:** ↑Stress	To determine how academics at Czech public universities perceived their workplaces and how these perceptions related to their occupational well-being
3. Nurendra (2018)	The study participants were (n=83) lecturers from a university in Yogyakarta. Quantitative method	Workload Emotional demands Work-home interference	Autonomy Self-development opportunities Social support	**Of job resources:** ↑Work engagement **Of job demands:** ↓Work engagement Job resources have a significant moderating role in job demands and work engagement	To examine the role of job resources as the moderating variable in the relationship between job demands and work engagement among lecturers
4. Dhanpat et al. (2019)	Participants were (n=184) lecturers from across universities in South Africa	Work overload Higher education unrest Change management	N/A	N/A	Construct and theoretically validate the Higher Education Hindrance Demands Scale through exploratory factor analysis

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Authors & Year	Target population and method	Job demands	Job resources	Consequences	Aim of the study
	Quantitative method	Decolonisation			
		Online teaching and learning			
		Lack of psychological safety			
5. Han et al. (2019)	University lecturers (n=2758) from East China participated in this study. Lecturers were from key national universities, provincial	Teaching load	Teaching resources	**Of job resources:**	This study investigated the associations between challenging job demands,
		Innovative technology	Peer support	↑Work engagement	
		Research demands	Administrative support	↓Emotional exhaustion	job resources, emotional exhaustion, and work engagement, and examined
	universities and vocational institutions		Teacher efficacy	**Of job demands:**	
	Quantitative method			↑Emotional exhaustion	the mediation effect of teacher efficacy as a personal resource in the job
				↓Work engagement	
				Teacher efficacy (as a personal resource) mediated the relationship between job resources and work engagement	demands-resources model

Authors & Year	Target population and method	Job demands	Job resources	Consequences	Aim of the study
6. Converso et al. (2019)	professors (n=291) within a public higher education institution in Italy Quantitative method	Work overload Conflict with colleagues	Meaningfulness of work Reward	**Of job resources:** ↓Psychological diseases ↓Intention to leave ↓Emotional exhaustion ↓ Workaholism ↓Work-family life conflict ↑Work engagement ↑Job satisfaction Of job demands: ↑Psychological diseases ↑Intention to leave ↑Emotional exhaustion ↑Workaholism ↑Work-family life conflict ↓Work engagement	To examine the associations of certain job resources (Meaningfulness of work, reward) and job demands (work overload, conflict among colleagues) with workaholism, emotional exhaustion and engagement
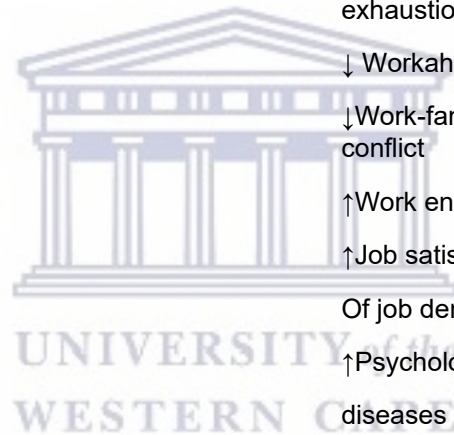
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Authors & Year	Target population and method	Job demands	Job resources	Consequences	Aim of the study
				↓Job satisfaction	

Note:

↑ - Refers to a positive increase in the listed variable.

↓ - Refers to a decrease in the listed variable.

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4.4.3.1 Data analysis

A narrative synthesis was suitable for the review, as it included quantitative, qualitative, and mixed-method study designs. Since the outcomes of the included studies are heterogeneous, a meta-analysis would not have been feasible. Apparent themes emerging from the data are presented in the findings in Section 4.5 below.

4.4.3.2 Ethical considerations

The study employed published sources, freely available or on subscription to researchers. Ethical approval was obtained from the researcher's institution.

4.4.4 Study selection/ search and retrieval process

The systematic search generated 1684 articles. The titles, abstracts, and keywords of these articles were reviewed. Out of this, 1658 studies were excluded because they did not meet the eligibility criteria and only 26 articles indicated their relevance to the topic under study. Some of the studies were excluded because they touched only on Job demands or Job resources but did not consider higher education or academics, or were impacted by other constructs such as age, organisational commitment, meaning of work or workflow. Further, other studies excluded at this stage were based on the fact that they were conceptual studies or reviews and did not contain empirical results. Out of 26 articles, only seven articles were meticulously read as the difference of 6 articles were duplicates from the different databases that were used. In the last stage, seven articles were screened and analysed with the adapted version of the Methodological Quality Appraisal Tool (Roman & Frantz, 2013). Finally, only one article was excluded based on the Methodological Quality Appraisal Tool and thus six articles were used for the review.

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4.4.5 Methodological quality appraisal

The methodological quality was assessed using the methodological quality appraisal method, adapted from Roman and Frantz (2013). The methodological quality appraisal sheet, presented in Table 4.3, comprises six categories used to appraise the sampling methods, such as (1) sampling method; (2) response rate; (3) validity and reliability of the measuring device; (4) data source; (5) definitions of the variables; (6) exploration of these variables in the HE sector. Inclusion within the review was considered should whether the methodological quality appraisal score be satisfactory or good.

Table 4.2: Methodological quality of the included articles

Questions	Alzyoud (2016)	Mudrak, et al. (2018)	Nurendra (2018)	Dhanphat et al. (2019)	Han et al. (2019)	Converso, et al. (2019)
In the empirical analysis of the study, is the JD-R specifically discussed/defined	1	1	1	1	1	1
Are job demands and resources in the HE sector being explored in the study?	1	1	1	1	1	1
Is the JD-R model used as a theoretical framework?	1	1	1	1	1	1
Was the sampling method representative of the population intended for the study?	1	1	1	1	1	1
Did the study report any response rate? (If the reported response rate is less than 60%, the question should be answered 'No'.)	0	1	0	0	1	0
Was the measurement tool used valid and reliable?	1	1	1	1	1	1
What was the source of the data? (Primary(1)/ Secondary(0)	1	1	1	1	1	1

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Questions	Alzyoud (2016)	Mudrak, et al. (2018)	Nurendra (2018)	Dhanphat et al. (2019)	Han et al. (2019)	Converso, et al. (2019)
Calculation	6/7*100	7/7*100	6/7*100	6/7*100	7/7*100	6/7*100
Total	85%	100%	85%	85%	100%	85%
Comments	Good	Good	Good	Good	Good	Good

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4.5 Findings

Of the reviewed articles, two of the studies were conducted in South Africa, whilst the remaining studies were conducted in countries such as Jordan, Czech Republic, Indonesia, East China and Italy. The participants consisted of academic staff that ranged from the level of Professors to junior lecturers. Data were collected by means of survey questionnaires in all the studies. In terms of tenure, the majority of the studies indicated that academic staff had organisational tenure of at least 3 years.

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Table 4.3: Job demands identified in the systematic review

Demand	Type	Definition
Academic workload / workload	Quantitative demand	In occupational health and research, elevated workload signifies a typical job demand and labels the situation as having a lot of work to do within a limited period. It is associated with aspects, such as time pressure (Kumar, Duggirala, Hayatnagarkar & Balaraman, 2017)
Work pressure	Quantitative demand	Work pressure is perceived as a cognitive-energetic state of the individual, creating the feeling of strain or felt pressure, related to the continuing and expected execution of work tasks (Roe & Zijlstra, 2000)
Change management	Quantitative demand	This notion is about a transformation that affects all aspects of society, therefore, bringing about doubt and generating innovative prospects of how to manage changes (Bowin, 2001). Change in HEIs refers to changes since 2001 resulting from institutional restructuring to meet the necessities of the emerging
Research demands	Quantitative demand	Is there increased competition for scarce funding resources by pressuring faculty members to yield more? Associating university funds with the number of publications produced (Dvorackova, Pabian, Smith, Stockelova´, Sima, & Virtova´, 2014)
Teaching load	Quantitative demand	This considers the ratio of students to lecturers. Student enrolment has increased intensely, whereas teaching roles have stayed somewhat unchanged (Prudky, Pabian, & Sima, 2010)

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Demand	Type	Definition
Work-family conflict (extended hours of working)/ Work-home interference	Qualitative demand	Often considered failing to manage work and home life duties owing to extended hours of working (Mudrak et al., 2018). Work-family conflict is viewed as a form of conflict among roles of work and home, where pressures are difficult to separate (Torp, Lysfjord & Midje, 2018)
Lack of psychological safety	Qualitative demand	Edmondson and Lei (2014) elucidate that psychological safety denotes the feeling of safety where individuals can work successfully in a fast-changing world under conditions of constant development and learning (Edmondson, Higgins, Singer, & Weiner, 2016)
Emotional demands	Qualitative demand	Emotional demands are about dealing with strong emotions such as distress, anger, anxiety, and frustration in the workplace (Mazzetti, Guglielmi & Topa, 2011)
Higher education unrest	Organisational demand	This refers to the "fees must fall campaign" where academics' work was damagingly affected because of violent demonstrations, interruption of the academic calendar, damage to buildings etc. (Dhanpat et al., 2019)
Decolonisation	Organisational demand	This refers to dealing with the colonial legacy (knowledge, violence and thought) (Pillay, 2015) still deeply rooted within education in South African HEIs (Heleta, 2016)
Job insecurity	Organisational demand	Job insecurity in the academic setting refers to short-term contracts, shortage of funding opportunities, or external accountability provided (Kinman, Jones & Kinman, 2006)

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Demand	Type	Definition
Conflict with colleagues	Organisational demand	This aspect refers to the degree of conflict within the workplace and among employees (Converso et al., 2019)
Online teaching and learning/ New technology and innovation	Organisational demand	This aspect considers the altering nature of teaching. The movement of blended learning and online education. This evolved way of teaching/learning has ensued with technology (Bennett & Lockyer, 2004)

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Table 4.5: Job resources identified in the systematic review

Resource	Type	Definition
Autonomy/ Influence over their work	Organisational Resource	Autonomy is the social climate shaped by management in the workplace, in which employees' viewpoints are recognised, opportunities for choice are provided, and self-initiation is encouraged (Deci, Eghrari, Patrick, & Leone, 1994). Thus, each employee has the freedom in deciding how to accomplish their job tasks, being owners of their own attitudes, and being able to act freely (Shirom, Nirel & Vinokur, 2006).
Performance feedback	Organisational Resource	This is an evaluative process that entails receiving enough information to carry out ones work objectives, to ensure that development and learning can take place (Bakker, Demerouti, Taris, Schaufeli & Schreurs, 2003).
Support from Supervisors	Organisational Resource	This is the degree to which employees' feel valued by their supervisors in addition to and caring about their well-being. It is thus the notion that the supervisor is worried about their welfare, trusts in their capabilities and shows respect to them (Saks, 2006).
Administrative support	Organisational Resource	This form of support represents support from the administrators, which can assist employees in managing their job demands (Chang, McKeachie & Lin, 2010).
Teaching Resources	Organisational Resource	This refers to the facilities and resources provided by the university in order to ensure successful teaching outcomes (Chang et al., 2010).

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Resource	Type	Definition
Support from colleagues	Organisational Resource	This concept is considered a straight forward resource as it is there to assist academics accomplish their work objectives (Bakker & Demerouti, 2007).
Self-development opportunities	Organisational Resource	Self-development opportunities refer to the possibilities that the workplace provides to employees to attain knowledge, or to advance and to improve their skills (Bakker et al., 2003).
Social support / Peer support	Organisational Resource	This concept refers to the perceived support that individuals obtain from their social support network to help control intensified emotions to help cope with environmental demands (du Plessis & Martins, 2019).
Teacher efficacy	Personal Resource	According to Hoy (2004), this notion talks to teachers' judgment about their competence to impact students' level of engagement and learning.
Meaningfulness of work	Personal Resource	Meaningfulness refers to one's view of the importance of the goals and activities that is carried out at the organisation in relation to an individual's level of self-actualisation and life (Barrick, Mount & Li 2013).

Out of the six studies that were reviewed, only three of the studies indicated their sampling technique. This included non-probability sampling (Dhanpat et al., 2019), convenience (Mudrak et al., 2018) and also stratified sampling (Han et al., 2019), whilst the other three studies made no mention of their sampling method. All studies that were conducted was done in an academic environment i.e. a higher education institutional setting. Lastly, all the studies considered JD-R framework as part of their study.

The identified job demands and job resources from the six articles are presented in Table 4.4 and 4.5. The definitions provided were extracted from the reviewed articles, and supplemented with information from literature. The researchers organised the list based on quantitative, qualitative and organisational demands; and personal and organisational resources.

4.5.1.1 Job demands

Quantitative demands within the context of the academic's role was identified as constant high workload/ teaching load (Converso et al., 2019; Dhanpat et al., 2019; Han et al., 2019; Nurendra, 2018), work pressure (Alzyoud, 2016), research demands and also change management (Han et al., 2019). It should be noted that there were more quantitative versus qualitative demands identified in the taxonomy. This could indicate that academics are dealing with copious amounts of work, which attributed to a higher number of quantitative demands being identified.

Qualitative demands were identified as aspects such as work-family conflict, lack of psychological safety and emotional demands. In terms of work-family conflict, dealing with an overload of work/teaching load has a spill over effect as many academics have to take work home or work additional hours. This has a direct impact on their personal lives (Converso et al., 2019). Moreover, with the constant changes that have taken place within the HE sector it comes as no surprise that many academics and their level of

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psychological safety have been affected negatively (Dhanphat et al., 2019). These types of demands directly affect the academics emotions (Nurendra, 2018) and their ability to deal with the cognitive, emotional or physical demands of the job, as it requires a generous amount of effort.

Finally, organisational demands was seen as characteristics such as Higher Education unrest, Decolonisation, job insecurity, conflict with colleagues, and the ability to grapple with new technology and innovation. Most of these aspects signify that changes are taking place within HE. However, these types of changes create more stress for academics as they are distinctive to the academic environment (other counterparts from the corporate environment do not have to deal with such different and as many aspects) (Dhanpat et al., 2019).

4.5.1.2   Organisational resources

Support from colleagues (Han et al., 2019; Mudrak et al., 2018) and social support (Alzyoud, 2016; Nurendra, 2018) were found to assist the academic in dealing with excessive demands. This type of support allows the individual to feel that there is someone that cares for his or her well-being (Alzyoud, 2016; Mudrak et al., 2018; Nurendra, 2018; Han et al., 2019).

In addition, the amount of autonomy an organisation provides to the academic (Alzyoud, 2016; Nurendra, 2018), support from supervisors (Mudrak et al., 2018), administrative support (Han et al., 2019), performance feedback

(Alzyoud, 2016), influence an academic has over their work (Mudrak et al., 2018), and rewards are all aspects that were highlighted in the study as ways to increase commitment, engagement and performance levels.

4.5.1.3   Personal resources

Finally, personal resources are focused on aspects such as teacher efficacy as well as self-development opportunities. These resources impact the

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individual as it brings enjoyment and the opportunity to advance in one's career (Nurendra, 2018; Alzyoud, 2016).

It should be noted that more organisational resources was identified by academics than personal resources. A reason for this could be that personal resources focus on the views and judgement of the academic (Barrick, Mount & Li 2013; Hoy, 2014) and organisational resources are retrieved from external sources such as a supervisors or co-workers. Thus, the individual does not need to draw from their own energy for assistance but relies on energy from the organisation (Schaufeli, 2017). However, both these categories are imperative for academics to function optimally.

4.5.1.4 *Relationship between job demands, resources, and outcomes*

The relationships portrayed between job demands and resources and associated outcome variables are indicated in Table 4.2. The relationships confirm the expected positive influence of job demands on well-being, and the negative influence of job demands on motivational processes. Consistent with the JD-R model, work engagement was the most studied dependent variable in the extracted studies (Alzyoud, 2016; Converso et al., 2019; Han et al., 2019; Mudrak et al., 2018; Nurendra, 2018). As expected, a negative relationship existed between job demands and work engagement, and a positive relationship between job resources and work engagement. The second most studied dependent variable was emotional exhaustion (as a proxy for burnout), with results indicating the positive effect of job resources on curbing burnout, and the amplifying effect of job demands on emotional exhaustion (Converso et al., 2019; Han et al., 2019). In all of the extracted studies, job resources improved positive outcomes such as work engagement and job satisfaction. Similarly, job demands negatively impacted work engagement and job satisfaction, whilst also enhancing the severity of emotional exhaustion, psychological distress, workaholism, work-family conflict and intentions to leave.

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4.6   Discussion

The JD-R model supported the overarching aim of this systematic review to identify the empirical, peer-reviewed, and published research on job demands and resources of academic employees. Demands impairing work processes and resources assisting work processes were identified. The review focused on available published studies between 2014 and 2019 meeting the inclusion criteria. The review specifically attempted to identify the job demands and resources academics in HEIs experienced.

The academic's autonomy level was also identified as a job resource. Job resources, such as autonomy, social support, feedback on performance, and personal development reflect a positive correlation with work attachment (Xanthoupolou, Bakker, Demerouti & Schaufeli, 2009). Increased levels of work attachment, therefore, cause higher levels of work commitment and engagement. Job resources could be a solution for those whose jobs have moderately high demands; employees could use the resources available to help them cope with copious demands. If job demands become too high, employees will engage less, causing lower commitment levels and intention to quit (Alzyoud, 2016).

Teacher efficacy affects academic employees' engagement level from a personal resource perspective (Han et al., 2019). Efficacy has been one dimension of psychological capital. Psychological capital refers to an academic's confidence level in dealing with challenging tasks, ensuring success. The more confident the individual, the higher the performance and engagement levels (Luthans, Youssef & Avolio, 2007).

The current study established more quantitative than qualitative job demands.

Job demands, quantitative demands, work-family conflicts and job insecurity were almost exclusively associated with stress (Mudrak et al., 2017). According to Lashuel (2020), it is often not realised soon enough by

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academics that poor work-life balance and pretending that one has everything under control, comes at a penalty to health, wellbeing and family relationships. Pressure, stress and anxiety often end up negatively affecting one's sleep patterns, increases exhaustion, frustration and loneliness, all of which impacts ones quality of life and relations with scholars and co-workers.

Job demands and job resources are quite specific to the academic environment. Thus, one can establish that the outcomes are consistent with those of earlier studies applying the JD-R model to numerous occupational contexts (Boyd, Grossman, Loeb & Wyckoff, 2011) and therefore provide supporting evidence for the applicability of the JD-R model in the context of higher education. By reviewing the empirically validated job demands and resources, the researchers produced a list of the most salient job demands and resources experienced by members of academic staff. This can now be used to test the prevalence of these job demands and resources in HEIs, and inform interventions.
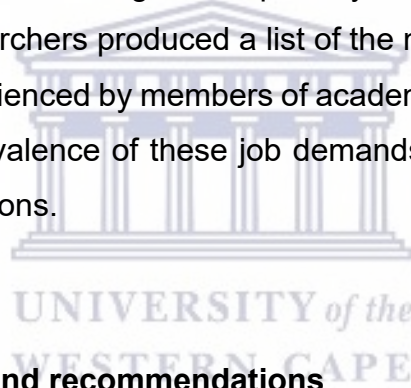
4.7   Limitations and recommendations

Potential limitations of the study may include the small number of studies included. From the review it was evident that specific job demands and job resources were often grouped together for measurement, rather than specifying specific demands and resources. In addition, even though only high or moderate-quality reviews were reported, as a best-evidence synthesis, conclusions are dependent on the quality of the researchers' primary studies.

Future research should continue exploring and refining how different forms of job demands and resources, when promoted and stimulated, can produce positive outcomes for academic employees, specifically within local

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contexts. The results of this review indicated workload as the most prevalent job demand for academics. However, this may not be true in all countries or regions. Thus, the search for understanding the actual work situation of higher education academics is of paramount importance, given the relevance of what they are supposed to accomplish in society. Moreover, even though it is widely known that the future of a nation passes through the hands of good teachers, these experts have been undergoing moments of crisis and devaluation in their careers (Mercali & Costa, 2019). One such example is the Covid-19 pandemic which deeply influenced work sectors, including academia. Academic employees were confronted with additional workload, work-life interference due to increased domestic and childcare responsibilities, as well as the need to engage in emergency remote learning (Bao, 2020). Thus, further research would need to consider this aspect to determine its impact of job demands and resources amongst academics.

By engaging academic staff in career discussions, involvement in large group meetings, job redesign, job-related training, employee enablement, career improvement, building relations with co-workers, and job crafting (Wärnich, Carrell, Elbert & Hatfield, 2015; Rothmann, 2014), would likely improve an individual's job performance. An example of this would be job crafting training, which guides employees on how to proactively alter their own work environment and is a beneficial means for managing organisational stress and further work pressures (Wrzesniewski, 2012).

4.8   Conclusion

This systematic review assisted in reinforcing the concept that job resources would promote and sustain employee engagement in today's organisations (Converso et al., 2019). A need exists for HEIs to focus on increasing resources for academics as it will mean having a sustainable workforce besides assisting their workforce in managing their demands. This can be

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conducted through interventions actively teaching academics how to manage their demands and exploiting their resources (Converso et al., 2019).

By using the information presented in this systematic review, academic institutions can tailor interventions to address specific job demands and resources. This review, therefore, clarifies and emphasises a need for further research to identify the challenges and additional drivers within HEIs, especially in South Africa (Mouton, Louw & Strijdom, 2013).

References

Alzyoud, A. A. Y. (2016). Job demands and resources on work engagement mediating by Job Satisfaction in Jordan Higher Education Sector. *International Journal of Social Science and Economic Research, 1*(5), 488-506.

Arksey, H. & O'Malley, L. (2005). Scoping studies: Towards a methodological Framework. *International Journal of Social Research Methodology, 8*(1), 19-32. https://doi.org/10.1080/1364557032000119616

Bakker, A. B. & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309-328. https://doi.org/10.1108/02683940710733115

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 wellbeing*. Salt Lake City, UT: DEF Publishers.

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*, 170-180. https://doi.org/10.1037/1076-8998.10.2.170

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., Demerouti, E., Taris, T., Schaufeli, W. B., & Schreurs, P. (2003). A multi-group analysis of the job demands – resources model in four home care organizations. *International Journal of Stress*

Management, *10*(1), 16-38. https://doi.org/10.1037/1072-5245.10.1.16

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Hum Behav & Emerg Tech*. 2020, 1-3. https://doi.org/10.1002/hbe2.191

Bauer, G. F., & Hämmig, O. (2014). Bridging occupational, organizational and public health: A transdisciplinary approach. In *Bridging occupational, organizational and public health* (pp. 1-11). Springer, Dordrecht. https://doi.org/10.1007 /978-94-007-5640-3_4

Barkhuizen, E. N. (2005). *Work wellness of academic staff in higher education institutions*. Unpublished Doctoral Thesis, Northwest University. http://hdl.handle.net/10394/713

Barrick, M. R., Mount, M. K., & Li, N. (2013). The Theory of Purposeful Work Behavior: The Role of Personality, Higher-Order Goals, and Job Characteristics. *The Academy of Management Review, 38*(1), https://doi.org/10.5465/amr.10.0479

Bennett, S. & Lockyer, L. (2004). Becoming an Online Teacher: Adapting to a Changed Environment for Teaching and Learning in Higher Education. *Educational Media International, 41*(3), 231-248. https://doi.org/10.1080/09523980410001680842

Bowin, R. B. (2001). *Human resource management: An experiential approach* (2nd ed.) Upper Saddle River, NJ: Prentice Hall.

Bowling, N. & Kirkendall, C. (2012). Workload: A review of causes, consequences and potential interventions. In J. Houdmont, S. Leka, & R. Sinclair (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice* (Vol. 2, pp. 221-238). Chichester: John Wiley & Sons. https://doi.org/10.1002/9781119942849.ch13

177

Boyd, D., Grossman, P., Loeb, S., & Wyckoff, J. (2011). The Influence of School Administrators on Teacher Retention Decisions. *American Educational Research Journal, 48*(2), 303-333. https://doi.org/10.3102/0002831210380788

Byrne, O. & MacDonagh, J. (2017). What's love got to do with it? Employee engagement amongst higher education workers. *Irish Journal of Management, 36*(3), 189-205. https://doi.org/10.1515/ijm-2017-0019

Chang, T. S., McKeachie, W., & Lin, Y. G. (2010). Faculty Perceptions of Teaching Support and Teaching Efficacy in Taiwan. *Higher Education, 59*(2), 207-220. https://doi.org/10.1007/s10734-009-9243-8

Chen, S., Westman, M., & Eden, D. (2009). Impact of Enhanced Resources on Anticipatory Stress and Adjustment to New Information Technology: A Field-Experimental Test of Conservation of Resources Theory. *Journal of Occupational Health Psychology, 14*(3), 219-230. https://doi.org/10.1037/a0015282

Converso, D., Sottimano, I., Molinengo, G., & Loera, B. (2019). The Unbearable Lightness of the Academic Work: The Positive and Negative Sides of Heavy Work Investment in a Sample of Italian University Professors and Researchers. *Sustainability, 11*, 2439. https://doi.org/10.3390/su11082439

Council on Higher Education. (2010). *Reflections of South African university leaders. Pretoria*, South Africa: CHE. DOI:978-1-928331-09-4

Council on Higher Education. (2016). VitalStats: Public higher education 2014. Pretoria, South Africa: CHE. DOI:978-0-9946785-8-4

Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of*

Personality, *62*(1), 119e142. https://doi.org/10.1111/j.1467-6494.1994.tb00797.x

Demerouti, E. & Bakker, A. B. (2011). The Job Demands-Resources model: Challenges for future research. *Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde,* *37*(2), Art. #974, 9 pages. https://doi.org/10.4102/sajip.v37i2.974

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources Model of Burnout. *Journal of Applied Psychology,* *86*(3), 499-512. https://doi.org/10.1037/0021-9010.86.3.499

Dhanpat, N., De Braine, R., & Geldenhuys, M. (2019). Preliminary development of the Higher Education Hindrance Demands Scale amongst academics in the South African context. *SA Journal of Industrial Psychology,* *45*, 1595. https://doi.org/10.4102/sajip.v45i0.1595

Du Plessis, M. & Martins, N. (2019). Developing a measurement instrument for coping with occupational stress in academia. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 45*(0), a1653. https://doi.org/10.4102/sajip.v45i0.1653

Du Plessis, M. (2020). Model of coping with occupational stress of academics in a South African higher education institution. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde,* *46*(0), a1714. https://doi.org/10.4102/sajip.v46i0.1714

Dvorackova, J., Pabian, P., Smith, S., Stockelova´, T., Sima, K., & Virtova´, T. (2014). Politika a kazˇdodennost na cˇesky´ch vysoky´ch sˇkola´ch. Praha: Sociologicke´ nakladatelstvı´ SLON.

Edmondson, A. C. & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review*

179

of Organizational Psychology and Organizational Behavior, 1(1), 23-43. https://doi.org/10.1146/annurev-orgpsych-031413-091305

Edmondson, A. C., Higgins, M., Singer, S., & Weiner, J. (2016). Understanding Psychological Safety in Health Care and Education Organizations: A Comparative Perspective. *Research in Human Development, 13*(1), 65-83. https://doi.org/10.1080/15427609.2016.1141280

Gabel-Shemueli, R., Dolan S. L., & Ceretti, S. (2014). Being engaged: The multiple interactions between job demands and resources and its impact on nurses engagement. *International Journal of Nursing, 3*(2), 17-32. Retrieved from https://www.ijnonline.com/index.php/ijn/article/view/155

Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work & Stress, 15*, 53-72. https://doi.org/10.1080/02678370117944

Hakanen, J. J., Peeters, M. C. W., & Perhoniemi, R. (2011). Enrichment processes and gain spirals at work and at home: A 3-year cross-lagged panel study. *Journal of Occupational and Organizational Psychology, 84*(1), 8-30. https://doi.org/10.1111/j.2044-8325.2010.02014.x

Han, J., Yin, H., Wang, J., & Bai, Y. (2019). Challenge job demands and resources to university teacher well-being: the mediation of teacher efficacy. *Studies in Higher Education*, *45*(8), 1771-1785.https://doi.org/10.1080/03075079.2019.1594180

Heleta, S. (2016). Decolonisation of higher education: Dismantling epistemic violence and Eurocentrism in South Africa. *Transformation in Higher Education, 1*(1), 1-8. https://doi.org/10.4102/the.v1i1.9

Higher education global trends and emerging opportunities to 2020, retrieved 08, 19, 2020, University of the Free State. htttps://www.ufs.ac.za.

Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology, 6*, 307- 324. https://doi.org/10.1037/1089-2680.6.4.307

Hoy, A. W. (2004). Self-Efficacy in College Teaching. Essays on Teaching Excellence. *Toward the Best in the Academy, 15*(7), 8-11. Retrieved from

http://www.podnetwork.org/publications/teachingexcellence/03-04/V15,%20N8%20WoolfolkHoy.pdf

Isaacs, S. A., Roman, N. V., Savahl, S., & Sui, X. C. (2018). Using the RE-AIM framework to identify and describe best practice models in family-based intervention development: A systematic review. Child & *Family Social Work, 23*(1), 122-136. https://doi.org/10.1111/cfs.12380

Janse van Rensburg, C., Rothmann, S., & Diedericks, E. (2018). Job demands and resources: Flourishing and job performance in South African universities of technology settings. *Journal of Psychology in Africa, 28*(4), 291-297. https://doi.org/10.1080/14330237.2018.1501881

Kacel, B., Miller, M., & Norris, D. (2005). Measurement of nurse practitioner job satisfaction in a Midwestern state. *Journal of the American Academy of Nurse Practitioners, 17*(1), 27-32. https://doi.org/10.1111/j.1041-2972.2005.00007.x

Kinman, G., Jones, F., & Kinman, R. (2006). The well-being of the UK academy, 1998-2004. *Quality in Higher Education, 12*(1), 15-27. https://doi.org/10.1080/13538320600685081

181

Kumar, S., Duggirala, M., Hayatnagarkar, H. G., & Balaraman, V. (2017). *Understanding impact of supervisory support on work outcomes using agent based simulation*. DIAS/EDUDM@ISEC. DOI: 10.1145/nnnnnnn.nnnnnnn

Lashuel, H. A. (2002). Mental Health in Academia. What about Faculty? *eLife*, (9), 54551. https://doi.org/10.7554/eLife.54551

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital: *Developing the human competitive edge*, Oxford: Oxford University Press. ISBN-13 978-0-19-518752-6

Mazzetti, G., Guglielmi, D., & Topa, G. (2020). Hard Enough to Manage My Emotions: How Hardiness Moderates the Relationship Between Emotional Demands and Exhaustion. *Frontiers Psychology, 11*, 1194. https://doi.org/10.3389/fpsyg.2020.01194

Mercali, G. D. & Costa, S. G. (2019). Antecedents of work engagement of Higher Education Professors in Brazil. *Human and Social Management, 20*(1), 1678-6971. https://doi.org/10.1590/1678-6971/eramg190081

Moher, D. (2009). Liberati A, Tetzlaff J, Altman DG, Group TP. *Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PLoS Med, 6*(7), e1000097-6.

Moloney, W., Boxall, P., Parsons, M., & Cheung, G. (2017). Factors predicting Registered Nurses' intentions to leave their organization and profession: A job demands-resources framework. *Journal of Adv Nursing, 74*(4), 864-875. https://doi.org/10.1111/jan.13497

Mostert, K. (2011). Job characteristics, work-home interference and burnout: testing a structural model in the South African context. *International Journal of Human Resource Management*, 22(5), 1036-1053. https://doi.org/10.1080/09585192.2011.556777

Mouton, N., Louw, P., & Strydom, G. L. (2013). Present-Day Dilemmas and Challenges of the South African Tertiary System. *International Business & Economics Research Journal, 12*(3), 285-300. https://doi.org/10.19030/iber.v12i3.7672

Mudrak, J., Zábrodská, K., Kveton, P., Jelinek, M., Blatny, M., Solcova, I., & Machovcova, K. (2018). Occupational Well-being Among University Faculty: A Job Demands-Resources Model. *Research of Higher Education, 59*, 325-348. https://doi.org/10.1007/s11162-017-9467-x

Mushemeza, E. D. (2016). Opportunities and Challenges of Academic Staff in Higher Education in Africa. *International Journal of Higher Education, 5*(3), 236-246. https://doi.org/10.5430/ijhe.v5n3p236

Ngoc, H. D., Hoang, L. H., & Hung, V. X. (2020). Transforming Education with Emerging Technologies in Higher Education: A Systematic Literature Review. *International Journal of Higher Education, 9*(5), 252. https://doi.org/10.5430/ijhe.v9n5p252

Ntshoe, I. & De Villiers, P. (2008). Steering the South African higher education sector towards transformation. *Perspectives in Education, 26*(4), 17-27. https://hdl.handle.net/10520/EJC87500

Nurendra, A. M. (2018). The effect of Job demands as a moderating variable between Job demands and work engagement on University Lecturers. *Malaysian online journal of counselling, 5*(1), 35-42. http://mojc.um.edu.my/

Pienaar, C. & Bester, C. (2009). Addressing career obstacles within a changing higher education environment: Perspectives of academics, *South African Journal of Psychology*. Suid-Afrikaanse Tydskrif vir Sielkunde, *39*(3), 376-385. https://doi.org/10.1177/008124630903900311

183

Pillay, S. (2015). *Decolonising the university, Africa is a Country*. Retrieved 07, 01, 2020, from, http:// africasacountry.com/2015/06/decolonizing-the-university/.

Prudky, L., Pabian, P., & Sima, K. (2010). Ceske´ vysoke´ sˇkolstvı´. Na cesteˇ od elitnı´ho k univerza´lnı´muvzdeˇla´va´nı´ 1989-2009. Praha: Grada.

Renshaw, T. L., Long, A. C., & Cook, C. R. (2015). Assessing Adolescents' Positive Psychological Functioning at School: Development and Validation of the Student Subjective Wellbeing Questionnaire. *School Psychology Quarterly, 30*(4), 534-552. https://doi.org/10.1037/spq0000088

Roe, R. A. & Zijlstra, F. R. H. (2000). Work pressure. Results of a conceptual and empirical analysis. In M. Vartiainen, F. Avallone & N. Anderson (Eds.), *Innovative theories, tools, and practices in work and organizational psychology* (pp. 29-45). Ashlans, OH: Hogrefe & Huber Publishers.

Roman, N. V. & Frantz, J. M. (2013). The prevalence of intimate partner violence in the family: A systematic review of the implications for adolescents in Africa. *Family Practice, 30*, 256-265. https://doi.org/10.1093/fampra/cms084

Rothmann, S. & Essenko, N. (2007). Job characteristics, optimism, burnout, and ill health of support staff in a higher education institution in South Africa. *South African Journal of Psychology, 37*(1), 135-152. https://doi.org/10.1177/008124630703700110

Rothmann, S. (2014). Flourishing in work and careers In M Coetzee (Ed), Psycho-social career meta-capacities: *Dynamics of contemporary career development* (pp 203-220) Dordrecht, The Netherlands: Springer. https://doi.org/10.1007/978-3-319-00645-1_11

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, *21*, 600-619. https://doi.org/10.1108/02683940610690169

Schaufeli, W. B. & Taris, T. W. (2014). A Critical Review of the Job Demands-Resources Model: Implications for improving work and health. *Bridging occupational, organizational and public health*, 43-68. DOI: 10.1007/978-94-007-5640-3_4

Schaufeli, W. B. (2017). Applying the Job Demands-Resources model: A 'how to' guide to measuring and tackling work engagement and burnout. *Organizational Dynamics, 46*(2), 120-132. https://doi.org/10.1016/j.orgdyn.2017.04.008

Schaufeli, W., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*, 71-92. https://doi.org/10.1023/A:1015630930326

Shirom, A., Nirel, N., & Vinokur, A. D. (2006). Overload, autonomy, and burnout as predictors of physicians quality of care. *Journal of Occupational Psychology*, *11*(4), 382-342. https://doi.org/10.1037/1076-8998.11.4.328

Torp, S., Lysfjord, L., & Midje, H. H. (2018). Workaholism and work-family conflict among university academics. *Higher Education, 76*, 1071-1090. https://doi.org/10.1007/s10734-018-0247-0

Van Veldhoven, M. (2014). Quantitative job demands. In M. C. W. Peeters, J. De Jonge, & T. W. Taris (Eds.), *An introduction to contemporary work psychology* (pp. 117-143). Wiley-Blackwell.

Viljoen, J. P. & Rothmann, S. (2002). Transformation in a tertiary education institution: A case study. *Management Dynamics, 11*(2), 2-9. https://hdl.handle.net/10520/EJC69645

185

Wärnich, S., Carrell, M. R., Elbert, N. F., & Hatfield, R. D. (2015). *Human resource management in South Africa* (5th ed.). Hampshire, United Kingdom: Cengage Learning.

Wrzesniewski, A. (2012). Callings In K. S Cameron & G. M Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp 45-55). New York, NY: Oxford University Press.

Xanthoupolou, D., Bakker, A., Demerouti, E., & Schaufeli, W. (2009). Reciprocal Relationship between Job Resources, Personal resources and Work engagement. *Journal of Vocational Behavior*, *74*, 235-244. https://doi.org/10.1016/j.jvb.2008.11.003

CHAPTER 5: ACADEMICS IN HIGHER EDUCATION—JOB DEMANDS AND RESOURCES

5.1   Introduction

The previous chapter reviews job demands and resources, based on the JDR model in the HE environment—a systematic review. This chapter introduces Phase II of the study, which embodies a qualitative methodology. This chapter presents the findings of job demands and resources experienced by academic employees using qualitative methods. Participant experiences were emphasised to provide a better understanding of the job demands and resources encountered. The framework of job demands and job resources gleaned from the study could be used for further research to manage and monitor motivational processes for academic staff, and to reduce strain owing to high job demands (Article 2).

5.2   Publication details

Article 2 has been submitted and accepted in the *Frontiers in Psychology*, detailed in Table 5.1 below.

Table 5.1: Article details

Title	Job demands and resources of academics in higher education
Authors	Naidoo-Chetty, M, Du Plessis M
Year	2021
Journal	Frontiers in Psychology
Volume	Vol 12
Issue	-
Page no.	2336

Status	Accepted or published
Full citation	Naidoo-Chetty, M., & Du Plessis, M. (2021). Job demands and resources of Academics in Higher Education. Frontiers in Psychology, 12, 2336. https://doi.org/10.3389/fpsyg.2021.631171

5.3　Journal overview

The manuscript was published in *Frontiers in Psychology*. *Frontiers in Psychology* is the largest journal in its field, publishing rigorously peer-reviewed research across the psychological sciences. This involves clinical research in cognitive science, from perception to consciousness, from imaging studies to human factors, and from animal cognition to social psychology.

Frontiers in Psychology holds an outstanding editorial board of global researchers. This multidisciplinary open-access journal leads in disseminating and communicating scientific knowledge and impactful discoveries to researchers, academics, clinicians, and the public globally.

5.4　Published article

Job demands and resources of Academics in Higher Education

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Abstract

Too many job demands and not enough job resources can negatively influence the well-being of employees. Currently, limited information exists surrounding the job demands and resources as experienced by academic employees in the higher education sector. Therefore, the aim of this study

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was to identify the job demands and job resources experienced by academic employees using qualitative methods. Semi-structured interviews were conducted with 23 academic employees, using an Interpretative Phenomenological Approach. Thematic analysis, specifically template analysis was used to categorize the themes. Job demands were divided into three categories: quantitative (publication pressure, overburdened with the load, and competing time demands), qualitative (work/home balance, complexity of student support, organizational politics, and lack of mental health support) and organizational demands (using technology-mediated learning and lack of structural resources). Job resources were organized into two categories: organizational (social support) and personal resources (autonomy, meaningful work, and personal support). Participant experiences are highlighted to provide a better understanding of the job demands and job resources encountered. The framework of job demands and job resources gleaned from the study could be used for further research to manage and monitor motivational processes for academic staff, and to reduce strain due to high job demands.

Keywords: job demands, job resources, qualitative, academics, higher education

5.4.1 Introduction

South African higher education has undergone a number of transformations since the advent of democracy. Changes in the higher education system and its institutions has been one of the top priorities of the South African government in the post-apartheid era. As such, the Higher Education Sector was identified as a sector in need of review (National Development Plan 2030, 2012). Goals such as increasing and broadening participation, providing equity of access and fair chances of success to all, and decolonisation, as part of the post-1994 transformational efforts (Badat, 2010; Dhanpat et al., 2019), has led to dissatisfaction, on a number of levels, experienced by academics (Pienaar and Bester, 2009). One of the reasons

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for this dissatisfaction is that although changes and transformations driven by policy might convey the perception that overall progression and betterment is taking place (Van Niekerk and Geertsema, 2009), in actuality these changes have put more pressure on Higher Education Institution (HEI) staff, specifically, academic employees (Dhanpat et al., 2019).

The demands that have been placed on academics, including expanding student numbers resulting in increased academic workload, seem to be a prevailing theme in academic career literature (Theron et al., 2014). These changes are likely to influence employees' work as they experience specific career dilemmas, namely, increased levels of job dissatisfaction (Phillips and Connell, 2003), intention to leave, breach of psychological contracts, break in employee– employer relationships, decline in commitment and job security, and increased workload (Theron and Dodd, 2011).

Job resources are those elements that assist when job demands become excessive (Demerouti et al., 2001). The Job Demands- Resources (JD-R) model puts forward that resources play an integral part in the prevention health-impairment process, and places employee well-being at the focal point. Thus, the resources of academics that assist them in successfully coping with their job demands, is a motivational process that leads to higher levels of work well-being (Byrne and MacDonagh, 2017).

5.4.1.1   *Job demands and resources in context*

For the purpose of this research, the job demands–resources (JDR) model (Demerouti et al., 2001) will be used as the theoretical framework. Job demands are the physical, psychological, social, or organizational features of a job that need continued cognitive and emotional energy or abilities and are linked with physiological and psychological costs (Demerouti and Bakker, 2011; Bakker et al., 2014). Job resources on the other hand denote the physical, psychological, social, or organizational aspects central to work performance (Rothmann and Jordaan, 2006).

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These aspects relate to employee experiences of job satisfaction, autonomy, purpose, engagement, and meaningful work, and job performance (Janse van Rensburg et al., 2018). Job demands can be divided into three categories, namely, quantitative demands, qualitative demands and organizational demands whilst resources can be organized into two categories, namely, organizational resources and personal resources (Schaufeli, 2017). Quantitative demands refer to elements such as the number of tasks and the speed at which it can be accomplished. When quantitative work demands are elevated, work tasks will necessitate more time than what was planned for (Van Veldhoven, 2014). Qualitative demands focuses on the type of skills and/or effort required to complete work tasks. For example, cognitive, emotional or physical skills and/or effort. It refers to the level of difficulty or complexity that is needed to carry out the job (Bowling and Kirkendall, 2012). In addition, organizational demands negatively impact an individual in terms of their work outputs (Bakker et al., 2004), and can be described as those elements that are brought about by aspects in the work environment. Resources are categorized according to organizational and personal resources. Organizational resources are mostly retrieved from external sources such as a supervisors or co-workers.

These resources may include feedback, rewards, job control, participation, job security, and supervisor support (Demerouti et al., 2001). Personal resources focus on the views and judgement of the individual (Hoy, 2004; Barrick et al., 2013), i.e., meaningfulness of work, autonomy, self-efficacy, optimism and organizational-based self-esteem (Xanthopoulou et al., 2009). Whilst other job stress models, such as the demand control model (Karasek, 1979) and the effort-reward imbalance model (Siegrist, 1996) also explain the predictive value of job characteristics in employee well-being, the limited set of predictor variables in these models may not be relevant to all occupations (Bakker and Demerouti, 2007). Therefore, the JDR model was used to guide the exploration of what demands and resources exist in the academic environment.

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Demands and Resources in the South African University Setting Universities in sub-Saharan Africa continue to operate under conditions that are under-resourced, with academic staff experiencing high workloads that negatively affect their wellbeing and performance (Higher Education South Africa, 2014). Several studies [see for example Rothmann and Jordaan (2006), Barkhuizen and Rothmann (2008), Pienaar and Bester (2009), Bezuidenhout and Cilliers (2010), Barkhuizen et al. (2014a,b), and Van Tonder and Fourie (2015)] reviewed aspects of job demands and resources and their implications in a Southern African higher education setting from a quantitative perspective. This can be further supplemented by research carried out in other parts of Africa. Reports have indicated that teaching at a university level is a high stress occupation. In Ghana, the main stressor for lecturers was the augmented intake of students with no consideration for expansion of university facilities (Atindanbila, 2011). As a result, lecturer-student ratio results in work overload. Teaching load and professional distress were also rated as the second and third highest sources of tension experienced. Furthermore, academic staff in Egypt indicated that demands such as poor working conditions, limited career development, increased levels of work overload and insufficient resources contributed to difficulties experienced in the academic environment (El-Sayed et al., 2014). South African academics additionally reported pressure to produce more research outputs, bigger classes and postgraduate supervision loads as sources of strain. Coping with a high volume workload was further exacerbated by the experience of unclear roles and responsibilities (Bezuidenhout and Cilliers, 2010).

Accordingly, it appears that the job demands of academics have escalated, whilst the levels of support and other resources have declined (Barkhuizen et al., 2014a). According to literature, job resources can lead to an engaged workforce, which is a key value proposition for Higher Education institutions that aim to retain talented staff (Barkhuizen et al., 2014a). As job demands for academics are consistently negatively related to work engagement and well-being (Naidoo-Chetty and Du Plessis, 2021), the need for further

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studies in this area is highlighted. Pon and Lichy (2015) note that there is limited research being done based on the experiences of academic employees in the academic field on job demands and resources, nationally and internationally.

5.4.2 The rationale of the study and problem statement

From investigating the literature on job demands and resources it is clear that most studies have engaged in quantitative methods. While these studies have made a noteworthy impact, quantitative methods have some restrictions as it is less flexible and exploratory in nature (Queirós et al., 2017). Empirical results were also obtained based on the researchers' theorizing on the job demands and resources of academics, thus presenting a perceived objective reality of academic demands and resources. One aim of this study was to identify the job demands and resources as experienced by academics by using qualitative methods. This allowed us to capture the subjective feelings of the academic working environment and what is experienced as demands and resources.

A deeper and richer understanding of academic employees' experiences of job demands and job resources, will permit academics to better manage their career demands and resources. Furthermore, it can help organizations to assist employees. When an organization fails to make essential job resources available, there is the possibility that employees will withdraw and disengage, which may lead to burnout (Takawira et al., 2014). However, even though there is clear evidence indicating that establishing engaging work environments is vital, the current climate at higher education institutions is rather somber (Geoffrey and January-Enkali, 2019). These types of problems have been reported as far back as 2006 by Rothmann and Jordaan in the South African higher education system. Aspects such as imbalances and misrepresentation of the system, poorly equipped students, and diminishing government funding, continue to be problems in need of addressing. Therefore, the current study is guided by the following research

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question: How do academics make sense of their experiences of job demands and resources in higher education?

5.4.3   Materials and methods

5.4.3.1   Participants and setting

All participants were from a selected public University in the Western Cape, South Africa. An invitation e-mail to participate in the interviews was sent to all academic staff by the respective university. When this method produced a low response rate, snowball sampling was utilized to improve the responses. In total, 23 semi-structured interviews were conducted with the majority of the participants being female. In total, there were 18 females and five males. The number of interviews represented an adequate sample size as it allowed analysis to saturation. As per the phenomenological research tradition, the number of the participants can be between two and 25 (Creswell, 2012). Of the interviewees, three were Professors, five were Senior Lecturers, and 15 were Lecturers. Within the research university, academics at all levels are involved with teaching, research, community engagement and supervision of postgraduate students to different degrees. Lecturers (typically early career scholars who do not hold a PhD) carry a greater burden of undergraduate teaching, whilst Professors (established researchers) have more postgraduate supervision responsibility.

The research institution is classified as a historically disadvantaged institution, and has been the vanguard of South Africa's historic change, with a distinctive academic role in helping to build an equitable and dynamic nation. Coming from a history of creative struggle against oppression, discrimination and disadvantage, the university played an important role in helping to build equitable access to education. In 1982, the university formally rejected the apartheid ideology and adopted a declaration of non-racialism. The University also formalized an "open" admissions policy which provided access to a number of African students, as well as an expansion to the curriculum taught to equip students to be successful and employable

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in the workplace. Now, the university (depending on the ranking being used) ranks within the first tier of Universities in South Africa based on research output.

5.4.3.2 Data collection

To understand and describe the job demands and job resources academics experience, the researcher conducted semi-structured online video interviews with each participant. Online video interviews were considered the best method to use at the specific point in time due to the COVID-19 pandemic and the subsequent requirement to socially distance. Moreover, the semi structured interview is the exemplary method for Interpretive Phenomenological Approach (IPA) as it facilitates rapport and allows the interview to go into novel areas (Smith et al., 2009). Interviews also included sub-questions (probing questions) to further probe for more detailed or "richer" responses from the participants, where it was required. Some of the questions that participants were asked in the interview were the following— "What resources in your work environment play a role in making what you do a success?;" "What are the work challenges that excite you;" "what work challenges makes it difficult for you to do and be your best?;" "What, in your view, are the types of work pressures that you experience in your work?" Furthermore, the interviewer asked participants to assign a score of 1–5 to provide a rating of the intensity of the demand that impacted the academic the most on a day to day basis.

At the beginning of each interview, the interviewer (the first author) built rapport by disclosing that she herself was an academic employee and had her own set of experiences. Thus, the interviewer ensured that she was transparent and reflexive in her thinking (Polit and Beck, 2014) to ensure that her own perceptions did not impact the process by which the data was collected, analyzed and presented. Furthermore, the interviewer explained to participants that the purpose of the interview was to gain insight into the job demands and resources they experienced in their daily working lives. As

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the interviewer was not from the same department as participants, and did not hold a position of influence in relation to the participants (such as head of department, senior management, human resource professional, etc.), it is unlikely that her employment in the same institution would have discouraged participation and open sharing.

5.4.3.3   *Data analysis*

A phenomenological approach was used in order to obtain an understanding of the phenomenon of job demands and resources. Specifically, the interpretive phenomenological analysis (IPA, Smith, 1996) was used in conjunction with Template analysis to gain insight into how academics made sense of their experiences of demands and resources related to their job roles as academic employees within the Higher Education Sector. The steps for analyzing IPA data as recommended by Smith and Osborn (2008) was followed. Firstly, the transcript was read and reread closely, with the left-hand margin being used to annotate what was interesting or significant about the participant's comments. When the entire transcript was annotated, the researcher returned to the beginning of the transcript and documented emerging theme titles. Here the initial notes were transformed into concise phrases, which aimed to capture the essential quality of what was found in the text.

The themes moved the response to a slightly higher level of abstraction and invoked more psychological terminology. This transformation of initial notes into themes was continued through the transcripts with the same theme title used when similar themes emerged.

In terms of template analysis, which is a form of thematic analysis, themes were categorized and identified using the IPA method and thus constructed into a template. The template was divided into quantitative, qualitative and organizational demands. Furthermore, resources were divided into personal and organizational resources.

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As a further step to the analysis, Participative Ranking Methodology (PRM) was used to determine the most challenging job demands. This is a "mixed methods" approach to data collection, where a group of experienced participants are directed toward generating responses to a detailed question or set of questions. The reason it is considered a "mixed methods" approach is that it draws on both quantitative and qualitative methodologies which assists in producing rich, contextualized data that can be calculated, ranked, and paralleled across or within groups (Ager et al., 2010). Thus, by using data obtained in the qualitative phase, certain themes became prevalent that were relevant to the academic environment. To calculate the average rank for an issue mentioned by academics we added up the ranking number from the group and divided by the number of participants (Ager et al., 2010).

5.4.3.4   Rigour

Credibility was achieved through the involvement of two researchers who analyzed one written interview independently. Furthermore a codebook was developed together by both researchers using verbatim quotes to provide the study participants a voice along with the researchers' data interpretations, respectively (Polit and Beck, 2010; Halcomb et al., 2013). In case of disagreement on the themes, there was an additional discussion to ensure that both researchers were on the same page. Self-reflection was an important consideration for dependability. Researchers were stimulated to put their own ideas on paper before starting the interviews and the analyses. This created for the researcher a constant awareness about their own background and perspective.

5.4.3.5   Ethical considerations

Ethical approval was obtained from the Human and Social Sciences Research Ethics Committee at the Researchers' Institution. Verbal and written consent was obtained from all participants prior to interviews and after verbal and written information about the research goals and methods was provided. Participants were assured that their identity would not be

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disclosed under any condition. They were free to withdraw from the research process at any time and without any explanation.

5.5   Results

The aim of the research was to identify the job demands and job resources experienced by academics in higher education. As mentioned earlier, the responses of the participants were categorized based on job demands (quantitative, qualitative and organizational) and job resources (organizational and personal).

5.5.1.1   *Quantitative demands*

Quantitative demands refer to elements such as the number of tasks and the speed at which it can be accomplished. Therefore, themes in this category carry the notion of volume of work or hours needed to accomplish such work, coupled with the available time within which such tasks should be completed. Three themes were identified as quantitative demands.

5.5.1.1.1 Publication pressure

Publication pressure was the first theme identified as quantitative demand. In the participative ranking of job demands, publication pressure was ranked as the most prominent. The responses mostly relate to research outputs. Individuals, such as P5, P22, and P23 mentioned feeling stressed and tired from the constant need to produce publications:

> Teaching does take up the predominant amount of time, which puts pressure on my research. Publishing an article is a long and strenuous process [P5, female, senior lecturer, Faculty of Economic and Management Sciences].

> Time for research is what remains after teaching and administrative requirements are met. Yet, I feel like the institution puts pressure on me to publish [P22, female, lecturer, Faculty of Arts and Humanities].

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> I have to stress over publishing, in order to get promoted. I have to publish and be running around and going to conferences [P6, female, associate professor, Faculty of Natural Sciences].

In support of P5 and 22's comment was the notion that due to additional time spent on teaching and with the new way of technology-based teaching, academics have gotten to the point where time for research appeared to be that remaining after teaching and administrative requirements had been met (Houston et al., 2006, 25). In fact, most of the academics indicated that "they did not have a lot of time to focus on their research" (e.g., P12, P17, P18, and P20). This has led to P6 feeling anxious and worried about not being promoted due to a lack of publications. Other obstacles to overcome were related to research funding. The competitive nature in obtaining funding caused a lot of anxiety and stress, yet, the university still expects outputs. Participants indicate:

> You have to apply for funding, you have to apply for leave, you have to prove where you're going, how long you're going, what your outputs are going to be, and then sometimes you even go through this whole admin process and get rejected [P5, female, senior lecturer, Faculty of Economic and Management Sciences].

> Some years you would get, some years we wouldn't get. It all depends on how the competition is at a certain year and how the economy is doing [P6, female, associate professor, Faculty of Natural Sciences].

South African academics are increasingly pressurised to publish in journals, accredited and incentivised by the Department of Higher Education and Training (DHET) to be recognised and rewarded for their work (Department of Education, 2015). Deans and deputy vice-chancellors are setting impractical performance management metrics, including journal publications (Guthrie et al., 2019). These targets are set in an environment with a significant increase in teaching and administration loads (Guthrie et

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al., 2019). Kubátová (2019) remarks that publishing forms an integral part of academic work globally.

Academic institutions are, therefore, ranked according to the level of publication in high-impact journals. Research grants are awarded to institutions, based on their publications. This also pressures academics to produce increasingly higher numbers of research publications, and obtain research grants, particularly focusing on volume rather than quality (Callaghan, 2016).

5.5.1.1.2 Overburdened with Load

An overwhelming number of participants mentioned being overburdened forms part of their work. Through the participative ranking method, this job demand was placed as second. For instance, participants mentioned:

> [C]lass numbers are very big [P1, female, lecturer, Faculty of Community and Health Sciences].

> You want to help the students and you want to be able to get to those who are falling behind, but because classes are so big, it's often actually difficult to make a difference [P23, female, senior lecturer, Faculty of Law].

> [T]here is always additional work and the role is not clear at times [P13, female, lecturer, Faculty of Dentistry].

> I have hundreds of students. If I spent 10 minutes, only 10 minutes marking my students' assignments, I am going to be busy for two and a half months, from eight to five, every day. [P15, female, lecturer, Faculty of Economic and Management Sciences].

> I was literally starting to work four days a week at six o'clock in the morning, and then working a full day. And then, coming home and having home responsibilities, was also quite - it was like a dual

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thing. I was finding I was on the verge of burnout [P17, female, senior lecturer, Faculty of Dentistry].

[W]ork is hectic [P20, female, lecturer, Faculty of Arts and Humanities].

As far back as 2008, Barkhuizen and Rothmann indicated that due to a surge in work demands, academics are forced to work long hours. This puts them at risk for physiological, psychological, and behavioral illnesses. For example, Bezuidenhout (2015) found that South African academics' typical work week comprises of being a subject expert, researcher, lifelong learner, tutor, organizer, therapist, and appraiser. Furthermore, South African academics have substantial workload and administrative burdens. This includes governance demands devoid of organizational and managerial support, job uncertainty, and poor remuneration, along with role ambiguity (Poalses and Bezuidenhout, 2018; Du Plessis, 2020).

5.5.1.1.3 Competing time demands

The third highest ranked job demands were aspects relating to competing time demands, therefore, leading to constant conflicting work priorities. Participants indicated:

There is an expectation to have certain information on short notice [P2, female, lecturer, Faculty of Arts and Humanities].

Endless meetings are a challenge because they disrupt workflow [P8, female, associate professor, Faculty of Economic and Management Sciences].

It doesn't matter what time of the year it is, you are always under lots of pressure to get things done [P7, female, professor, Faculty of Arts and Humanities].

Another frustration is the institution's policies and procedures that academics need to follow in order to get something done. Participants explain:

> The bureaucracy that you have to go through to in order, for example, go to a conference. And then sometimes you even go through this whole admin process, and you get rejected [P5, female, senior lecturer, Faculty of Economic and Management Sciences].

> The sort of paperwork and bureaucracy involved is a real hindrance [P22, female, lecturer, Faculty of Arts and Humanities].

This led to P8 sensing "frustrated with the constant red tape". Rice and Sorcinelli (2002) and Ylijoki (2013) confirm that universities put extraordinary pressure on academics while having limited time (and financial) resources to complete a task. The additional working hours during their own time are rarely reflected in typical workload models. A concern exists that academic environments will no longer be regarded as a better career option concerning work-life balance (Dhanpat et al., 2019); instead, it is turning into an environment characterised by constant pressure. The movement towards ever-increasing productivity (Kinman, 2014) is not stabilising (Callaghan, 2016).

5.5.1.2 *Qualitative demands*

The themes identified as qualitative demands focus on skills and/or effort required to complete work tasks. In this case it was not about the volume of the work, but rather the complexity of work tasks requiring cognitive, emotional, or physical skills and/or effort.

5.5.1.2.1 *Balancing work and home responsibilities*

Balancing of work and home responsibilities were also mentioned frequently, and ranked as fourth most taxing job demand. Participant 20 mentioned that "work extends into family time." In addition, P7 indicated that

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in order to manage the workload, one has to "work on weekends" and this created a "lack of work-life balance."

> Remember, I'm a mother, I'm a wife, I'm a student, I'm a lecturer. I feel guilty that I'm not paying attention to my family as I am forever either in meetings or chasing deadlines [P4, female, lecturer, Faculty of Economic and Management Sciences].

> It needs to be noted somewhere that a workload isn't just your work from nine o'clock till five o'clock. It actually extends into your after-hour time as well [P11, female, lecturer, Faculty of Community and Health Sciences].

> When you leave the office, your work is not done. Although we have flexibility, you find yourself working into the evening, weekends, Saturdays and Sundays [P7, female, professor, Faculty of Arts and Humanities].

Although universities might offer comparatively flexible working hours when compared to other industries, a large probability exists that surmounting pressures on academics can lead to working similar hours and even taking work home (Callaghan, 2016).

That is, participating in the work role makes participating in the family role more difficult and vice versa. It can thus be noted that where performance objectives, work hours and duties of employees become unrealistic and extreme—to the point that work incessantly places restrictions on academics' personal lives—they will experience an inability to relax (even after hours) due to the huge amount of pressure they face daily (Parker and Hyett, 2011).

5.5.1.2.2 Student support complexity

Diversity among students was something that several academics had to cope with. Diversity components mentioned include race, gender, culture,

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religion, age, and language. Although the instruction medium of the research university is English, this is not the mother language for most students. The diverse student base results directly from HE initiatives to ensure equity of access to students. Participants share their experiences:

> The challenging aspect in handling a very large class is that the students are diverse. So, it becomes more challenging to communicate [P10, male, senior lecturer, Faculty of Natural Sciences].

> Language for me is also a challenge [P1, female, lecturer, Faculty of Community and Health Sciences].

> They [referring to students] feel themselves that they are being discriminated against. It is always difficult to gain their trust. I talk to them about developing as South Africans and finding ways to get them to understand one another [P2, female, lecturer, Faculty of Arts and Humanities].

Most participants felt they exert efforts in their teaching and learning strategy (P1, P2, P4, P13, P18, and P23). Frustrations experienced by participants include:

> The students will be demanding, harassing actually, in their e-mails demanding for examination scope [P16, male, senior lecturer, Faculty of Law].

> What makes it difficult is the social issues, the economic struggles of our students. They miss class because some don't have transport money to come to varsity [P2, female, lecturer, Faculty of Arts and Humanities].

While students are encouraged to be accountable for their own learning (Lavhelani et al., 2020), it remains the responsibility of the academic to ensure a high success rate with student learning. This causes undue stress

for academics as the level of student success determines academic success within their roles (Dey et al., 2015).

5.5.1.2.3 Organisational politics

Organisational politics affected most academics interviewed. While the volume and time needed to complete the bureaucratic processes featured as a quantitative demand, participants also experienced the complexity and emotional effort. For instance, there was constant mention of competition among staff members. Participants mentioned:

> We have leaders that have an agenda. They are not always neutral [P4, female, lecturer, Faculty of Economic and Management Sciences].

> When you come into a setting, people make sure they are on the positive team end, meaning that the highest loads would be delegated to the newer novice and younger academics [P14, male, lecturer, Faculty of Community and Health Sciences].

> Since I am younger that the other academics, I don't have a voice. If I do speak up in a meeting, nothing gets done and it doesn't really get heard [P15, female, lecturer, Faculty of Economic and Management Sciences].

Rice and Sorcinelli (2002, p. 104) have suggested similar evidence where junior academics are "awkwardly clasped between local and cosmopolitan pressures, among disciplinary colleagues and organisational demands".

Another manifested element was the lack of mentorship for novice academics. This seemed to have a negative effect for participants, such as:

> You are given a task, and you must find your own way [P4, female, lecturer, Faculty of Economic and Management Sciences].

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I learnt by knocking my head. Although my mentor was there, he was focused on his own career [P6, female, associate professor, Faculty of Natural Sciences].

My experience with my work was very challenging. You don't get mentored into your position. You just get told this is your job and you need to find your way [P3, female, lecturer, Faculty of Community and Health Sciences].

Effective mentoring is vital to sharing imperative knowledge, abilities, and insight with a newly appointed employee. Paris (2013) proposes that the novice lecturer is normally ready and willing to benefit from such an interchange to improve their professional journey. Lecturing is demanding and stressful, particularly for new lecturers.

Therefore, new lecturers often have trouble transitioning into their new roles from learners to teachers or from industry to classroom (Franklin and Molina, 2012). Adizu and Effiong (2020) indicated in their study that the observed benefits of effective mentorship can lead to professional development of the mentee along with progression in pedagogical knowledge.

5.5.1.2.4 Lack of mental health support for academic staff

Most participants confirmed a lack of consideration for academic staff's mental well-being (P3, P4, P6, P8, P13, and P17). This is in addition to the fact that students are put at the forefront with "their needs being catered to first" (P3 and 13). Participants explain:

There is no emotional support. Even if it's there, it's not genuine. Maybe I am crazy, but I am expecting a call from my superior asking me 'Hey, how are you? Are you coping? You're not getting any of that [P4, female, lecturer, Faculty of Economic and Management Sciences].

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> Sometimes we forget about the staff component, we are doing everything for the student. They need to think about staff wellness and mental health of staff as well [P3, female, lecturer, Faculty of Community and Health Sciences]

P11 mentioned that academics must deal with students' mental and personal problems, which they themselves are not equipped to deal with. This causes anxiety because of "limited counselling for the staff members" dealing with these concerns.

Thus, it is imperative that HEI's ensure that the mental well-being of staff is prioritized as they rely on the dedicated efforts of all staff members to allow for a successful workplace. Nevertheless, if occupational demands overshadow occupational resources, work tends to be more challenging and stressful, which is preceded by an exhausted, disengaged workforce (Poalses and Bezuidenhout, 2018).

5.5.1.3 *Organisational demands*

Organisational demands are elements produced by aspects or changes in the work environment. These aspects may have an adverse influence on an individual's work outputs (Bakker et al., 2004).

5.5.1.3.1 *Using technology-mediated learning approaches*

A number of academics indicated difficulty in dealing with technology. Especially as it pertains to emergency remote learning due to the COVID-19 pandemic. Academics had to learn to navigate their way "technologically" as this became a requirement.

> Technology is a challenge for me. Even iKamva [referring to the online learning management system] [P9, female, lecturer, Faculty of Dentistry].

> For me, the biggest challenge is this sort of e-learning, and the use of technology and the use of different modes. I always need to

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phone people and say 'can you help me'. That's like a headache for me. [P11, female, lecturer, Faculty of Community and Health Sciences].

I like to work on the hard copies and I'm not keen to do everything electronically [P2, female, lecturer, Faculty of Arts and Humanities].

COVID-19 restrictions affected economic and social sectors globally, including HE in South Africa. Owing to social distancing, various HEIs had to ensure that all learning material was available online for student access. It has become essential for universities to offer theoretical learning and provide students with practical training through technology.

Institutions had to find alternative forms of formative (and most likely summative) ways to assess students. Most academic staff at contact universities normally' have limited knowledge or training in the instruction or delivery of online learning. Academics with teaching responsibilities needed to develop their skills and rapidly become familiar with online learning platforms. This also included a significant increase in administration (Hedding et al., 2020).

5.5.1.3.2 Lack of structural resources

The participants empathised that certain resources were required from the work environment to succeed in their job functions; this was not always provided by the institution and, therefore, participants used their own resources or "just having to work with what they have". For example:

I have to share my office with a colleague [P1, female, lecturer, Faculty of Community and Health Sciences].

I use my personal laptop, rather than my computer at work, because I use specific programmes for my course, the PC at work doesn't support this programme. And also for say, taking photographs in the

archives. I use my own resources [P5, female, senior lecturer, Faculty of Economic and Management Sciences].

A healthy environment as discussed by Nordic (2009) in a faculty can be influenced by several factors. While some of these factors are intrinsic, extrinsic factors, including the availability of university resources (Stankovska et al., 2017) were noted as important drivers of a healthy environment.

These types of resources mentioned date as far back as (1989) where Hobföll specifically mentioned that object resources play an important role in the stress experience of individuals (e.g., office space). It is thus evident that an absence of sufficient structural resources to perform the job effectively will cause an increase in the amount of pressure the individual will experience as they are trying to carry out their job tasks in the best possible way (Poalses and Bezuidenhout, 2018).

5.5.1.4 *Organisational resources*

The institution can provide organisational resources, which the academic could use to alleviate the demand for social resources. Having social resources, knowing they are not alone, was a crucial variable for most academics. Respondents confirmed having support from various sources. This included peer or social support, support from colleagues, supervisors, and administrative. This support was summarised as follows:

> I think because we're such a small department, we're quite a close-knit group [P5, female, senior lecturer, Faculty of Community and Health Sciences].

> Okay, yes, generally it has been wonderful. Amazing actually. So, my department supported me immensely [P16, male, senior lecturer, Faculty of Law].

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There are offices that one can go to now and get advice, like teaching and learning. You can consult and get help with how to structure your course, and how to develop a new curriculum, and how to use the online resources in the teaching. That helps a lot, because you know that you're not alone [P6, female, associate professor, Faculty of Natural Sciences].

I think also with the opportunities that are provided by the different DVCs [deputy vice chancellors]. For example, the DVC of research when it comes to workshops and writing retreats, the Division of Postgraduate studies, organising all different workshops that are related to conducting research and otherwise, and also the availability of funding to apply for different projects [P12, male, lecturer, Faculty of Community and Health sciences].

Managers and supervisors should assist in instilling and upholding an encouraging workplace environment and practices as this influences an employee's job demands and resources (Van den Broeck et al., 2008; Alzyoud et al., 2015; Kotze, 2018). Theron et al. (2014) conducted a study which revealed that academic staff received adequate support from their managers but felt that more emphasis needed to be placed on aspects such as performance management and feedback needed for improvement (Lesenyeho et al., 2018).

5.5.1.5   *Personal resources*

Personal resources were identified as state-like aspects of self-determining and influencing individuals' abilities to affect or control their environments (Xanthopoulou et al., 2009). Personal or psychological resources are oriented toward the individual.

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5.5.1.5.1 Autonomy

Most participants observed control in managing their work. Decision-making freedom and autonomy experiences were shared throughout the interviews. Participants share:

> Surprisingly, I have been given quite a good level of control. I was allowed to pick my subjects, as in what I wanted to teach [P16, male, senior lecturer, Faculty of Law].

> There is a lot of freedom to change things, or to bring about new ideas [P11, female, lecturer, Faculty of Community and Health sciences].

Academic freedom matters substantially (Nongxa, 2020). Some noted that the autonomy and influence level of academics over their work, signifies a crucial element, directly affecting job satisfaction level (Bentley et al., 2013). Autonomy and influence moderate the harmful effect of other factors, such as high work demands (Fredman & Doughney, 2012). When autonomy is applied with the right sense of duty and accountability, it will cause academics to excel in all areas (Kori, 2016).

Another aspect where participants experienced autonomy was in the flexible work arrangements provided by the institution. P23 indicated that "some level of flexibility" provided an opportunity to take time off to focus on research projects, summarised by P18 as a "good opportunity for growth". Others relate:

> That helps because I live far from the faculty so it's much easier for me just to do my research at home [P23, female, senior lecturer, Faculty of Law].

> I mean the fact that we can have almost flexible time is a very, very good attribute that I can attest to that we see over the years. Nobody

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is standing behind me and you have to clock in and clock out now [P18, male, lecturer, Faculty of Art and Humanities].

In previous studies, results have indicated that Flexible Working Arrangements (FWA's) prolong employment (Damman and Henkens, 2018), improve work functioning (Amick et al., 2017), and postpones retirement among older workers (Moen et al., 2017). Dropkin et al. (2016) also argues that FWA's provide more comfort (such as being able to work from home), autonomy (having less face-to-face managerial supervision), and control (being able to control one's work hours) and reduces the amount of stress experienced, increases job satisfaction, and improves work–life balance (Vanajan et al., 2019). Furthermore, Bayissa and Zewdie (2010) indicated that prospective growth and career development opportunities, such as being able to further ones education, having job security and job autonomy, are some of the major rewards available to academic staff in higher education institutions.

5.5.1.5.2 *Meaningful work*

Participants established purpose and meaning in their work. A vast majority indicated that they felt overburdened by their workload; however, they also observed their jobs as meaningful. Comments, such as "the role brings a level of satisfaction," "wanting to give back to society," this being "their purpose," finds the "role rewarding", were all phrases used throughout. It can, therefore, be assumed that participants established a deep sense of meaning in the work they do. The participants shared: Participants mentioned that they found purpose and meaning in their work. Even though a vast majority indicated that they felt overburdened by their work load, they also indicated that they experienced their jobs as meaningful. Comments such as "the role brings a level of satisfaction," "wanting to give back to society," this being "their purpose," finds the "role rewarding" were all phrases used throughout. It can thus be assumed that participants find a

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deep sense of meaning in the work they do. In more detail, participants shared:

> I get, in proportion to the frustrations of working at this institution, I get as much satisfaction from engagement with the students and being a part of their lives [P22, female, lecturer, Faculty of Arts and Humanities].

> My motivation is giving back to society [P10, male, snr lecturer, Faculty of Natural Sciences].

> Definitely making a difference. That's it, making a difference, and believing that this is what I was born to do [P20, female, lecturer, Faculty of Art and Humanities] I love working with the students, and when you actually see that almost light bulb moment where the students say oh, I get it. This is what you have been speaking about. That is a very rewarding feeling [P13, female, lecturer, Faculty of Dentistry].

> And to make a difference because I have that at my disposal [P21, female, lecturer, Faculty of Natural Sciences].

Even though HEI's are environments currently characterized by high levels of stress and pressure, research suggests that academic work is still seen, in most countries, as a job that brings about high levels of fulfillment (Bentley et al., 2013; Shin and Jung, 2014). This could be due to a number of reasons, including HEI's being workplaces that have positive social characteristics. This can be seen as critical determinants of an academic's level of job satisfaction. This includes aspects such as university atmosphere, sense of community, relationships with colleagues (Lacy and Sheehan, 1997), perceived quality of students (Bentley et al., 2013), effectiveness of administration and technical/administrative support (Rosser, 2004; Bentley et al., 2013), quality of academic leadership

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(Fredman and Doughney, 2012), or social reputation of academics in society (Shin and Jung, 2014).

5.5.1.5.3 Personal support

The study emphasised personal support as a final resource. Chen and Fellenz (2020) established that individuals' personal resources at home increased their resources at work. For example, participants indicated receiving a proficient level of support from their spouses.

> … and my husband is also, I don't know if he counts as a resource but having his support helps me a lot [P23, female, senior lecturer, Faculty of Law].

This assisted in dealing with work stress as mentioned by P4.

> How I cope, I don't know. It's by the grace of God, and also maybe my husband is also helping in that way [P4, female, lecturer, Economic and Management Science Faculty].

There was also having that "understanding from family members" when having to bring work home in addition to having a productive space and enough resources (such as "internet, printer and a pc") when working from home.

> Yes, for instance maybe if you are in the workspace, they give you that time to do your work. That is another way of support [P10, male, senior lecturer, Faculty of Natural Sciences].

> So, I have resources at home that I need in terms of access to Internet, computer, space at home to work [P17, female, senior lecturer, Faculty of Dentistry].

According to Sonnentag (2017), beneficial work environments in the form of job resources as well as beneficial personal resources is needed in order for work engagement to transpire. In addition, Bakker and Demerouti (2007)

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and Herbert (2011) have indicated that how the employee perceives and uses their personal resources, such as resilience and optimism and positive self-evaluation, will determine how they control their environment.

5.6   Discussion

The aim of the research was to explore how academics make sense of the job demands and resources they encounter in the Higher Education environment. The JD-R model was used as theoretical framework to guide the exploration of what demands and resources exist in the academic environment.

From the results, it can be noted that elements such as having a heavy workload, work pressure and constant research demands resulted in academics feeling anxious and tired. Constantly having to work in such a demanding environment results in low levels of teacher-efficacy, low levels of work engagement and burnout (Han et al., 2020). Furthermore, having a lack of teaching resources impacts academics' worklife balance as most academics indicated that it became difficult to separate home and work responsibilities. Thus, institutions need to ensure that the retention and career fulfilment of academic staff (Ng'ethe et al., 2012), along with academic well-being, be made a priority (Janse van Rensburg et al., 2018).

As Leibowitz et al. (2017) show, teaching in a poorly resourced context with a large staff-student ratio of largely under-prepared undergraduate students creates different demands on academic staff members. As evident in the theme complexity of student support, academics in this South African university not only needed to focus on their teaching, but also on the socio-economic and psychological needs of students. Hence the need for academic development support programmes at universities is highlighted. However, the level of support and other resources have declined (Barkhuizen et al., 2014a). As such, academics draw on their personal resources, such as meaningful work and making a difference in the lives of students, to buffer the effect of the demands. The majority of the

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respondents found great meaning in their roles as academics. Moreover, their main reason for staying in academia was because they knew they were able to make a difference for students as well in a broader context i.e., communities.

Out of the 22 participants that was interviewed, the majority of the participants indicated that the demand experienced as most challenging is publication pressure. Second to this, participants indicated that being overburdened with the load was quite demanding. Competing time demands, as third highest ranked job demand, spoke directly to the amount of work pressure that was being felt by academics. Participants mentioned that a lot of their time was being spent on lectures/teaching, countless meetings in addition to consulting with or assisting students. Such high workloads and large intake of students are likely to lead to a decline in commitment and job insecurity (Theron and Dodd, 2011), as well as low levels of well-being. The fourth most prominent demand mentioned was work-family life conflict. This could have been a direct result of the pandemic COVID-19 lockdown and the move to remote working with resultant utilization of online and technology-mediated teaching technologies.

Although there are still many challenges to overcome, there were also positive elements identified from the interviews conducted. Aspects such as autonomy, flexibility in ones work schedule and having the support of supervisors, colleagues, and peers appeared to make quite a difference.

The JD-R model proposes that the interaction between job demands and job resources is important for developing motivational processes leading to work engagement and wellbeing, as well as depletion processes of job strain that lead to burnout (Bakker et al., 2014). As we did not ask participants about the interaction of their job demands and resources, it is not clear how they made sense of this interaction. However, job resources particularly influences engagement and wellbeing when job demands, such as publication pressure and work overload are high. In line with the

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Conservation of Resources theory by Hobfall (1989), resource gain becomes more salient in contexts of resource loss. As one example gleaned from the across the interviews attest, publication pressure was buffered by participants' acknowledgment that they have complete autonomy in deciding what they want to research. Our interpretation of the interaction of job demands and resources of academics are purely speculative, however, there is reason to believe that personal resources of those who choose to be academics could be used in creative ways to buffer inescapable work demands.

5.7 Limitations and recommendations

The present study was not without limitations. It is important to emphasize that the findings of this study were related to academic employees in a Higher Education Institution in South Africa, and it cannot be assumed that the results would be applicable to all other settings and other Higher Education Institutions. Another possible limitation is that participants may have felt hesitant to share certain information considering the sensitive nature of the topic being discussed. However, the interviewer felt contented that an acceptable level of care was in place to ensure that open and honest feedback was shared by participants.

For future research, it is recommended that a longitudinal study exploring job demands and job resources from the perspective of academics be identified over a period of time. This could add to a better understanding of changes taking place within the Higher Education Sector. It is also suggested that future research concentrates on discovering ways in which higher education institutions can provide support to employees to assist them in better dealing with the demands experienced, and provide employees with training on how to better manage their resources to enable them in dealing with challenges faced in work and life. This could include training to empower employees with skills to effectively raise concerns

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around demands being experienced in the workplace, and help employees to explore alternative ways of achieving the desired results through open and candid dialogue or job crafting interventions (Van Wingerden, 2016). A further recommendation is to explore areas of positive deviance. This could involve investigating areas in other sectors where there is a lower incidence of employees being at risk of burnout and exploring the factors present in the environment that could contribute toward this outcome, for example, increased work engagement (Alzyoud, 2016; Gauche et al., 2017).

5.8   Conclusion

The present study provided insight into how academic employees make sense of the demands and resources in their job roles. Mention was made of how demands cause strain and stress, whereas resources was linked to the meaningfulness of the job. Research has progressively demonstrated that not considering the proper management of job demands and resources of one's workforce as a key element, can result in negative setbacks (Dhanpat et al., 2019). By understanding the lived experiences of academics, leaders and human resource departments in HEI's could consider suitable interventions to alleviate job demands and implementing methods in which to structure work in order to increase resources at academics' disposal (Van Wingerden, 2016; Bakker and Demerouti, 2018). Higher Education Institutions and key stakeholders should therefore be encouraged to reflect on the findings of the current study to ensure that the most appropriate method in which to offer ongoing support to their employees is considered.

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References

Adizu, N. E., and Effiong, E. A. (2020).Mentoring of beginning business education lecturers for sustainable pedagogical skills development in state universities in Rivers State. *Glob. J. Manag. Bus. Res*. 20:3195.

Ager, A., Stark, S., and Potts, A. (2010). *Participative Ranking Methodology: A Brief Guide*. Version 1.1. Program on Forced Migration & Health, Mailman School of Public Health, Columbia University.

Alzyoud, A., Siti, Z. O., and Mohd Isa, M. F. (2015). Examining the role of job resources on work engagement in the academic setting. *Asian Soc. Sci*. 11, 103–110. doi: 10.5539/ass.v11n3p103

Alzyoud, A. A. Y. (2016). Job demands and job resources on work engagement mediating by job satisfaction in Jordan higher education sector. *Int. J. Soc. Sci. Econ. Res*. 1, 488–506.

Amick, B. C., Lee, H., Hogg-Johnson, S., Katz, J. N., Brouwer, S., Franche, R., et al. (2017). How do organizational policies and practices affect return to work and work role functioning following a musculoskeletal injury? *J. Occup. Rehabil*. 27, 393–404. doi: 10.1007/s10926-016-9668-8

Atindanbila, S. (2011). Perceived stressors of lecturers at the University of Ghana. *J. Emerg. Trends Educ. Res. Pol. Stud*. 2, 347–354.

Badat, S. (2010). The challenges of transformation in higher education and training institutions in South Africa. *Dev. Bank Southern Africa* 8, 1–37. Available online at: https://www.dhet.gov.za/summit/Docs/2010Docs/The %20Challenges%20of%20Transformation%20in%20Higher%20Edu action %20and%20Training%20Institutions%20in%20South%20Africa.pdf

Bakker, A. B., and Demerouti, E. (2007). The job demands-resources model: state of the art. *J. Manag. Psychol*. 22, 309–328. doi: 10.1108/02683940710733115

Bakker, A. B., and Demerouti, E. (2018). "Multiple levels in job demandsresources theory: implications for employee well-being and performance," in *Handbook of Well-Being*, eds E. Diener, S. Oishi, and L. Tay (Salt Lake City, UT: DEF Publishers), 1–13.

Bakker, A. B., Demerouti, E., and Sanz-Vergel, A. I. (2014). Burnout and work engagement: the JD–R approach. *Annual Rev. Organ. Psychol. Org. Behav*. 1, 389–411. doi: 10.1146/annurev-orgpsych-031413-091235

Bakker, A. B., Demerouti, E., and Verbeke, W. (2004). Using the job demandsresources model to predict burnout and performance. *Hum. Resour. Manag.* 43, 83–104. doi: 10.1002/hrm.20004

Barkhuizen, N., Roodt, E., and Schutte, N. (2014a). Talent management of academics: balancing job demands and job resources. *Mediterranean J. Soc. Sci*. 50, 2033–2033. doi: 10.5901/mjss.2014.v5n20p2033

Barkhuizen, N., and Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institutions. *South Afri. J. Psychol*. 38, 321–336. doi: 10.1177/008124630803800205

Barkhuizen, N., Rothmann, S., and van de Vijver, F. J. R. (2014b). Burnout and work engagement of academics in higher education institutions: effects of dispositional optimism. *Stress Health* 30, 322–332. doi: 10.1002/smi.2520

Barrick, M. R., Mount, M. K., and Li, N. (2013). The theory of purposeful work behavior: the role of personality, higher-order goals, and job

220

characteristics. *Acad. Manag. Rev.* 38, 132–153. doi: 10.5465/amr.2010.0479

Bayissa, W., and Zewdie, S. (2010). Academic staff reward system: a case of Jimma University. *Ethiop. J. Educ. Sci*. 61, 13–27. doi: 10.4314/ejesc.v6i1.65378

Bentley, P. J., Coates, H., Dobson, I. R., and Meek, V. L. (2013). *Factors Associated With Job Satisfaction Amongst Australian University Academics and Future Workforce Implications. Job Satisfaction Around the Academic World* (Springer), 29–53. doi: 10.1007/978-94-007-5434-8_3

Bezuidenhout, A. (2015). Implications for academic workload of the changing role of distance educators. *Distance Educ*. 36, 246–262. doi: 10.1080/01587919.2015.1055055

Bezuidenhout, A., and Cilliers, F. (2010). Burnout, work engagement and sense of coherence in female academics in higher education institutions in South Africa. *South Afri. J. Industr. Psychol*. 36, 1–10. doi: 10.4102/sajip.v36 i1.872

Bowling, N. A., and Kirkendall, C. (2012). Workload: a review of causes, consequences, and potential interventions. *Contemp. Occup. Health Psychol. Glob. Perspectiv. Res. Pract*. 2, 221–238. doi: 10.1002/9781119942849.ch13

Byrne, O., and MacDonagh, J. (2017). What's love got to do with it? Employee engagement amongst higher education workers. *Irish J. Manag.* 36, 189–205. doi: 10.1515/ijm-2017-0019

Callaghan, C. W. (2016). "Publish or perish:" family life and academic research productivity. *SA J. Hum. Resour. Manag*. 14, 1–9. doi: 10.4102/sajhrm.v14i1.727

Chen, I. S., and Fellenz, M. R. (2020). Personal resources and personal demands for work engagement: evidence from employees in the service industry. *Int. J. Hospital. Manag*. 90:102600. doi: 10.1016/j.ijhm.2020.102600

Creswell, J.W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, 4th Edn. London: Pearson.

Damman, M., and Henkens, K. (2018). Gender differences in perceived workplace flexibility among older workers in the Netherlands: a brief report. *J. Appl. Gerontol.* 39, 915–921. doi: 10.1177/0733464818800651

Demerouti, E., and Bakker, A. B. (2011). The job demands-resources model: challenges for future research. *SA J. Indus. Psychol*. 37, 01–09. doi: 10.4102/sajip.v37i2.974

Demerouti, E., Bakker, A. B., Nachreiner, F., and Schaufeli, W. B. (2001). The job demands-resources model of burnout. *J. Appl. Psychol.* 86:499. doi: 10.1037/0021-9010.86.3.499

Department of Education (2015). *Research Output Policy, vol. 597, no 2*. Pretoria: Government Gazette.

Dey, A., Choudhury, M. M., Mollah, S., and Kim, M. H. (2015). Evaluation of teaching methods on students's academic performance in the University of Dhaka. *AE Int. J. Multidiscipl. Res*. 3, 1–15.

Dhanpat, N., de Braine, R., and Geldenhuys, M. (2019). Preliminary development of the Higher Education Hindrance Demands Scale amongst academics in the South African context. *SA J. Indus. Psychol*. 45, 1–12. doi: 10.4102/sajip.v45i0.1595

Dropkin, J., Moline, J., Kim, H., and Gold, J. E. (2016). Blended work as a bridge between traditional workplace employment and retirement: a

222

conceptual review. *Work Aging Retir.* 2, 373–383. doi: 10.1093/workar/waw017

Du Plessis, M. (2020). Model of coping with occupational stress of academics in a South African higher education institution. *SA J. Indus. Psychol.* 46, 1–11. doi: 10.4102/sajip.v46i0.1714

El-Sayed, S. H., El-Zeiny, H. H. A., and Adeyemo, D. A. (2014). Relationship between occupational stress, emotional intelligence and self-efficacy among faculty members in faculty of nursing Zagazig University, Egypt. *J. Nurs. Educ. Pract.* 4, 183–194. doi: 10.5430/jnep.v4n4p183

Franklin, E. A., and Molina, Q. F. (2012). Teacher induction programs in agricultural education: description of the role of AAAE higher education teacher preparation programs. *J. Agri. Educ.* 53, 123–135.doi: 10.5032/jae.2012.01123

Fredman, N., and Doughney, J. (2012). Academic dissatisfaction, managerial change and neo-liberalism. *High. Educ.* 64, 41–58. doi: 10.1007/s10734-011-9479-y

Gauche, C., de Beer, L. T., and Brink, L. (2017). Exploring demands from the perspective of employees identified as being at risk of burnout. *Int. J. Qualitat. Stud. Health Well-Being* 12, 1361783–1361787. doi: 10.1080/17482631.2017.1361783

Geoffrey, N., and January-Enkali, E. (2019). Work engagement at a transforming tertiary institution: a reflection of NUST Academic Staff, Namibia. *Int. J. Acad. Res.* 1, 265–281. doi: 10.5281/zenodo.3368285

Guthrie, J., Parker, L. D., Dumay, J., and Milne, M. J. (2019). What counts for quality in interdisciplinary accounting research in the next decade *Accoun. Audit. Accountabil. J.* 32, 2–25. doi: 10.1108/AAAJ-01-2019-036

223

Halcomb, E. J., Peters, K., and Davies, D. (2013). A qualitative evaluation of New Zealand consumers perceptions of general practice nurses. *BMC Family Pract*. 14, 1–7.

Han, J., Yin, H., Wang, J., and Bai, Y. (2020). Challenge job demands and job resources to university teacher well-being: the mediation of teacher efficacy. *Stud. High. Educ.* 45, 1771–1785. doi: 10.1080/03075079.2019.1594180

Hedding, D. W., Greve, M., Breetzke, G. D., Nel, W., and Jansen Van Vuuren, B. (2020). COVID-19 and the academe in South Africa: not business as usual. *South Afri. J. Sci.* 116, 1–3. doi: 10.17159/sajs.2020/8298

Herbert, M. (2011). *An Exploration of the Relationships Between Psychological Capital (Hope, Optimism, Self-Efficacy, Resilience), Occupational Stress, Burnout and Employee Engagement.* (PhD Dissertation). Stellenbosch University, Stellenbosch, South Africa.

Higher Education South Africa (2014). *Remuneration of Academic Staff at South African Universities: A Summary Report of the HESA Statistical Study of Academic Remuneration.* Pretoria.

Hobfall, S. E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *Am. Psychol.* 44:513. doi: 10.1037/0003-066X.44.3.513

Houston, D., Meyer, L. H., and Paewai, S. (2006). Academic staff workloads and job satisfaction: expectations and values in academe. *J. High. Educ. Pol. Manag.* 28, 17–30. doi: 10.1080/13600800500283734

Hoy, A. W. (2004). Self-efficacy in college teaching. *Essays Teach. Excell.* 15, 8–11. Available online at: https://cft.vanderbilt.edu/wp-content/uploads/ sites/59/vol15no7_self_efficacy.htm

Janse van Rensburg, C., Rothmann, S., and Diedericks, E. (2018). Job demands and resources: flourishing and job performance in South African universities of technology settings. *J. Psychol. Africa* 28, 291–297. doi: 10.1080/14330237.2018.1501881

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: implications for job redesign. *Admin. Sci. Q.* 24, 285–308.

Kinman, G. (2014). Doing more with less? work and well-being in academics. *Somatechnics* 4, 219–235. doi: 10.3366/soma.2014.0129

Kori, E. (2016). Challenges to academic freedom and institutional autonomy in South African universities. *Int. J. Teach. Educ.* IV, 45–53. doi: 10.20472/TE.2016.4.1.004

Kotze, M. (2018). How job resources and personal resources influence work engagement and burnout. *African J. Econ. Manag. Stud.* 9, 148–164. doi: 10.1108/AJEMS-05-2017-0096

Kubátová, J. (2019). Does academic publishing lead to work-related stress or happiness? *Publications* 7:66. doi: 10.3390/publications7040066

Lacy, F. J., and Sheehan, B. A. (1997). Job satisfaction among academic staff: an international perspective. *High. Educ.* 34, 305–322. doi: 10.1023/A:1003019822147

Lavhelani, P. N., Ndebele, C., and Ravhuhali, F. (2020). Examining the efficacy of student academic support systems for "at risk" first entering students at a historically disadvantaged South African University. *Interchange* 51, 137–156. doi: 10.1007/s10780-019-09383-z

Leibowitz, B., Bozalek, V., Garraway, J., Herman, N., Jawitz, J., Muhuro, P., et al. (2017). *Learning to Teach in Higher Education in South Africa.* Council on Higher Education; Higher Education Monitor 14. Available

online   at: https://www.sun.ac.za/english/learning-
teaching/ctl/Documents/Learning
%20to%20Teaching%20in%20Higher%20Education%20South%20
Africa.pdf

Lesenyeho, D. L., Barkhuizen, N. E., and Schutte, N. E. (2018). Exploring the causal relationship between the antecedents and consequences of talent management for early career academics in South African higher education institutions. *SA J. Hum. Resour. Manag*. 16, 1–10. doi: 10.4102/sajhrm.v16i0.912

Moen, P., Kojola, E., and Schaefers, K. (2017). Organizational change around an older workforce. *Gerontologist* 57, 847–856. doi: 10.1093/geront/gnw048

Naidoo-Chetty, M., and Du Plessis, M. (2021). Systematic review of the Job Demands and Resources of academic staff within Higher Education Institutions. *Int. J. High. Educ.* 10, 268–284. doi: 10.5430/ijhe.v10n3p268

National Development Plan 2030. (2012). *Our Future – Make It Work.* Pretoria: National Planning Commission. Available online at: https://www.gov.za/sites/   default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf (accessed June 7, 2021).

Ng'ethe, M. J., Namusonge, G. S., and Iravo, M. A. (2012). Influence of leadership style on academic staff retention in public universities in Kenya. *Int. J. Bus. Soc. Sci.* 3, 297–302.

Nongxa, L. (2020). Intellectual laziness and academic dishonesty: a threat to academic freedom? *South African J. Sci.* 116, 1–5. doi: 10.17159/sajs.2020/8585

Nordic, F. (2009). Levels of job satisfaction amongst Malaysian academic staff. *J. Asian Soc. Sci.* 5, 122–128. doi: 10.5539/ass.v5n5p122

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Paris, L. (2013). Reciprocal mentoring: can it help prevent attrition for beginning teachers? *Austr. J. Teacher Educ.* 38, 136–1578. doi: 10.14221/ajte.2013v38n6.5

Parker, G. B., and Hyett,M. P. (2011).Measurement of well-being in the workplace: the development of the Work Well-Being Questionnaire. *J. Nerv. Mental Dis.* 199, 394–397. doi: 10.1097/NMD.0b013e31821cd3b9

Phillips, J. J., and Connell, A. O. (2003). *Managing Employee Retention: A Strategic Accountability Approach.* Burlington: Routledge. doi: 10.1016/B978-0-7506-7484-3.50005-6

Pienaar, C., and Bester, C. (2009). Addressing career obstacles within a changing higher education work environment: perspectives of academics. *South African J. Psychol.* 39, 376–385. doi: 10.1177/008124630903900311

Poalses, J., and Bezuidenhout, A. (2018). Mental health in higher education: a comparative stress risk assessment at an open distance learning university in South Africa. *Int. Rev. Res.* Open Distribut. Learn. 19, 169–191. doi: 10.19173/irrodl.v19i2.3391

Polit, D. F., and Beck, C. T. (2010). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice, 7th Edn*. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams &Wilkins, 35.

Polit, D. F., and Beck, C. T. (2014). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice, 8th Edn.* Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams &Wilkins.

Pon, K., and Lichy, J. (2015). For better or for worse: the changing life of academic staff in French business schools. *J. Manag. Dev.* 34, 536–552. doi: 10.1108/JMD-03-2014-0022

Queirós, A., Faria, D., and Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *Eur. J. Educ. Stud.* 3, 369–387. doi: 10.5281/zenodo.887089

Rice, E. R., and Sorcinelli, M. D. (2002). Can the tenure process be improved. *Questions Tenure* 9, 101–124. doi: 10.2307/j.ctvk12qgg.9

Rosser, V. J. (2004). Faculty members' intentions to leave: a national study on their worklife and satisfaction. *Res. High. Educ.* 45, 285–309. doi: 10.1023/B:RIHE.0000019591.74425.f1

Rothmann, S., and Jordaan, E. G.M. (2006). Job demands, job resources and work engagement of academic staff in South African higher education institutions. *SA J. Indus. Psychol.* 32, 87–96. doi: 10.4102/sajip.v32i4.247

Schaufeli, W. B. (2017). Applying the job demands-resources model. *Org. Dyn.* 2, 120–132. doi: 10.1016/j.orgdyn.2017.04.008

Shin, J. C., and Jung, J. (2014). Academics job satisfaction and job stress across countries in the changing academic environments. *High. Educ.* 67, 603–620. doi: 10.1007/s10734-013-9668-y

Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *J. Occup. Health Psychol.* 1:27.

Smith, J. A. (1996). Beyond the divide between cognition and discourse: using interpretative phenomenological analysis in health psychology. *Psychol. Health* 11, 261–271. doi: 10.1080/08870449608400256

Smith, J. A., and Osborn, M. (2008). Phenomenological analysis. *Social* 229:9780470776278.ch10. doi: 10.1002/9780470776278.ch10

Smith, J. P., Tindall, L., Flower, P., and Larkin, M. (2009), *Interpretative Phenomenological Analysis: Theory, Method and Research*. London: Sage, 346–347. doi: 10.1080/14780880903340091

Sonnentag, S. (2017). A task-level perspective on work engagement: a new approach that helps to differentiate the concepts of engagement and burnout. *Burnout Res.* 5, 12–20. doi: 10.1016/j.burn.2017.04.001

Stankovska, G., Angelkoska, S., Osmani, F., and Grncarovska, S. P. (2017). Job motivation and job satisfaction among academic staff in higher education. *Bulgarian Comparat. Educ. Soc.* 15, 159–166.

Takawira, N., Coetzee, M., and Schreuder, D. (2014). Job embeddedness, work engagement and turnover intention of staff in a higher education institution: an exploratory study. *SA J. Hum. Resour. Manag.* 12, 1–10. doi: 10.4102/sajhrm.v12i1.524

Theron, A. V. S., and Dodd, N. M. (2011). Organisational commitment in a post-merger situation. *South African J. Econ. Manag. Sci.* 14, 333–345. doi: 10.4102/sajems.v14i3.100

Theron, M., Barkhuizen, N., and Du Plessis, Y. (2014). Managing the academic talent void: investigating factors in academic turnover and retention in South Africa. *SA J. Indus. Psychol.* 40, 1–14. doi: 10.4102/sajip.v40i1. 1117

Van den Broeck, A., Vansteenkiste, M., De Witte, H., and Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: the role of basic psychological need satisfaction. *Work Stress* 22, 277–294. doi: 10.1080/02678370802393672

Van Niekerk, F., and Geertsema, J. C. (2009). Strategies for university improvement: the research profile change at a South African nonresearch- intensive university. *South African J. High. Educ.* 23, 912–934. doi: 10.4314/sajhe.v23i5.48808

Van Tonder, D., and Fourie, E. (2015). The effect of job demands and a lack of job resources on South African educators' mental and physical

resources. *J. Soc. Sci.* 42, 65–77. doi: 10.1080/09718923.2015.11893395

Van Veldhoven, M. (2014). "Quantitative job demands," in *An Introduction to Contemporary Work Psychology*, eds M. C. W. Peeters, J. De Jonge, and T. W. Taris (Hoboken, NJ: John Wiley & Sons, Ltd.), 117–143.

Van Wingerden, J. (2016). *Job Demands-Resources Interventions*. Rotterdam: Erasmus University Rotterdam. Available online at: http://hdl.handle.net/1765/ 93132

Vanajan, A., Bültmann, U., and Henkens, K. (2019). Health-related work limitations among older workers. *Gerontologist* 60, 450–459. doi: 10.1093/geront/gnz073

Xanthopoulou, D., Bakker, A. B., Demerouti, E., and Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *J. Vocation. Behav*. 74, 235–244. doi: 10.1016/j.jvb.2008. 11.003

Ylijoki, O.-H. (2013). Boundary-work between work and life in the high-speed university. *Stud. High. Educ.* 38, 242–255. doi: 10.1080/03075079.2011.577524

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CHAPTER 6: JOB DEMANDS AND RESOURCES OF ACADEMICS IN HIGHER EDUCATION

6.1 Introduction

The preceding chapter presents the job demands and resources findings academic employees experienced, using qualitative methods. The current chapter forms Phase III of the study. This phase of the study embodies a mixed-method pre-experimental approach (quantitative and qualitative methodology). The findings are presented to determine the effectiveness of job crafting intervention among HEI academics in improving job resources and decreasing job demands. Participants completed pre- and post-measures while participating in two, two-hour online job crafting training sessions (Article 3).

6.2 Publication details

Article 3 has been submitted and is being reviewed in *Acta Commercii*, as detailed in Table 6.1 below.

Table 6.1: Article details

Title	Evaluating a job crafting intervention among academic employees: Brief report on a pilot study
Authors	Naidoo-Chetty, M., Du Plessis M.
Year	2022
Journal	Acta Commercii
Volume	To be confirmed
Issue	To be confirmed
Page no.	To be confirmed

Status	In review

6.3   Journal overview

The manuscript is in review in *Acta Commercii. Acta Commercii* promotes research within the ambit of management and related disciplines. It serves as a platform for refreshingly innovative and invigorating approaches to management and what this means across various contexts, countries, and cultures. The objective is to provide an African-international dialogue among researchers. *Acta Commercii* fosters interest within the South African arena, attempting to understand the possibilities that can be achieved in management, and influencing various professions.

6.4   Manuscript under review

Evaluating a job crafting intervention among academic employees: Brief report on a pilot study

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Abstract

Orientation: Constant changes in the higher education arena led to academics needing to function in a volatile and complex environment. This has created unique demands, which academics need to overcome. Academics, therefore, need to change their job design proactively.

Research purpose: The effectiveness of a job crafting intervention among HEI academics in improving job resources and decreasing job demands was explored.

Motivation for the study: Owing to constant changes in the higher education environment, it has become imperative that HEIs have a better

understanding of how to assist academics when dealing with challenging or hindering demands in the workplace. Job crafting can be a proactive mechanism to alter demands and enhance job resources. This study attempts to contribute knowledge in assessing the effectiveness of a job crafting intervention with a pilot group of academic staff.

Research design, approach, and method: A mixed-method, pre-experimental research approach was implemented (n = 9). Participants completed pre- and post-measures while participating in two, two-hour online job crafting training sessions.

Main findings: No significant quantitative differences between pre- and post-measurements emerged from the data, although participant reflections hint towards qualitative differences in work-related thinking and actions. The pilot study implied favourable acceptance of a brief job crafting intervention to consider changes to academic work by reducing demands and increasing resources.

Practical/managerial implications: Organisations, specifically HEIs should know the opportunities that job crafting can provide. HEIs may, therefore, use interventions to foster employee job crafting behaviours.

Keywords: job crafting; job crafting intervention; job demands; job resources; work engagement; pre-experimental; mixed-method; higher education; academics

6.4.1 Introduction

A constant discussion in the Higher Education (HE) sector focuses on the impact of global challenges experienced by academics and the affect of this on their overall performance. Researchers have put forward that academic employees need to be adaptable due to the constant changing landscape (Teichler et al., 2013; Wood, Geard, & Silverman, 2016). Aspects such as

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restricted access to research funding and adjustments in the number of teaching hours all play a role in the constant demands experienced by academics. Additionally, either for innovation-related reasons or due to other changes, the teaching tasks are subject to major alterations that comprise delivering courses online and adjusting to the circumstances of remote education (Urbanaviciute, Roll, Tomas & De Witte, 2021).

Based on this there is a need for academics to manage their job demands and exploit their resources with the use of job crafting as this will allow academics to alter their job demands and resources as they see fit (Ebuka, Ngozi, Obianuju & Peace, 2022).

Job crafting is an employee-initiated work design process allowing employees to actively alter their work characteristics (Wang & Demerouti, 2016). This is conducted to balance the individual's job demands and resources (Demerouti, 2014). According to Bakker and Demerouti (2018), job crafting is observed as employee modifications regarding job demands and resources.

The goal of job crafting is to make employees aware of the tasks they perform and on which tasks they spend most of their time (van Wingerden, Derks, Bakker & Dorenbosch, 2013; Van Wingerden and Poell, 2019.). By doing this, employees have more insight in their jobs, and can decide whether this aligns with their desires. This results in more knowledge and better understanding of one's job, where the employees have the initiative to change their jobs and create their ideal working circumstances. This eventually leads to meaningfulness to the job (Berg, Dutton & Wrzesniewski, 2013; Morales-Solis, Chen, May & Schwoerer, 2022.), it increases job satisfaction (Cheng and Yi, 2018), engagement (Mäkikangas, 2018), and performance (Kooij, Tims & Akkermans, 2016; Mohd Rasdi, Tauhed, Zaremohzzabieh & Ahrari, 2022.).

Job crating is different from for example job rotation, because job crafting does not involve long-term changes. When engaging in job rotation, an employee changes their job continuously, which mostly impacts the short-term effects. Job crafting, on the other hand, changes the job itself and therefore also impacts the long-term effects. In addition, the implementation of job crafting encourages employees to take the initiative to change their working environment. Therefore, it can be assumed that the process of job crafting is cost efficient as well, because the employer can now focus on other tasks. It is important for employers to understand what job crafting is, because then they are able to successfully implement job crafting (Demerouti, 2014; Demerouti, Soyer, Vakola & Xanthopoulou, 2021).

Even though the research on job crafting is still new, many researchers have shown that job crafting is effective (Berg, Dutton & Wrzesniewski, 2013; Demerouti, Peeters, and van den Heuvel, 2019) and should be implemented by more organizations. Furthermore, a unique advantage of job crafting is that is it applicable to every employee (Schrijver, 2018).

6.4.2 Job crafting and the JD-R model

The Job demands and resources model has become a widely used model across various occupations (Han, Yin, Wang, & Zhang, 2020). As noted previously, the JD-R model foretells that the level of an individual's work engagement is influenced by the balance between job demands that are motivational and those that are health-impairing, and by the balance between sufficient and inadequate job resources (Schaufeli & Bakker, 2004). In other words, when there is incompatibility amongst accessible resources and job demands (e.g., when the employee feels too little control over her work environment, and workload is too high while rewards are too low, and community values are incongruent with personal ones), there is a threat of burnout and disengagement (Maslach et al., 2001).

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Therefore, exploring job crafting within the JD-R model can increase the understanding of the motivating and inhibiting factors that drive employees at work and aid in developing job redesign interventions to target these factors. In detail, the JD-R model considers individuals as active agents in the ever-changing work context (Demerouti, 2014), who can be motivated to optimize their job demands (i.e., aspects of work that require effort) and resources (i.e., aspects of the job that facilitate effective functioning) to achieve their work goals (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007).

A follow-up school of thought approaches job crafting from job demands-resources theory (JD-R; Bakker & Demerouti, 2007). This perspective proposes that individuals craft their jobs to balance their job demands and resources (Tims & Bakker, 2010). Job demands refer to aspects of the job, which require sustained cognitive, emotional or physical effort, such as workload, dealing with time pressure, or challenging customer interactions (Bakker & Demerouti, 2007). Job resources refer to aspects of the job, or work characteristics, which help individuals achieve work goals, reduce job demands, or stimulate growth and development (Bakker & Demerouti, 2007), such as job autonomy, feedback, and social support.

Tims, Bakker, and Derks (2012) empirically validated four types of crafting:

- increasing structural job resources, when individuals increase job resources such as autonomy, variety, and development opportunities;
- increasing social job resources, which refers to increasing relational characteristics such as social support and feedback from others;
- increasing challenging job demands, which is when individuals take on extra tasks, roles or responsibilities which are stimulating as opposed to a hindering;
- decreasing hindering job demands, when individuals reduce the number of tasks which require sustained effort and are not motivational.

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A meta-analysis concluded in 2017 that the most widely adopted theoretical model of job crafting is the one proposed by Tims and Bakker (2010), which positioned job crafting in the JD-R model (Rudolph, Katz, Lavigne, & Zacher, 2017). Of particular relevance to the current research is that recent updates to the JD-R model incorporating, directly and particularly, the concept of job crafting (see Figure 6.1).
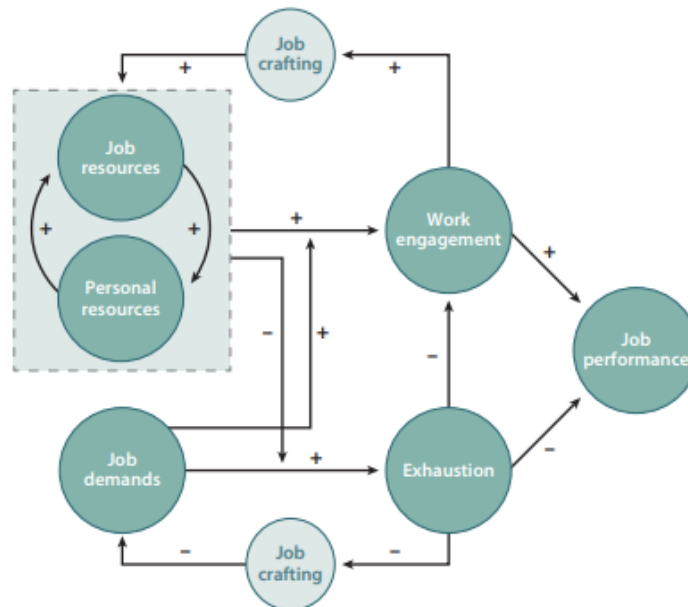
Figure 6.1. An updated version of the Job Demands-resources model, incorporating a job crafting component. (From Bakker and Demerouti (2014, p. 10).

This concept employs the JDR (JD-R) framework (Bakker & Demerouti, 2014) as a preliminary theme. Within the JD-R framework, job characteristics can be categorised as either job demands or resources. Job demands and resources are specific to roles and occupations. According to Naidoo-Chetty and Du Plessis (2021), academic job demands include:

- Workload
- Work-home life balance
- Online teaching and learning
- Publication pressure

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Job resources, including:

- Autonomy
- Personal support
- Meaningful work

A paucity of research on job crafting in HEIs exists specifically for academic employees (Demerouti, 2014; Demerouti, Bakker & Gevers, 2015). Previous research on job crafting interventions focused on the private (Dickson, 2020; Kilic, Tatar & Erdil, 2020; Thomas, Thomas & Du Plessis, 2020) and healthcare sectors (Baghdadi et al., 2021; Bakker & Albrecht, 2018).

6.4.3 The goal of the study

The primary aim of this intervention was to pilot and determine whether a job crafting intervention among HEI academics can help manage job demands and increase job resources. The study intended to answer the question: 'Does a job crafting intervention influence the perceived intensity of job demands and resources of academic employees in an HEI?'

6.4.4 Method

6.4.1.1   Participants and setting

The study population included academic employees from an HEI in the Western Cape, South Africa. The rationale for sampling this population is that academic employees often need to approach aspects, such as workload imbalances and severe resource restrictions. Academics are also expected to complete complex tasks within a highly demanding environment (Wray & Kinman, 2022) while dealing with COVID-19 social distancing implications of teaching and research activities (Al-Taweel et al., 2020). The concerned university provided an ideal setting for the sample choice.

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Twelve participants formed the initial intervention group sample; however, owing to various work commitments, three participants could not participate in the intervention. The participants included seven females and two males (Table 6.2). Most participants were appointed at a lecturer level within the selected HEI. All participants completed the pre- and post-test online questionnaire.

Table 6.1: Demographic information of participants (n = 9)

Participant (P)	Job title	Gender	Faculty		
P1	Lecturer	Female	Economic	and	Management Sciences
P2	Lecturer	Female	Economic	and	Management Sciences
P3	Lecturer	Female	Economic	and	Management Sciences
P4	Researcher	Female	Community and Health Sciences		
P5	Snr Lecturer	Female	Dentistry		
P6	Lecturer	Male	Community and Health Sciences		
P7	Lecturer	Female	Economic	and	Management Sciences
P8	Lecturer	Female	Economic	and	Management Sciences
P9	Lecturer	Male	Economic	and	Management Sciences

6.4.1.2 *Data collection and procedure*

The University Research Ethics Committee involved with the data collection approved the study (HS19/6/11). The deputy registrar (Ref-UWCRP270819MN) permitted participant access. The participants were recruited through snowball sampling. An invitation email to participate in the intervention was distributed among potential academic staff, indicating an interest in job crafting during previous research. These individuals were

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encouraged to forward the invitation to other academic staff members that may be interested.

The study employed a mixed-method approach to obtain data quantitatively and qualitatively. For those who agreed to participate, online questionnaires (pre and post-test) were distributed through a link for completion (which formed the quantitative aspect). The intervention occurred through an online meeting platform because of the COVID-19 social distancing protocols (allowing qualitative data to be obtained). Academics completed questionnaires and other study-related activities during work hours with the institution's permission. The pre-intervention phase involved perusing and endorsing an informed consent document before completing the biographical questionnaire. Participants were requested to complete a compilation of measurement instruments.

The flourishing-at-work scale short form (FAWS-SF; Rautenbach 2015) measured autonomy and meaningful work; however, for this study, only these two dimensions from the FAWS-SF was employed. The FAWS-SF was valid and reliable (>0.70) in the South African context (Rautenbach & Rothmann 2017).

The workload scale of Dhanpat, Geldenhuys and De Braine (2019) measured load-overburden. The scale measures a seven-point response scale, ranging from 1 = strongly disagree to 7 = strongly agree, and 1 = never to 7 = always. The workload variable presented acceptable Cronbach alpha of 0.76 in earlier research (Dhanpat et al., 2019).

The Dhanpat et al. (2019) online teaching and learning questionnaire feature the altering teaching nature, measuring technology-mediated learning approaches. Five items on a seven-point response scale measured online teaching and learning, ranging from 1 = strongly disagree to 7 = strongly agree. Dhanpat et al. (2019) lacked to establish significant factor loadings for online learning and teaching as part of their HE hindrance demand scale. This may have been because online learning and teaching

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lacked the institution; however, because of the COVID-19 pandemic, online learning and teaching became a new norm; therefore, imperative to include them in the study.

The Survey of Work-home Interaction (*Nijmegen, also known as the SWING) developed by Geurts et al. (2005) measured the demands of work-home responsibilities. For this study, the first 15 items investigating negative work-home interaction were employed. The negative load reactions developed at work hamper home functioning (Questions 1-9); negative work-home interference and negative load reactions developed at home hamper work functioning (Questions 10-15). These aspects were most relevant to the study.

The responses are provided on a four-point scale (range: 0 = never to 3 = always). For NWHI, Cronbach's alpha varied from 0.85 to 0.90 across three studies (Mostert & Oldfield, 2009; Pieterse & Mostert, 2005; Van Tonder, 2005). The reliability coefficient varied from 0.78 to 0.79 for PWHI. These studies provided beneficial, although preliminary, evidence of the reliability of the SWING English version for South Africa.

The PPQ (Haven et al., 2019) comprises three subscales scored on a five-point Likert scale ('5 = totally agree', '1 = totally disagree'). For this study, two subscales were the third subscale, 'publication resources', which does not focus on the demand aspects academics experienced but on the needed resources, not what was intended to be measured. The publication stress subscale (six items) presented a Cronbach's α =.804, whereas the subscale publication attitude (six items) presented a Cronbach's α =.777 (Haven et al., 2019).

The SPOS developed by Eisenberger et al. (1986) measured POS as a job resource. The POS was assessed on a seven-point agreement scale (1 = strongly disagree, 7 = strongly agree). The internal consistency of the three-item measure was reported as α = 0.75 (Eisenberger et al., 1986). The post-

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intervention phase required the participants to complete the same measures besides the biographical questionnaire.

The qualitative phase of the data collection was conducted in a focus group interview format. During these online group discussions, the first author directed a reflection on academics' challenges to achieving their job crafting goals. Questions were directed to identify aspects providing reliable results during the intervention phase and whether participants achieved their goals.

6.5   Overview of the job crafting intervention

The job crafting intervention was modelled on the intervention described by Van den Heuvel, Demerouti and Peeters (2015). The reason for choosing this job crafting intervention is attributable to its unity with the JD-R framework; therefore, striving to compel participant employees to be mindful of the model's three primary strategies for altering job demands and resources (increasing resources, increasing challenging job demands, and decreasing hindering job demands). The intervention entailed a two, two-hour training workshop, including a personal crafting plan and a reflection exercise over four weeks (Figure 6.1). A group of three to four academic employees attended the training workshop. This was done based on the availability of participants. However each sub-group received exactly the same training.

Phase 1	Phase 2	Phase 3
Pre Week 1 – Consent Form & online questionnaire (Pre-test)	**Intervention** Week 2 & 3 - Training workshop & personal crafting plan	**Post** Week 4 – Online questionnaire (Post-test), training workshop and reflection exercise
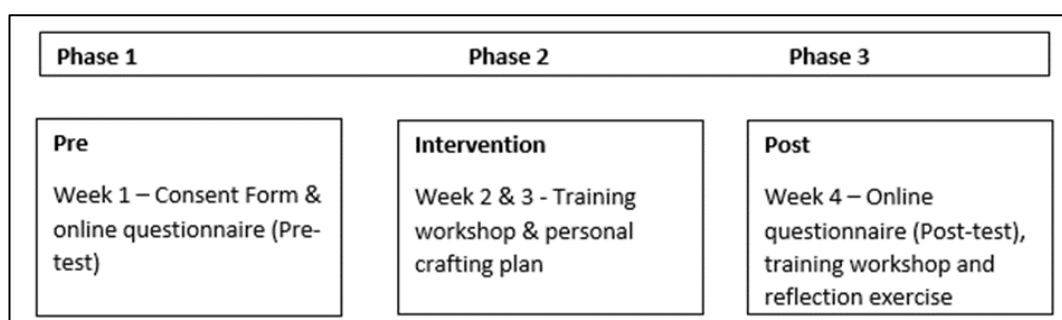
Figure 6.2: Intervention phases

The first two-hour session was conducted a week after participants completed the pre-test. To start the session, participants were provided with

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an overview of job crafting and its relation to the JD-R framework. Once the first author established a proficient level of engagement with the participants, there was discussion around tips on how to craft your own job. After the session, each participant was presented with crafting their work over the next few weeks.

The next step in this process was to send out the online post questionnaire. This was conducted exactly a week before the follow-up session. For the final two-hour session, the first author provided a brief re-cap about job crafting and the uses thereof. Once this was complete, each participant was provided with the opportunity to talk through their experiences and indicate whether they were or could not use job crafting in their everyday working lives.

To end the session, a reflection exercise was conducted in a focus group format. This allowed information to be collected for the qualitative data collection process for the study. The following questions were asked to participants:

i.   What was your experience of the intervention?
ii. In your own words, what did you learn from the intervention?
iii. Has the intervention changed your behaviour?
iv. How have the changes you made influenced your department?

The purpose of these reflection discussions and the intervention was to allow academics to alter their job features and inter-connections to increase their job resources and challenges at work.

6.6   Data analysis

Data from the pre- and post-measurement were extracted from the Google survey and exported to SPSS Version 28 (Corp IBM, 2019) for analysis. Paired sample t-tests were conducted to compare the differences between

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pre- and post-test scores on the measurement instruments, besides calculating descriptive statistics. The confidence interval level for statistical significance was 95% (*p* ≤ 0 05). The information obtained from the focus group discussions was transcribed and categorised according to the topic.

6.7   Results and discussion

This pre- and post-test study examined job crafting intervention effects. Table 6.2 presents the study variable descriptive statistics and correlations.

Most Cronbach's alpha values were higher than 0.70 except for the workload (post- α =.631), online teaching and learning (pre- α =.606), and publication pressure (pre- α =.645) of job demands. For publication pressure, two items (Item 5 and 12) were removed to improve the reliability. According to Ursachi, Horodnic and Zait (2015), an accepted rule is that an alpha of 0.6 directs an acceptable level of reliability. The Cronbach alpha, therefore, indicates acceptable reliability for both the pre-test and post-test measurements.

A slight change in the pre- and post-test mean scores existed for most variables. The job demand publication pressure indicated the most meaningful change. This change could be positive as the mean score was lower (*M* = 3.06 vs *M* = 2.88), indicating that academic employees perceived a slight reduction in the pressure experienced when dealing with publication outputs after participating in the job crafting intervention. This improvement of 0.18 was, however, statistically non-significant, *t*(8) =1.037, *p* = .330.

Workload mean scores signified a perceived change as the score lowered (*M* = 3.87) to (*M* = 3.73), albeit not statistically significant. This could indicate that participants observed a reduction in workload. This can be affirmed by the qualitative feedback obtained from the reflection exercise, where most participants agreed to hold power to change certain aspects of their jobs, commenting as follows:

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It has helped to put things into perspective. I have learnt to ask myself, what is the deadline? When should it be done? Instead of leaving what I was doing like my writing. It has taught me to set boundaries and stick to my initial plan [P4, female, Researcher, Faculty of Community and Health Sciences].

Your mindset is a resource and is a powerful tool - that in itself can help you overcome what you feel and do things [P1, female, Lecturer, Faculty of Economic and Management Sciences].

Qualitative data in training reflections were analysed to support specific findings from the quantitative data. Themes were identified based on the answers provided. For example, most participants confirmed following methods similar to job crafting; this session reaffirmed their accomplishments.

Was happy to see that there is a model to validate what I was doing. That there is a model to give this process credibility [P5, female, Snr Lecturer, Faculty of Dentistry].

What I have been exposed to has reaffirmed my learning - have been doing job crafting unconsciously [P2, female, Lecturer, Faculty of Economic and Management Sciences].

Regarding job resources, the numerically largest perceived change was in organisational support. The mean score (M = 4.35) in the pre-test increased by 0.52 to (M = 4.87). This could be observed as an increase in support experienced after the intervention. This improvement–0.51, was statistically insignificant, $t(8)$ =1.053, p = 341.

This is also prominent in meaningful work. The mean score was (M = 4.61), increasing to (M = 4.77), observed as an increase in participants experienced after the intervention about meaningful work. This improvement, 0.16, 95% CI, was statistically insignificant, $t(8)$ = -.371, p = .720.

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Participants perceived behaviour change even though the quantitative difference between pre-test and post-test scores was not statistically significant. Participants agreed that job crafting led to contemplating their tasks.

> I actively try to think about my days/week and try to plan according to that [P9, male, Lecturer, Faculty of Economic and Management Sciences].

> I have been more intentional about how I craft my work [P7, female, Lecturer, Faculty of Economic and Management Sciences].

P1 (female lecturer, Faculty of Economic and Management Sciences) also mentioned that job crafting provided a 'can-do attitude' and made her feel more positive, considering tiring and complex tasks. Similarly, P8 (female lecturer, Faculty of Economic and Management Sciences) agreed, indicating she was motivated in her performance even though certain tasks were challenging.

Table 6.2: Paired sample T-test results for the pre- and post-measurement of the intervention

Variable	M(Pre)	M(Post)	ΔM	Δ SD	t	p
Job demands						
Workload	3.87	3.73	.14286	1.91130	.224	.828
Work-home interaction	.44	.42	.01481	.54546	.081	.937
Opportunity to learn (OTL)	4.00	3.42	.5777	1.07445	1.613	.145
Publication pressure	3.06	2.88	.17778	.51424	1.037	.330
Job resources						
Meaningful work	4.61	4.77	.16667	1.34629	-.371	.720
POS	4.35	4.87	1.79307	.73202	1.053	.341

Note. OTL = Online teaching and learning; POS = perceived organisational support; *M* = mean; Δ*M* = change in the mean from pre to post; Δ SD = change in the SD from pre- to post-test; t = t-test statistic; p = level of significance. Analysis reported is for n = 9, df = 8. For the paired sample t-test, variables were paired to determine the differences between the pre- and post-scores.

6.8   Study limitations, and research

This study was pre-experimental; therefore, it held a small sample size. Other researchers should, therefore, involve a larger sample group with a control group. Another practical implication of the study outcomes is that organisations should know the opportunities job crafting interventions provide.

6.8.1 Recommendations for employees

Not all employees may have the desire to engage in job crafting; therefore, feedback may help them become more aware of their environment and what changes they can initiate to improve aspects of their jobs (Tims, Bakker & Derks, 2015); however, Musi (2020), who based his study on job crafting as an overarching approach, indicates that employees need to have the freedom to craft according to their needs, values and goals to improve their functioning (Vanbelle, Van den Broeck & De Witte, 2017).

Without this freedom, it is hard for employees to feel confident about crafting their work; therefore, a need exists for an employee to feel like they are in control and that they can influence their environment (Xanthopoulou et al., 2009). An employee's level of self-efficacy is vital as it contributes to the level of meaningfulness and value of the role. Miraglia et al. (2017) established that, when employees believe in their capabilities, they are more inclined to pursue opportunities that can challenge them, improve their abilities, and develop them personally and professionally.

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6.8.2 Recommendations for human resources and line managers

As employees themselves initiate job crafting, managers play an essential role in encouraging ways and resources for employees to job craft (Wrzesniewski & Dutton, 2001). Managers can embed job crafting into their culture and continuously support employees to invest their energy in enhancing the meaning of their work through job crafting (Tims, Derks & Bakker, 2016; Zhang & Li, 2020). HEI line managers should be involved in job crafting, encouraging academic employees to craft their jobs, enabling them to develop the suitability level acquired (Janse van Rensburg, Rothmann & Diedericks, 2018; Wrzesniewski, 2012). Relevant stakeholders within HEIs should encourage academic employees to associate with individuals with similar features, values, and opinions about work and life. Such relations would support enhancing social resources, such as job resources in the organisation (Wang, Chen & Lu, 2020).

The heads of organisations wishing to implement the 'job crafting intervention' as a strategy to increase the efficiency of their employees should focus on initiative support from personnel, autonomy, a positive atmosphere creation, along with the creation of conditions for value management (Yakimova, Tsareva & Vlasenko, 2017).

According to Meijerink, Bos-Nehles and De Leede (2020), job crafting mediates the relationship between perceived HRM and work engagement and also suggests that managers can adopt certain roles to ensure that high-commitment HRM practices produce desirable outcomes. The first aspect to consider, beyond initiating favourable employee perceptions of HRM, is that management can encourage employees to attain and preserve job resources.

This could be conducted, for example, by encouraging career progression (Tharenou, Latimer & Conroy, 1994) along with developing an organisational climate encouraging skill development and feedback-seeking (McNamara et al., 2012). It was implied in the study by Meijerink et al. (2020)

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that HR and line managers, through offering feedback, coaching activities, or on-the-job training, have to signal the importance to employees of proactively increasing job resources and pursuing challenging job demands, as this increases their work engagement. (Meijerink et al., 2020).

6.9   Conclusion

The study results confirm a lack of statistical variances from the pre-test to the post-test scores, despite the job crafting intervention. As indicated, this could be based on the small sample size employed. Consensus is derived from the reflection exercise. Participants reflected that the job crafting intervention influenced their thinking and how work was conducted. Quantitatively, statistically significant differences between pre- and post-test scores could not be established.

The positive influence of job crafting reflects a voluntary exercise employees could undertake. Job crafting is also a cost-effective application, mostly requiring support from organisations. It could be valuable for future academic research and human resource practitioners and academics to understand and identify resources associated with proactive work behaviour and the demands hindering job crafting; it can offer insight into which crafting behaviours could trigger positive outcomes. Job crafting should, therefore, be considered by HEIs and not merely organisations.

6.10   Acknowledgements

6.11 Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

6.12 Authors' contributions

Naidoo-Chetty, M. conceived, designed, collected the data and wrote the study and Du Plessis, M. co-authored and contributed to the conceptualisation process, critical reading, coherence and editing of the article.

6.13 Funding information

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6.14 Data availability

The identified raw data supporting the conclusions of this article will be provided by the authors, without undue reservation.

6.15 Disclaimer

The observations and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

References

Al-Taweel, D., Al-Haqan, A., Bajis, D., Al-Bader, J., Al-Taweel, A.M., Al-Awadhi, A., and Al-Awadhi, F. 2020. Multidisciplinary academic perspectives during the COVID-19 pandemic. *The International Journal of Health Planning and Management*, 35(6), 1295-1301. https://doi.org/10.1002/hpm.3032

Baghdadi, N.A., Farghaly Abd-EL Aliem, S.M., and Alsayed, S.K. 2021. The relationship between nurses' job crafting behaviours and their work engagement. *Journal of nursing management,* 29(2), 214-219. https://doi.org/10.1111/jonm.13141

Bakker, A. B. and 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. and Demerouti, E. 2007. The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328. ISSN: 0268-3946

Bakker, A.B. and Demerouti, E. 2008. Towards a model of work engagement. *Career Development International*, 13, 209–223. https://doi.org/10.1108/13620430810870476

Bakker, A.B. and Demerouti, E. 2014. *Job Demands–Resources theory*. In C. Cooper & P. Chen (Eds.), Wellbeing: A complete reference guide (pp. 37– 64). Chichester, UK: Wiley-Blackwell. http://dx.doi.org/10.1002/ 9781118539415.wbwell019

Bakker, A.B. and Demerouti, E. 2018. Multiple levels in job demands-resources theory: Implications for employee well-being and performance. *Handbook of well-being*. In E. Diener, S. Oishi, & L. Tay (Eds.), Handbook of well-being Noba Scholar.

252

Bakker, A.B. Hakanen, J.J., Demerouti, E. and Xanthopoulou, D. 2007. Job resources boost work engagement, particularly when job demands are high. *Journal of educational psychology*, *99*(2), 274. https://doi.org/10.1037/0022-0663.99.2.274

Berg, J.M., Dutton, J.E. and Wrzesniewski, A., 2013. Job crafting and meaningful work. *Purpose and meaning in the workplace*, 81-104. https://doi: 10.1037/14183-005

Cheng, J.C. and Yi, O. 2018. Hotel employee job crafting, burnout, and satisfaction: The moderating role of perceived organizational support. *International Journal of Hospitality Management*, *72*, 78-85. https://doi: 10.1016/j.ijhm.2018.01.005

Corp, I.B.M. (2019). IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp.

Demerouti, E. 2014. Design your own job through job crafting. *European Psychologist,* 19(4), 237-247. https://doi: 10.1027/1016-9040/a000188

Demerouti, E., Bakker, A.B., and Gevers, J.M. 2015. Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior*, 91, 87-96. https://doi.org/10.1016/j.jvb.2015.09.001

Demerouti, E., Peeters, M.C. and van den Heuvel, M. 2019. Job crafting interventions: do they work and why? *Positive psychological intervention design and protocols for multi-cultural contexts*, pp.103-125. In: Van Zyl, L., Rothmann Sr., S. (eds) Positive Psychological Intervention Design and Protocols for Multi-Cultural Contexts. Springer, Cham. https://doi.org/10.1007/978-3-030-20020-6_5

253

Demerouti, E., Soyer, L.M., Vakola, M. and Xanthopoulou, D. 2021. The effects of a job crafting intervention on the success of an organizational change effort in a blue-collar work environment. Journal of Occupational and Organizational Psychology, 94(2), pp.374-399. https://doi.org/10.1111/joop.12330

Dhanpat, N., De Braine, R. and Geldenhuys, M. 2019. Preliminary development of the Higher Education Hindrance Demands Scale amongst academics in the South African context. *SA Journal of Industrial Psychology*, 45(1), 1-12. https://doi.org/10520/EJC-1720168513

Dickson, S.M. 2020. *A Quantitative Correlational Investigation into the Mediation Effect of Autonomy between Job Crafting and Employee Engagement* (Doctoral dissertation, Grand Canyon University).

Ebuka, A.A., Ngozi, N.H., Obianuju, C. and Peace, N.N. 2022. Job Crafting, a brain drain antidote in Public Universities in Nigeria. *Annals of Human Resource Management Research*, 2(1), 1-13. https://doi.org/10.35912/ahrmr.v2i1.887

Eisenberger, R., Huntington, R., Hutchison, S., and Sowa, D. 1986. Perceived organizational support. *Journal of Applied Psychology*, 71, 500 –507. https://doi.org/10.1037/0021-9010.71.3.500

Geurts, S.A., Taris, T.W., Kompier, M.A., Dikkers, J.S., Van Hooff, M.L., and Kinnunen, U.M. 2005. Work-home interaction from a work psychological perspective: Development and validation of a new questionnaire, the SWING. *Work & Stress*, 19(4), 319-339. https://doi.org/10.1080/02678370500410208

Han, J., Yin, H., Wang, J. and Zhang, J. 2020. Job demands and resources as antecedents of university teachers' exhaustion, engagement and job satisfaction. *Educational Psychology,* 40(3), 318-335. https://doi.org/10.1080/01443410.2019.1674249

254

Haven, T.L., De Goede, M.E.E., Tijdink, J.K., and Oort, F.J. 2019. Perceived publication pressure: revising the Publication Pressure Questionnaire (PPQ) by using work stress models. *Research integrity and peer review*, 4(1), 1-9. https://doi.org/10.1186/s41073-019-0066-6

Horodnic, I.A., and Zait, A. 2015. How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, 20, 679 – 686. https://doi.org/10.1016/S2212-5671(15)00123-9

Janse van Rensburg, C., Rothmann, S., and Diedericks, E. 2018. Job demands and resources: Flourishing and job performance in South African universities of technology settings. *Journal of Psychology in Africa,* 28(4), 291-297. https://doi.org/10.1080/14330237.2018.1501881

Khan, M.M., Khan, E., and Imran, S.A. 2018. Using job crafting to improve the well-being and faculty performance: the case of higher education institutions of Pakistan. *GMJACS*, 8(1), 13-13. http://www.iahrw.com/index.php/home/journal_detail/19#list

Kilic, E., Tatar, B., and Erdil, O. 2020. The relationship between job crafting and organizational identification: the mediating role of affective well-being. *Business and Economics Research Journal*, 11(1), 201-212. https://doi: 10.20409/berj.2020.245

Kooij, D.T., van Woerkom, M., Wilkenloh, J., Dorenbosch, L. and Denissen, J.J. 2017. Job crafting towards strengths and interests: The effects of a job crafting intervention on person–job fit and the role of age. *Journal of Applied Psychology*, *102*(6), 971. doi: 10.1037/apl0000194

Mäkikangas, A. 2018. Job crafting profiles and work engagement: A person-centered approach. *Journal of Vocational Behavior*, *106*, 101-111. https://doi: 10.1016/j.jvb.2018.01.001

Maslach, C., Schaufeli, W.B. and Leiter, M.P., 2001. Job burnout. *Annual review of psychology*, *52*(1), 397-422. https://doi.org/10.1146/annurev.psych.52.1.397

McNamara, T.K., Pitt-Catsouphes, M., Brown, M., and Matz-Costa, C. 2012. Access to and utilization of flexible work options. Industrial Relations: *A journal of economy and society,* 51(4), 936-965.https://doi.org/10.1111/j.1468-232X.2012.00703.x

Meijerink, J., Bos-Nehles, A., and de Leede, J. 2020. How employees' pro-activity translates high-commitment HRM systems into work engagement: The mediating role of job crafting. *The International Journal of Human Resource Management,* 31(22), 2893-2918. https://doi.org/10.1080/09585192.2018.1475402

Miraglia, M., Cenciotti, R., Alessandri, G., and Borgogni, L. 2017. Translating self-efficacy in job performance over time: The role of job crafting. *Human Performance,* 30(5), 254- 271. https://doi.org/10.1080/08959285.2017.1373115

Mohd Rasdi, R., Tauhed, S.Z., Zaremohzzabieh, Z. and Ahrari, S. 2022. Determinants of research performance of university academics and the moderating and mediating roles of organizational culture and job crafting. *European Journal of Training and Development*. https://doi.org/10.1108/EJTD-11-2021-0192

Morales-Solis, J.C., Chen, J., May, D.R. and Schwoerer, C.E. 2022. Resiliency and meaningfulness in work: a job crafting perspective. *International Journal of Organizational Analysis*. Vol. ahead-of-print No. https://doi.org/10.1108/IJOA-09-2021-2951

256

Mostert, K. and Oldfield, G.R. 2009. Work-home interaction of employees in the mining industry. *South African Journal of Economic and Management Sciences,* 12(1), 81-99. https://doi.org/10520/EJC31270

Musi, K. 2020. *Job insecurity and work engagement of staff in higher education: the role of job crafting* (Doctoral dissertation, North-West University (South Africa)).

Naidoo-Chetty, M. and Du Plessis, M. 2021. Systematic Review of the Job demands and resources of Academic Staff within Higher Education Institutions. *International Journal of Higher Education*, 10(3), 268-284. https://doi.org/10.5430/ijhe.v10n3p268

Pieterse, M. and Mostert, K. 2005. Measuring the work-home interface: Validation of the Survey Work-Home Interaction — (SWING) Instrument. *Management Dynamics,* 14, 2-15. https://hdl.handle.net/10520/EJC69692

Rautenbach, C. and Rothmann, S. 2017. Antecedents of flourishing at work in a fast-moving consumer goods company. *Journal of Psychology in Africa*, 27(3), 227-234. https://doi.org/10.1080/14330237.2017.1321846

Rautenbach, C. 2015. *Flourishing of employees in a fast moving consumable goods environment* (Unpublished Doctoral Dissertation) North-West University, Vanderbijlpark, South Africa.

Rudolph, C.W., Katz, I.M., Lavigne, K.N. and Zacher, H. 2017. Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of vocational behavior*, *102*, 112-138. https://doi.org/10.1016/j.jvb.2017.05.008

257

Schaufeli, W.B. and Bakker, A.B. 2004. Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *25*(3), 293-315. https://doi.org/10.1002/job.248

Schrijver, N. 2018. *Job crafting, job crafting interventions and their successfulness* (Bachelor Thesis), a literary review Human Resource Studies, Tilburg University.

Teichler, U., Arimoto, A., & Cummings, W. K. 2013. The changing academic profession. *Dordrecht etc: Springer*.

Tharenou, P., Latimer, S., and Conroy, D. 1994. How do you make it to the top? An examination of influences on women's and men's managerial advancement. *Academy of Management journal,* 37(4), 899-931. https://doi.org/10.5465/256604

Thomas, E. C., Thomas, K. G., and Du Plessis, M. 2020. Evaluating job crafting as an intervention aimed at improving work engagement. *SA Journal of Industrial Psychology*, 46(1), 1-12. https://doi.org/10.4102/sajip.v46i0.1703

Tims, M. and Bakker, A.B. 2010. Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, *36*(2), 1-9. https://hdl.handle.net/10520/EJC89228

Tims, M., Bakker, A.B. and Derks, D. 2012. Development and validation of the job crafting scale. *Journal of vocational behavior*, *80*(1), 173-186. https://doi.org/10.1016/j.jvb.2011.05.009

Tims, M., Bakker, A.B., and Derks, D. 2015. Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology,* 24(6), 914-928. https://doi.org/10.1080/1359432X.2014.969245

Tims, M., Derks, D., and Bakker, A.B. 2016. Job crafting and its relationships with person– job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior*, 92, 44– 53. https://doi.org/10.1016/j.jvb.2015.11.007

Urbanaviciute, I., Roll, C.L., Tomas, J. and De Witte, H. 2021. Proactive strategies for countering the detrimental outcomes of qualitative job insecurity in academia. *Stress and Health*, *37*(3), pp.557-571. https://doi.org/ 10.1002/smi.3023.

Van den Heuvel, M., Demerouti, E., and Peeters, M.C.W. 2015. The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, 88, 511–532. https://doi. org/10.1111/joop.12128

Van Tonder, H.P. 2005. *A psychometric analysis of the Survey Work-Home Interaction Nijmegen (SWING) in a nursing environment.* Unpublished Master's dissertation, North-West University, Potchefstroom Campus, South Africa.

van Wingerden, J., Derks, D., B. Bakker, A. and Dorenbosch, L. 2013. Job crafting in het speciaal onderwijs: Een kwalitatieve analyse. *Gedrag & Organisatie*, *26*(1). https://doi.org/10.5117/2013.026.001.085

Van Wingerden, J. and Poell, R.F. 2019. Antecedents of job crafting behavior within organizations: The role of personal resources, job resources and perceived opportunities to craft in employees proactive behavior. *International Journal of Human Resource Studies*, *9*(3), 135. ISSN 2162-3058

Wood, I., Geard, N. and Silverman, E. 2016. Job insecurity in academic research employment: an agent-based model. In *ALIFE 2016, the Fifteenth International Conference on the Synthesis and Simulation of Living Systems* (pp. 460-467). MIT Press. https://doi.org/10.1162/978-0-262-33936-0-ch074

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Vanbelle, E., Van den Broeck, A., and De Witte, H. 2017. Job Crafting: Autonomy and workload as antecedents and the willingness to continue working until retirement age as a positive outcome. *Psihologia Resurselor Umane*, 15(1), 25–41. https://doi:10.24837/pru.2017.1.3

Wang, H.J. and Demerouti, E. 2016. *A review of job crafting research: The role of leader behaviors in cultivating successful job crafter*. In S.K. Parker & U.K. Bindl (Eds), Proactivity at work (Series in Organization and Management). Routledge.

Wang, H.J., Chen, X., and Lu, C.Q. 2020. When career dissatisfaction leads to employee job crafting: The role of job social support and occupational self-efficacy. C*areer Development International*, 25 (4), 337-354. https://doi.org/10.1108/CDI-03-2019-0069

Wray, S. and Kinman, G. 2022. The challenges of COVID-19 for the well-being of academic staff. *Occupational Medicine*, 72(1), 2-3. https://doi.org/10.1093/occmed/kqab007

Wrzesniewski, A. and Dutton, J.E. 2001. Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179-201. https:///doi.org/10.5465/amr.2001.4378011

Wrzesniewski, A. 2012. Callings. In G. M. Spreitzer & K. M. Cameron (Eds), *The Oxford handbook of positive organizational scholarship* (pp. 45-55). New York: Oxford University Press. https://doi:10.1093/oxfordhb/9780199734610.013.0004

Xanthopoulou, D., Bakker, A.B., Demerouti, E., and Schaufeli, W.B. 2009. Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior,* 74(3), 235-244. https://doi.org/10.1016/j.jvb.2008.11.003

Yakimova, Z.V., Tsareva, N.A., and Vlasenko, A.A. 2017. Value personnel management: diagnostic tools and development mechanisms. The *Turkish Online Journal of Design, Art and Communication* TOJDAC December, 1571-1572. https://doi:10.7456/1070DSE/133

Zhang, T. and Li, B. 2020. Job crafting and turnover intention: The mediating role of work engagement and job satisfaction. Social Behavior and Personality: *an International Journal,* 48(2), 1-9. https://doi.org/10.2224/sbp.8759

CHAPTER 7: IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

7.1 Introduction

This chapter concludes the research project by reporting on the deductions from the phases of the study. The summary section shapes the main objectives of each phase and their associated crucial findings. This is followed by a discussion of the study limitations, and to conclude, outlines recommendations for future research. A conclusion rounds off the study.

7.2 Summary

This study identified job demands that can hinder an academic's career. The study emphasises job resources that could assist academics in overcoming these hindrances. It was also established that academics experience distinct demands compared to other industries, needing separate resources. The study findings contribute and elaborate on developing the job demand and resource framework, applying to academic employees.

The study's objectives were to:

1. To determine what job demands, job resources and associated outcomes relevant to the academic role have been studied
2. To review the empirically tested relationships between academic job demands and resources and consequences
3. Identify job demands and resources as experienced by academics
4. Determine if a job crafting intervention has an influence on the job demands and resources of academic employees in an HEI

A discussion of the related phases and associated study objectives follows.

7.2.1 Phase 1: Provide a literature review of the academics' job demands and resources

A systematic review of existing literature was warranted because of a lack of clarity concerning job demand and resource literature, specific to the academic environment. A systematic review identified published literature on job demands and resources experienced by academics within HE.

This was conducted by empirically reviewing literature from 2014 until 2019. This period was chosen, reflecting major changes, such as increases in student registrations (*Higher education global trends and emerging opportunities to 2020*) and student protests (Du Plessis, 2020). Concerning the eligibility criteria, only English articles were considered. Only subscribed or open access databases of the researchers' library access were considered for the systematic review. Databases were considered for their relevance to the literature; therefore, certain keywords were used in the search, such as *job demands, job resources, higher education, university, college,* and *academic staff*. Two reviewers combed the databases, ensuring consistency.

Only HEI academic staff were included in the study population. National and international studies with quantitative, qualitative, and mixed methodology designs were considered in the review.

The PRISMA critical appraisal tool was used to assess the methodological quality of the articles. The PRISMA critical appraisal tool consists of four dimensions (1) Identification; (2) Screening; (3) Eligibility; and (4) Included (Moher et al., 2009). Articles that scored less than 70% were omitted demonstrating that they were poorly developed or executed. All three levels of review were conducted by two researchers working independently.

Based on the search, 1684 articles were generated. Once titles, keywords, and abstracts were reviewed, 1658 studies were excluded as they did not meet the eligibility criteria. Only 26 articles were included based on their

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topic relevance. This was further assessed using the methodological quality appraisal method, adapted from Roman and Frantz (2013), yielding six articles meeting the eligibility criteria.

A list of the most prominent job demands and resources experienced by academics, based on the findings, was drawn up. This list includes quantitative, qualitative, and organisational job demands and organisational and personal resources specific to the academic environment.

The findings indicate more quantitative demands were emphasised by academics, such as workload, work pressure, and change management, versus qualitative demands identified in the taxonomy. This could be perceived as academics dealing with copious amounts of work, contributing to identifying more quantitative demands. The qualitative demands identified, such as work-family conflict, lack of psychological safety, and emotional, applied to the array of changes affecting the academic environment.

Organisational demands, such as HE unrest, decolonisation, and job insecurity, similarly confirm changes within HE. These changes place more demands on academics as they are distinctive to the academic environment (other counterparts from the corporate environment need not deal with such diverse, excessive aspects) (Dhanpat et al., 2019).

Academics identified influential organisational resources, such as performance feedback, support from supervisors, and administrative support. These organisational resources were emphasised as potential resources that could assist academics. Personal resources encompass work meaningfulness and teacher efficacy. A reason for this could be attributable to personal resources focusing on academics' observations and judgement (Barrick et al., 2013; Hoy, 2014). Organisational resources are salvaged from external sources, such as supervisors or co-workers. The individual does not need to extract from their own source of energy for

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support but attains energy from the organisation (Schaufeli, 2017). Both these categories are vital for academics to function optimally.

A list of the most salient job demands and resources is presented, based on the findings of the systematic review. The review reinforced the concept that job resources can promote the motivational processes inherent in the JD-R framework with a need to increase resources for academics as this will assist them in managing their demands (Converso et al., 2019). This salient list is industry specific to job demands and resources for academics, as published in empirical research extracted and categorised. This allows for verification and expansion within specific contexts.

7.2.2 Phase 2: Identify job demands and resources as experienced by academics

Semi-structured interviews were conducted with 23 academic employees for the second phase of the study. Most studies on the job demands and resources of academic employees used quantitative methodologies, based on empirical literature evidence. A major aim of this phase was to explore academics' job demands and resources from their lived experiences, using qualitative methods. An observation from a South African perspective was needed, as most studies were global. This allowed for a deeper and richer understanding, informing interventions to allow academics to better manage their demands and resources.

A phenomenological approach was used to gain a better understanding of the phenomenon of academics' job demands and resources in the HE sector. Specifically, the IPA (Smith, 1996) was used with template analysis to gain insight into how academics made sense of their experiences of demands and resources related to their job functions as academic employees within the HE sector. The steps for analysing IPA data as recommended by Smith and Osborn (2008) are explained in the subsequent sections.

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Thematic analysis, specifically templates analysis, categorised the themes. Job demands were divided into three categories, indicating quantitative (workload, work pressure and research demands), qualitative (teaching difficulties, bureaucracy, and work-family conflict) and organisational demands (conflict with colleagues and online teaching/innovative technology and innovation). Job resources were organised into two categories, indicating organisational (autonomy, support from supervisors, colleagues and peers) and personal resources (meaningfulness of work and personal support).

From the findings, some noted that aspects, such as heavy workload, work pressure and constant demand weighed heavily on participants. Other deliberations observed by academics as challenging were functioning in an environment where competing demands might cause low teacher efficacy, low levels of work engagement, and burnout (Han et al., 2019).

Teaching resources are imperative. A lack, therefore, might adversely affect academics. According to several academics, they could not draw a line between work and family responsibilities. Academics perceived the increase in student numbers and under-prepared students as demands (Leibowitz et al., 2017).

Academics identified undesirable aspects related to the job demands placed on them; however, not all aspects were hindrances. Several academics indicated establishing great meaning in their roles; autonomy and flexibility in their work schedules were reflected, and finally significant support from supervisors, colleagues, and peers. These elements refer to the personal and job resources academic employees implore in their daily work.

Research increasingly established that disregarding the proper management of job demands and resources of an individual's workforce as a vital component can cause hindrances (Dhanpat et al., 2019). Understanding the lived experiences of academics, leaders, and human resource departments in HEIs could deliberate on interventions to improve

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job demands and implement approaches, structuring work to increase resources at academics' disposal (Bakker & Demerouti 2018; Van Wingerden, 2016).

As a contribution to the present study, the job demands and resources identified in Phases 1 and 2 are summarised (Table 7.1). The table summarises identifying specific demands and resources as established in the systematic review (Phase 1) and qualitative inquiry in a South African university (Phase 2).

Table 7.1: Findings of Phases 1 and 2 of the job demands, experienced by academics

Job demands as identified in Phase 1	Phase 1 (Systematic review)	Phase 2 (semi-structured interviews)	Job demands as identified in Phase 2
Academic workload/workload	✓	✓	Overburdened with load
Work pressure	✓	✓	Competing time demands
Change management	✓		-
Research demands	✓	✓	Publication pressure
Teaching load	✓		-
Work-family conflict (extended working hours)/Work home interference	✓	✓	Balancing work and home responsibilities
Lack of psychological safety	✓		-
Emotional demands	✓	✓	Lack of mental health support for academic staff

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Job demands as identified in Phase 1	Phase 1 (Systematic review)	Phase 2 (semi-structured interviews)	Job demands as identified in Phase 2
Higher education unrest	✓	✓	The complexity of student support
Decolonisation	✓		-
Job insecurity	✓		-
Conflict with colleagues	✓	✓	Organisational politics
Online teaching and learning/ innovative technology and innovation	✓	✓	Using technology-mediated learning approaches
-		✓	Research funding

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Table 7.2: Findings of Phases 1 and 2 of the job resources experienced by academics

Job resources, as identified in Phase 1	Phase 1 (Systematic review)	Phase 2 (semi-structured interviews)	Job resources as identified in Phase 2
Autonomy/ Influence over their work	✓	✓	Autonomy
Performance feedback	✓		-
Support from supervisors	✓	✓	Social Resources (supervisory, peers/ colleagues and admin)
Administrative support	✓	✓	Social Resources (supervisory, peers/ colleagues and admin)
Teaching resources	✓		-
Support from colleagues	✓	✓	Social resources (supervisory, peers/ colleagues and admin)
Self-development opportunities	✓		-

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Job resources, as identified in Phase 1	Phase 1 (Systematic review)	Phase 2 (semi-structured interviews)	Job resources as identified in Phase 2
Social support / peer support	✓	✓	Social Resources (supervisory, peers/ colleagues and admin)
Teacher efficacy	✓		-
Meaningfulness of work	✓	✓	Meaningful work
-		✓	Personal Resources (support from spouse/family members)

The study results, therefore, allow for a proposed taxonomy of academics' job demands and resources. Table 7.3 below provides the taxonomy of demand and resources.

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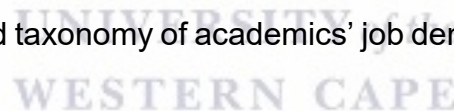
Table 7.3: Job demand as perceived by academics

Job demand	Example	Definition	Type of demand
Demanding research outputs	Publication pressure/ research demands/ researching funding	Academics are feeling constant pressure to obtain funding to publish, to publish a certain number of articles and to find time to sit with and work on potential research	Quantitative demand
Demanding workload	Overburdened with load/academic workload	The volume of job demands placed on academics, which need to be conducted	Quantitative demand
Rival tasks	Competing time demands /work pressure	Strain/pressure of conducting work tasks in a certain period	Quantitative demand
Work-home interaction	Work-family conflict/ work and home responsibilities	Academics struggling to find a balance between home life and work life and finding it difficult not to cross those boundaries	Qualitative demand
Emotional demands	Emotional demands/mental health support/student support	Emotional demands are placed on academics. Whether it stems from supporting students with their problems or the job itself, this affects academics' mental well-being,	Qualitative demand
Academic discord	Conflict with colleagues/organisational politics	Conflict being experienced by academics in the workplace	Qualitative demand

Job demand	Example	Definition	Type of demand
Distance learning	Online teaching and learning/online mediated learning approaches	Movement of traditional face-to-face for academics' learning to a more blended approach, which includes more reliance and understanding of technology	Organisational demand
Lack of instructional resources	Teaching resources	Academics accessing facilities and various other resources available to assist them in fulfilling their role	Organisational demand
Psychological safety	Lack of psychological safety	Academics not having the feeling of being safe, i.e., with the constant development and learning it is scarce a place where you are constantly not under fire to remain competitive	Organisational demand
Organisational change	Change management	Constant transformation that the HE sector has been going through to ensure that emerging needs are being met	Organisational demand
Decolonisation	Transformation in higher education	Influences and outcomes stemming from colonialism, yet the South African HE sector continues to be shaped by its own distinctive experiences	Organisational demand
Higher education unrest	Protests/Feels must fall	Violent demonstrations and interruptions that took place during the fees must fall campaign	Organisational demand
Sectoral instability	Job insecurity	An unstable environment where several academics must work in i.e., short-term contracts and limited funding opportunities etc.	Organisational demand

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Table 7.4: Job resources as perceived by academics

Job resources	Example	Definition	Type of resource
Academic social support	Support from supervisors/colleagues/administrators	Academics receiving support in being valued for their contribution, having the opportunity for someone to listen if there is a problem, or even having admin support when the job becomes too demanding	Organisational resources
Academic independence	Autonomy	The level of authority/decision-making of the academic within their role	Personal resources
Academic meaningfulness	Meaningful work	An academics level of enjoyment/fulfilment in conducting the role and the potential value they add to the students and the organisation as a whole	Personal resources
Academic confidence	Teacher efficacy	The ability to be confident and guide students to success	Personal resources
Kindred resources	Support from family and friends	Support that the academic receives from family and friends	Personal resource

Job resources	Example	Definition	Type of resource
		to assist them in coping with the demanding environment/work circumstance	
Academic career development	Performance feedback/self-development opportunities	This allows the academic to obtain constructive feedback, enabling further growth and learning	Organisational resources

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7.2.3 Phase 3: Determine if a job crafting intervention has an influence on the job demands and resources of academic employees in an HEI?

Phase 3 specifies determining the effectiveness of a job crafting intervention among HEI academics in improving job resources and decreasing job demands. According to the literature, job crafting interventions had a positive influence on managing job demands and resources (Gordon et al., 2018; Van den Heuvel et al., 2012).

This phase of the study had to determine the intervention that would be favourable to academics. The intervention used in the current study is modelled upon Van den Heuvel et al. (2012). The reason for choosing this job crafting intervention was attributable to its unity with the JD-R framework; therefore, attempting to compel participant employees to be mindful of the model's three main strategies for altering job demands and resources (increasing resources, increasing challenging job demands, and decreasing hindering job demands).

A pre-experimental research approach was used as this phase aimed to pilot a job crafting intervention among academics. The intervention included two, two-hour training sessions, goal-setting exercises, and reflection sessions. Nine academics participated in the study, recruited through snowball sampling. Part of the job crafting intervention was that participants were requested to complete an online questionnaire (pre and post-test). Informed consent was obtained from all participants before the intervention.

The designed questionnaire was based on the findings from the second phase of the study, where job demands and resources experienced by academics were identified. Biographical questions formed part of the first questionnaire. The questionnaire comprised six subscales; autonomy and meaningful work (FAWS-SF; Rautenbach, 2015) workload scale (Dhanpat et al., 2019); online teaching and learning scale (Dhanpat et al.,

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2019); the Survey of Work-home Interaction (Geurts et al., 2005), publication pressure (Haven et al., 2019); POS (Eisenberger et al., 1986).

The first training session imparted knowledge to participants regarding the JD-R framework along with the job crafting content. Participants were also requested to complete some JCEs. After the session, each participant had written a personal crafting plan. Over the succeeding four weeks, academics were requested to put this job crafting plan into practice; this was the action phase of the intervention. The intervention phase concluded after four weeks; immediately after that, employees met with the researcher to discuss their job crafting experiences. This meeting, constituting the reflection phase of the intervention, helped identify successes, problems, and solutions.

Once this process was complete, data were extracted from the Google survey and exported to SPSS Version 28 (Corp IBM, 2019) for analysis. A paired sample t-test for the pre and post-test results of the intervention was employed to determine the results. Based on the results, quantitatively, and statistically, significant differences between pre- and post-test scores could not be established. Based on the reflection exercise, qualitative results hint at the job crafting intervention having some positive effects on the participants.

The findings from this phase indicate that a larger sample group might be more beneficial. It is also vital to include all stakeholders in the job crafting intervention process, as this can create a better understanding and more 'buy-in' from participants. The study findings will allow other HEIs to learn from and possibly implement the same or similar interventions.

The study concludes that job crafting intervention indicates intervention was fruitful in facilitating employee well-being and individual job redesign. This was based on the feedback from the qualitative questions.

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7.3   Significant findings

This study implemented the JDR model to determine and describe academics' job demands and resources. It determines if a job crafting intervention can produce a shift in the experience of job demands and job resources. A practical implication of this study is that, although previous research displays several job demands in the academic profession (Shernoff et al., 2011; Skaalvik & Skaalvik, 2015), academic employees should pay attention to reducing the workload and time pressure in the profession.

In the systematic review (Phase 1) and the qualitative phase (Phase 2) of the study, workload and time pressure is perceived as a hindrance demand. Researchers reported an increasing workload and an acceleration of working speed among academics (Buchanan, 2010; Hargreaves, 2003; Lindqvist & Nordänger, 2006) owing to the ever-changing environment. This encounter with the COVID-19 pandemic made work life even more challenging (Washburn et al., 2021). Recent studies indicated academics worked longer hours (Ehrlich, 2020) with increased levels of stress (McMurtrie, 2020). This is owing to the changing nature of work and the need for academics to transform courses into new online and hybrid formats (Etter, 2020). This may, therefore, have become the most serious job demand in the academic profession.

Another significant aspect of the study is that a salient list of the most prevalent job demands and resources is emphasised. With limited literature, this could assist HE in assisting and understanding their academic staff's needs, reducing experiences of job demands, and elevating potential resources.

As several studies hold a quantitative focus, this study provided a deeper and richer understanding through a qualitative methodology in Phases 1 and 2. Describing and understanding academics' experiences

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concerning their job demands and resources, provides HEIs with valuable insight into the everyday working lives of academics.

7.4   Limitations of the research

This study is not without limitations; care had to be taken with the sampling technique (Phase 2). Purposive or theoretical sampling attempts to select participants according to criteria, meeting the research objectives as unfolded by guided theorising; however, this presents challenges with aspects, such as 'gate-keeper bias' and 'sample frame bias' (Groger & Mayberry, 1999) that need to be considered. The former has its implications, as it is the researcher controlling the sample; the latter is a restricted sampling of other individuals involved in the academic field (Groger & Mayberry, 1999).

Since the study was restricted to a specific HEI and the participants differed concerning age, race, marital status, and years of work experience, their findings cannot be transferred to other work contexts. The study findings are, therefore, restricted to applying to the participants. An important consideration is that, while challenges are encountered concerning job demand and resources within a university, the institutional context and culture of specific universities may differ.

The study should include a self-undermining aspect, as this would assist other researchers in understanding a deeper level of self-undermining behaviours. This could assist in identifying behaviours that could lead to academic job strain and burnout.

7.5   Recommendations

Employees form a vital part of any organisation; they form the cornerstone of any HE institution. Without their support, HEIs would not function successfully; therefore, great care should be taken to consider how job demands and resources influence academic employees. This study aimed to empower IOP and HR management by considering

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factors that, based on the JD-R theoretical framework, could affect academics' level of employee engagement and job burnout.

7.5.1 Recommendations for academics

Academics' function is multifaceted; each employee is unique and differently motivated—not only in the HE sector but across all sectors. Academics must manage hefty amounts of work during a workweek and occasionally spend time on tasks lacking influence. Owing to the increasing burden to juggle teaching loads, with administrative and managerial tasks, academic staff have less time for research.

In South Africa the mental health and well-being of university staff members was considerably impacted by the COVID-19 pandemic. According to van Niekerk and van Gent, (2021) academic staff at an Eastern Cape University experienced an increased risk of mental health issues such as depression, anxiety and stress.

This was further strained by the hypercompetitive academic principles centring on securing publications and grant funding instead of mentorship, training, and well-being. Academics experience stress and struggle to find time for their personal lives. They are challenged by an ever-increasing workload (Bartlett et al., 2021). Lacking such knowledge may harm academics' well-being, affecting their organisational performance. Academics need to be cautious of the challenges discussed while implementing strategies assisting them in managing their demands and exploiting their resources. One such recommendation suggested by the study is for academics to practise job crafting.

Furthermore in the South African context van Niekerk and van Gent, (2021) indicate that intensifying elements such as worries and fears of academic staff should be dealt with appropriately. Therefore, ongoing efforts to improve the resilience of staff members cannot be undervalued

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as mental wellness could alleviate the effect of the pandemic and other strain experienced by staff members

7.5.2 Recommendations for organisations

Organisational support concerning professional support functions, personnel resources, premises, and technical resources should be overseen and improved not to hinder academics in managing job demands and resources. A major shift in work circumstances was observed during the pandemic (Charoensukmongkol & Phungsoonthorn, 2021). Top management needs to be aware of and revisit the policies implemented during the COVID-19 crisis to ease some of the harmful psychological influences that the crisis causes on employees, which included aspects, such as work overload and lack of work-family life balance (Naidoo-Chetty & Du Plessis, 2021).

Within the South African context, there is a critical need for increased investment in upgrading resources, both in universities and at community level, because of the digital divide that the COVID-19 pandemic created. HEIs need to be more reactive in being able to deal with hindrances that impact learning such as a pandemic outbreak, student protests and others (Mpungose, 2020).

According to Charoensukmongkol and Phungsoonthorn (2021), the function of supervisor support could assist in reducing the fears and emotional exhaustion of university employees during such a crisis. Management must, therefore, allow and encourage supervisors of all work units or departments to provide the support to address the concerns of their employees during a crisis, which could help to manage their job demands and resources as supervisors themselves are a critical resource (Charoensukmongkol & Phungsoonthorn, 2021; Hu et al., 2016).

According to Buchs (2014), an organisational culture providing resources, such as performance feedback, team communication, and good leadership, decreases the effect of job demands. Organisations should consider the job resources provided to their employees. Buchs (2014) indicates that the resources which an organisation provides to its staff must be aligned at the same level of demand. Adverse work behaviours could relate to an excess of job resources. The university should focus on promoting wellness and stress-reduction strategies (Pignata, 2020), according to the JD-R health motivation process.

7.5.3 Recommendations for future research

The JD-R model is a widely applied framework; however, a need exists for methodological contributions, including more objective and qualitative ways (Demerouti, 2014) to assess the experiences of academics concerning their job demands and resources. JD-R studies have most often been conducted in the private sector. Increased research using JD-R in the public sector in HE is, therefore, recommended. The taxonomy of job demands and resources generated in this study may develop fit-for-purpose survey measurement instruments.

Interviews with top-level management employees might explain strategies and interventions for academics on improving the use of their job resources while managing their job demands. It would be important to consider not only job resources and personal resources, but other aspects, such as environmental resources, and how political, geographical, cultural, and economic settings might contribute to hindering academic employees from overcoming job demands and resources.

In a South African study carried out by du Plessis (2019) suggested interventions to assist with reducing, or perhaps eliminate, stressors intrinsic to higher education institutions comprise redesigning the academic's job to increase role clarity as well as

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ensure sufficient support resources are available. HEIs could also promote employee assistance programmes (EAPs) and health and wellness programmes (Pignata et al., 2017).

Granted the university environment conventionally provided opportunities for strengthening social ties which fulfills the common need to belong to a community, it comes as no surprise that the COVID-19 pandemic altered rural university life, consequently, impacting psychosocial wellbeing as isolation, lack of support, workload, etc. in the absences of resources, which created feelings of stress and burnout (Olawale et al., 2021). It was therefore recommended from the findings of their research study that rural institutions must facilitate psychosocial wellness programming with the assistance of wider stakeholders such as government and the private sector who can assist in funding this initiative. It was also recommended that institutions examine their academic programmes and free them of excessive stresses for students and staff based on their institution-specific settings. This would go a long way in safeguarding the survival of higher education institutions and their communities in the wake of both the current pandemic, and possible imminent disturbances which may ensue (Olawale et al., 2021).

7.6   Conclusion

This chapter describes the main study aims, comprising three phases. Summaries of the significant findings are discussed. The most significant finding includes identifying job demands and resources as experienced by academic employees. Implications of the complete study are discussed, followed by the limitations, relating to each phase. Recommendations are suggested for academics, organisations, and future researchers, based on the insights attained.

References

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 wellbeing*. Salt Lake City, UT: DEF Publishers. DOI:nobascholar.com

Barrick, M. R., Mount, M. K., & Li, N. (2013). The Theory of Purposeful Work Behavior: The Role of Personality, Higher-Order Goals, and Job Characteristics. *The Academy of Management Review. 38*(1). DOI:10.5465/amr.10.0479

Bartlett, M. J., Arslan, F. M., Bankston, A., & Sarabipour, S. (2021). Ten simple rules to improve academic work-life balance. *PLoS Computational Biology, 17*(7). https://doi.org/10.1371/journal.pcbi.1009124

Buchanan, J. (2010). May I be excused? Why teachers leave the profession. *Asia Pacific Journal of Education, 30,* 199–211. https ://doi.org/10.1080/02188 79100 37219 52.

Buchs, C.J., (2014). *Job demands, job resources and behaviour at work: a thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University, Albany, New Zealand* (Doctoral dissertation, Massey University).

Charoensukmongkol, P. & Phungsoonthorn, T. (2021). The effectiveness of supervisor support in lessening perceived uncertainties and emotional exhaustion of university employees during the COVID-19 crisis: the constraining role of organizational intransigence. *The Journal of general psychology, 148*(4), 431-450. https://doi.org/10.1080/00221309.2020.1795613

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Converso, D., Sottimano, I., Molinengo, G., & Loera, B. (2019). The Unbearable Lightness of the Academic Work: The Positive and Negative Sides of Heavy Work Investment in a Sample of Italian University Professors and Researchers. *Sustainability, 11*, 2439. https://doi.org/10.3390/su11082439

Corp, I. B. M. (2019). IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp.

Demerouti, E. (2014). *Job demands and job resources: Given and crafted*. Key notes speech delivered at the 11th conference of the European Academy of Occupational Health Psychology, London, England.

Dhanpat, N., De Braine, R., & Geldenhuys, M. (2019). Preliminary development of the Higher Education Hindrance Demands Scale amongst academics in the South African context. *SA Journal of Industrial Psychology*, *45*(1), 1-12. https://doi.org/10520/EJC-1720168513

Du Plessis, M. (2020). Model of coping with occupational stress of academics in a South African higher education institution. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 46*(0), a1714. https://hdl.handle.net/10520/EJC-1f4adcd3b6

Du Plessis, M. (2019). Coping with occupational stress in an open distance learning university in South Africa. J*ournal of Psychology in Africa*, 29(6), 570-575. https://doi.org/10.1080/14330237.2019.1689466

Ehrlich, E. (2020). I am 100% burned out: SOU professors say they're overwhelmed with new COVID-related workloads. https://www.opb.org/article/2020/08/26/southern-oregon-university-professors-workload-burnout-covid-coronavirus/ Accessed on the 26.4.2022

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Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*, 500 –507. https://doi.org/10.1037/0021-9010.71.3.500

Etter, B. (2020). *College of Liberal Arts faculty spend the summer preparing for fall*. https://libarts.source.colostate.edu/collegeof-liberal-arts-faculty-spend-the-summer-preparing-for-fall/Accessed on the 26.04.2022

Geurts, S. A., Taris, T. W., Kompier, M. A., Dikkers, J. S., Van Hooff, M. L., & Kinnunen, U. M. (2005). Work-home interaction from a work psychological perspective: Development and validation of a new questionnaire, the SWING. *Work & Stress*, *19*(4), 319-339. https://doi.org/10.1080/02678370500410208

Groger, L. & Mayberry, P. (1999). What we didn't learn because of who would not talk to us. *Qualitative Health Research, 9*(6), 829-835. Retrieved April 16, 2022, from Academic Search File database.

Hammersley, M. & Gomm, R. (2008). Assessing the radical critiques of interviews. In: M. Hammersley, (Ed.), *Questioning Qualitative Inquiry: Critical Essays* (pp. 89-100) London: Sage.

Han, J., Yin, H., Wang, J., & Bai, Y. (2020). Challenge job demands and job resources to university teacher well-being: the mediation of teacher efficacy. *Studies in Higher Education, 45*(8), 1771-1785. https://doi.org/10.1080/03075079.2019.1594180

Hargreaves, A. (2003). Teaching in the knowledge society: Education in the age of insecurity. Milton Keynes: Open University Press.

Haven, T. L., De Goede, M. E. E., Tijdink, J. K., & Oort, F. J. (2019). Personally perceived publication pressure: revising the Publication Pressure Questionnaire (PPQ) by using work stress

models. *Research integrity and peer review*, *4*(1), 1-9. https://doi.org/10.1186/s41073-019-0066-6

Higher education global trends and emerging opportunities to 2020, retrieved 08, 19, 2020, University of the Free State. htttps://www.ufs.ac.za

Hoy, A. W. (2004). Self-Efficacy in College Teaching. Essays on Teaching Excellence. *Toward the Best in the Academy, 15*(7), 8–11.

Hu, Q., Schaufeli Wilmar, B., & Taris, T, W. (2016). Extending the job demands-resources model with guanxi exchange. *Journal of Managerial Psychology, 31*(1), 127–140. doi: https://doi.org/10.1108/JMP-04-2013-0102

Leibowitz, B., Bozalek, V., & Kahn, P. E. (eds) (2017). *Theorising learning to teach in higher education*. New York, NY: Routledge.

Lindqvist, P. & Nordänger, U. K. (2006). Who dares to disconnect in the age of uncertainty? Teachers' recesses and "off-the-clock" work. *Teachers and Teaching: Theory and Practice, 12,* 623–637. https://doi.org/10.1080/13540600601029637

McMurtrie, B. (2020). The pandemic is dragging on: Professors are burning out. *Chronicle of Higher Education, 67*(7), 10–14. Retrieved from https://www.chronicle.com/

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group*. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of internal medicine, 151*(4), 264-269.

Mpungose, C. B. (2020). Emergent transition from face-to-face to online learning in a South African University in the context of the Coronavirus pandemic. *Humanities and Social Sciences*

287

Communications, 7(1), 1-9. https://doi.org/10.1057/s41599-020-00603-x

Olawale, B. E., Mutongoza, B. H., Adu, E. O., & Omodan, B. I. (2021). COVID-19 induced psychosocial challenges in South African higher education: Experiences of staff and students at two rural universities. Research in Social Sciences and Technology, 6(3), 179-193.10.46303/ressat.2021.37

Pignata, S. (2020). *Stress in Australian universities: initiatives to enhance well-being*. In Handbook of Research on Stress and Well-Being in the Public Sector. Edward Elgar Publishing.

Pignata, S., Boyd, C. M., Winefield, A. H., & Provis, C. (2017). Interventions: Employees' perceptions of what reduces stress. *BioMed Research International, 2017*, 1–12. https://doi.org/10.1155/2017/3919080

Rautenbach, C. (2015). *Flourishing of employees in a fast moving consumable goods environment* (Unpublished Doctoral Dissertation) North-West University, Vanderbijlpark, South Africa. http://hdl.handle.net/10394/17030

Roman, N. V. & Frantz, J. M. (2013). The prevalence of intimate partner violence in the family: A systematic review of the implications for adolescents in Africa. *Family Practice, 30*, 256–265. https://doi.org/10.1093/fampra/cms084

Schaufeli, W. B. (2017). Applying the Job Demands-Resources model: A 'how to' guide to measuring and tackling work engagement and burnout. *Organizational Dynamics, 46*(2), 120-132. http://dx.doi.org/10.1016/j.orgdyn.2017.04.008

Shernoff, E. S., Mehta, T. G., Atkins, M. S., Torf, R., & Spencer, J. (2011). A qualitative study of the sources and impact of stress among

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urban teachers. *School Mental Health, 3,* 59–69. https
://doi.org/10.1007/s1231 0-011-9051-z.

Skaalvik, E. M. & Skaalvik, S. (2015). Job satisfaction, stress and coping strategies in the teaching profession—What do teachers say? *International Education Studies, 8*(3), 181–192. https ://doi.org/10.5539/ies.v8n3p 181.

Smith, J. A. & Osborn, M. (2008). Phenomenological analysis. *Social,* 229 -254. https://doi.org/10.1002/9780470776278.ch10

Van den Heuvel, M., Demerouti, E., & Peeters, M. C. W. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, *88*, 511–532. https://doi. org/10.1111/joop.12128

Van Niekerk, R. L. & Van Gent, M. M. (2021). Mental health and well-being of university staff during the coronavirus disease 2019 levels 4 and 5 lockdown in an Eastern Cape university, South Africa. *South African Journal of Psychiatry, 27*(1), 1-7.http://dx.doi.org/10.4102/sajpsychiatry.v27i0.1589

Van Wingerden, J. (2016). *Job Demands-resources Interventions*. Erasmus University, Rotterdam. http://hdl.handle.net/1765/93132

Washburn, M., Crutchfield, J., Roper, D. A. O., Smith, D., & Padilla, Y. (2021). Changes to MSW Faculty Workload Resulting From COVID-19: An Issue of Equity. *Journal of Social Work Education, 57*(1), 209-S223. https://doi.org/10.1080/10437797.2021.1934209

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Appendix 1: Participant information sheet (semi-structured interview)

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University of the Western Cape
Private Bag X17
Bellville
7535
Tel: 021 959 3184

INFORMATION SHEET FOR RESEARCH PARTICIPANTS (SEMI-STRUCTURED INTERVIEW)

Dear Participant,

I, Mineshree Naidoo-Chetty, am currently studying towards my PhD in Industrial Psychology at the University of the Western Cape (student number: 2433764). At present, I am busy with my thesis and would like to invite you to participate in the research.

The title of my thesis is:

JOB DEMANDS AND RESOURCES OF ACADEMIC LEADERS AT A PUBLIC HIGHER EDUCATION INSTITUTION IN THE WESTERN CAPE: A MIXED METHODS APPROACH

Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Kindly advise me, as the researcher, if there is anything that is not clear or if you need more information.

1.   PURPOSE OF THE STUDY

The purpose of the study is to identify problematic areas concerning job demands and to highlight the type of job resources that is needed for academic leaders to have positive outcomes in their job roles at a higher education institution in South Africa. Based on this information an intervention programme will be developed and implemented to enable academic leaders in managing their job responsibilities in a more positive way during their academic careers at a university in the Western Cape. Failure to participate in this approach, has far-reaching penalties for South African higher education institutions and implications for the development and sustainability of the country's priorities.

2.   PROCEDURE

If you volunteer to participate in this study, you will be invited to participate in a semi-structured interview (30-45 minutes) in which you will be asked different questions with the aim of reflecting on your own experiences and views to determine the following areas:

i)   What, in your view, are the types of work pressures that you experience on a daily basis?

ii)   Does your organization assist you if you are experiencing a vast amount of work pressure?; and

iii)   What type of motivating features does your organization provide you with

A copy of the semi-structured questions will be available to you before the interview. The interview will be voice recorded.

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

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Risks:

The risks of this study are minimal. These risks are similar to those you experience when disclosing work-related information to others. You may decline to answer any or all questions and you may terminate your involvement at any time if you choose. The data will only be utilised for research purposes and will not in any way inform any performance management or promotion decisions related to yourself or your colleagues.

Compensation and Benefits:

There will be no compensation or direct benefits for participating in the research.

Confidentiality:

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. The results of this study will be published in the form of a completed dissertation as well as in an accredited journal(s), but confidentiality will be maintained. Participant's names will not be requested in the survey, nor published in any results.

Voluntary Participation:

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and remain in the study. The researcher may withdraw you from this research if circumstances arise which warrant doing so.

This study received ethical clearance from the Human and Social Sciences Ethics Committee of the University of the Western Cape. They can be contacted at research-ethics@uwc.ac.za

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact me at the details listed below:

Researcher:	**Supervisors:**	**Head of Department:**
Mineshree Naidoo-Chetty	Dr. Marieta du Plessis	Prof. Bright Mahembe
Principal Researcher	Industrial Psychology	Head of Department
Department of Industrial	EMS Faculty, UWC	Industrial Psychology
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083 772 7875		021 959 2212

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CONSENT FORM

Title: Job demands and resources of Academic Leaders at a public higher education institution in the Western Cape: A mixed methods approach

Researcher: Mineshree Naidoo-Chetty (2433764)

Please respond to the following statements:		X
1.	I confirm that I have read and understand the information sheet explaining the above research project and I have had the opportunity to ask questions about the project.	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. (If I wish to withdraw I may contact the lead researcher at any time)	
3.	I understand my responses and personal data will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the publications that result for the research.	
4.	I agree for the data collected from me to be used in future research.	
5.	I agree to take part in the above research project.	
6.	I agree that a voice recording of the semi-structured interview for this study may be done.	

_____   _____   _____
Name of participant   Date   Signature
(or legal representative)

_____   _____   _____
Name of person taking consent   Date   Signature
(if different from lead researcher)

_____   _____   _____
Lead researcher   Date   Signature
(To be signed and dated in the presence of the participant)

Student researcher: Mineshree Naidoo-Chetty PhD Student Tel: 083 772 7875 mnaidoo@uwc.ac.za	Supervisors: Dr. Marieta du Plessis Tel: 021 959 3184 mduplessis@uwc.ac.za	Head of Department: Prof. Bright Mahembe Tel: 021 959 3184 bmahembe@uwc.ac.za	Ethics Committee: HSSREC Research and Development, UWC Tel: 021 959 2988 Research-ethics@uwc.ac.za

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

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Appendix 2: Semi-structured interview guide

JOB DEMANDS AND RESOURCES OF ACADEMIC LEADERS AT A PUBLIC HIGHER EDUCATION INSTITUTION IN THE WESTERN CAPE: A MIXED METHODS APPROACH

Qualitative Approach: Semi-structured Interview

Format: 30 to 45 minutes
Target Audience: Academics Leaders (Senior Professors, Professors, Associate Professors, Senior Lecturers and Lecturers).
Structure per semi-structured interview:
Introduction
- Thank participant for participating in the research.
- Confirm overview of the research
- Confirmation/finalisation of any (outstanding) Consent Forms and recordings

Participant details:
Job title:

Senior Professor		Professor		Associate Professor		Senior Lecturer		Lecturer	

Gender: _____
Race: _____
Faculty/department: _____

Standard Questions:
1. How are you experiencing your work at the moment?"

   _____
   _____
   _____

   Probing question: To determine if the individual knows what is expected from them i.e. their job responsibilities.

   _____
   _____
   _____

2. How much control would you say you have over your job?

   _____
   _____
   _____

   Probing question: what are the aspects that hinder them from having control?

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_____

_____

_____

3. What are the work challenges that excite you"; "what work challenges makes it difficult for you to do and be your best?"

_____

_____

_____

    a. *Probing question:*

        i. *What is it about XXX (as mentioned in 3) that you enjoy?*

        ii. *What personal and/or organisational characteristics help you to do the work you enjoy?*

        iii. *If you had to rate on a scale of 1 (never) to 5 (all the time) on how often you get to do the work you enjoy, what would your rating be?*

_____

_____

_____

_____

_____

_____

_____

4. Are you required to work alone or with others?

_____

_____

_____

5. What resources in your work environment play a role in making what you do a success?

_____

_____

_____

6. How do you feel about the support you currently receive from (supervisor, co-worker etc...)

_____

_____

_____

Probing question: What are these forms of support?

_____

_____

_____

7. How often is this assistance received?

_____

_____

8. What support would you have liked to receive in the workplace that you are currently not getting?

_____

_____

9. Are there things happening in the work environment that helps you to cope better when there is a lot expected of you?

_____

_____

10. Are there things that you would have liked to happen or be available in the work environment, as it would have helped you to cope better with all the demands?

_____

_____

11. What resources in your personal life play a role to aid you in making your job/work a success?

_____

_____

12. What, in your view, are the types of work pressures that you experience in your work?

_____

_____

_____

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13. Do you as the individual feel that you have the necessary coping tools to deal with negative challenges?

_____
_____
_____

Probing question: How do you go about resolving those challenges?

_____
_____
_____

14. If you had to indicate on a scale of 1(not challenging) to 5 (very challenging), what do you consider the most challenging to the least challenging?

_____
_____
_____

Probing:
I: What is it about XXXX (the challenge) that you find most draining?

_____
_____
_____

15. Does your organization assist you if you are experiencing a vast amount of work pressure?

_____
_____
_____

Probing question: to determine what the institution does to assist.

_____
_____
_____
_____

16. What type of motivating features does your organization provide?

_____
_____
_____

17. If you had to look back at your academic career, what types of aspects would you alter when considering work pressures?

_____
_____
_____
_____

18. What keeps you in your role as an academic?

_____
_____
_____
_____

THANK YOU!!!!

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Appendix 3: Consent form (job crafting intervention)

Department of Industrial Psychology
University of the Western Cape
Private Bag X17
Bellville
7535
Tel: 021 959 3184

CONSENT FORM FOR RESEARCH PARTICIPANTS

JOB CRAFTING INTERVENTION

Job demands and resources of academic employees at higher education institutions

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I understand that my anonymity will be maintained at all times, and that there will be no identifiable information that will be linked back to me (the participant). I voluntarily agree to take part in this study.

Participant's Name & Surname _____

Signature _____   Date _____

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact me on the details listed below:

Researcher:	**Supervisor:**	**Head of Department:**
Mrs. M Naidoo-Cherry	Dr. M du Plessis	Prof. Bright Mahembe
Principal researcher	Industrial Psychology	Head of Department
UWC	EMS Faculty, UWC	Industrial Psychology
Department of Industrial	Bellville	EMS Faculty, UWC
Psychology	mduplessis@uwc.ac.za	Bellville
mnaidoo@uwcac.za	021 959 3175	bmahembe@uwc.ac.za
0837727875		021 959 2212

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Appendix 4: Participant Information sheet (job crafting intervention)

Dear participant

I, Mineshree Naidoo-Chetty, am currently studying towards my PhD in Industrial Psychology at the University of the Western Cape (student number: 2433764). At present, I am busy with my thesis and would like to invite you to participate in the research.

The title of my thesis is:

Job demands and resources of academic employees at high education institutions

Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask the researcher if there is anything that is not clear or if you need more information.

Purpose of the study

The purpose of the study is to identify problem areas concerning job demands and to emphasise the job resources needed for academics to have positive outcomes in their job roles at an HEIs in South Africa. Based on this information an intervention programme will be developed and implemented to enable academic employees in managing their job responsibilities more positively during their academic careers at a university in the Western Cape. Failure to participate in this approach has far-reaching penalties for South African HEIs and implications for the development and sustainability of the country's priorities

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Study procedure

You will receive a link via email that will allow you to access an online survey. To complete this survey, you will be required to answer different questions to reflect on your own experiences and views regarding your job demands yourself and resources, respectively. A code will be assigned to your responses by an independent researcher and any information that can be used to identify you will be removed from your response. Once the survey has been completed online, it will be saved automatically and sent to a database, where I will be able to access the information. Only the primary researcher and supervisor will have access to the database.

Risks

The risks of this study are minimal. These risks are similar to those you experience when disclosing work-related information to others. You may decline to answer any or all questions and you may terminate your involvement at any time if you choose. However, should you wish to receive debriefing or counselling after completion of the survey, the Wellness@UWC service may be used (Contact number: 0800 205 333).

Benefits and Compensation:

There will be no direct benefit or compensation to you for your participation in this study. However, your contribution will help the Industrial Psychology profession to better understand the influence of job demands and resources on academic leaders within the higher education sector.

Confidentiality:

Any information obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. The results of this study will be published in the form of a completed dissertation and an accredited journal(s), but

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confidentiality will be maintained. Participants' names will not be requested in the survey, nor published in any results.

Voluntary Participation:

Your participation in this study is voluntary and you are free to withdraw at any time without giving a reason. Should you decide to participate in this study, you will be asked to sign a consent form. You will also be given a copy of the information letter. If you do not participate in this study, your relationship with the researcher will not be affected.

This study received ethical clearance from the Human and Social Sciences Committee (c/o Research Development, Tel: 021 959 4111, email: research-ethics@uwc.ac.za

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact me on the details listed below:

Researcher: Mrs M Naidoo-Chetty	Supervisor: Prof. M. du Plessis	Head of Department: Prof. Bright Mahembe
Principal researcher	Industrial Psychology	Head of Department Industrial Psychology
UWC Department of Industrial Psychology	EMS Faculty, UWC Bellville	EMS Faculty, UWC Bellville
minaidoo@uwc.ac.za	mduplessis@uwc.ac.za	bmahembe@uwc.ac.za
083 772 7875	021 959 3175	021 959 2212

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Dear Participant

I agree to participate

Yes / No

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Appendix 5: Online questionnaire (pre and post-test- job crafting intervention)

SECTION A:

Biographical information

Please answer the following general questions. This information is for statistical purposes ONLY.

1. Select the option that best describes your proficiency in English from the list below.

iv.	English is my first language; I am fully proficient in this language.	v.	☐
vi.	I have a good understanding of English and seldom misunderstand words and meaning.	vii.	☐
viii.	I have some understanding of English, but I often misunderstand words, meaning and fine nuances.	ix.	☐
x.	I struggle with understanding English.	xi.	☐

xii.

2. What is your full-time work experience (in years)?

xiii.
xiv. _____
years

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3. Your gender

Male ☐	Female ☐	Other ☐	Prefer not to say ☐

4. Your age (in years)?

xv.	18-24	xvi.	☐
xvii.	25-34	xviii.	☐
xix.	35-44	xx.	☐
xxi.	45-54	xxii.	☐
xxiii.	55-64	xxiv.	☐
xxv.	64+	xxvi.	☐
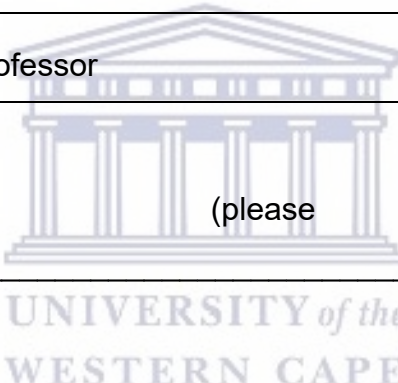
5. What is your highest level of education?

xxvii.	Secondary school	xviii.	☐
xxix.	Matric or equivalent (12 years of schooling)	xxx.	☐
xxxi.	Post-school certificate or diploma	xxxii.	☐
xxiii.	University degree	xxiv.	☐
xxv.	Postgraduate degree	xxvi.	☐

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xxvii.		
xviii.	Other (please specify):	
	_____	

6. What is your job title?

xxix.	Lecturer	xl.	☐
xli.	Senior Lecturer	xlii.	☐
xliii.	Associate Professor	xliv.	☐
xlv.	Professor	xlvi.	☐
xlvii.	Senior Professor	xlviii.	☐
xlix.			
l.	Other (please specify): _____ _____		

7. What is your nationality <u>currently</u>?

South African ☐
Other (please specify): _____

8. What was your nationality <u>at birth</u>?

South African ☐

Other (please specify): _____			

9. What is your home language <u>currently</u>?

□ Afrikaans	□ English	□ Xhosa	□ Zulu
□ Venda	□ South Sotho	□ North Sotho	□ Ndebele
□ Tsonga	□ Tswana	□ Swazi	Other (please specify): _____

10. What was your home language <u>at birth</u>?

□ Afrikaans	□ English	□ Xhosa	□ Zulu
□ Venda	□ South Sotho	□ North Sotho	□ Ndebele
□ Tsonga	□ Tswana	□ Swazi	Other (please specify): _____

13. For what period have you been employed by your current organisation (in years)?

li. 1-3 years	lii. □

liii.	4-7 years	liv.	☐
lv.	8-10 years	lvi.	☐
lvii.	10+ years	lviii.	☐

SECTION B:

Burnout questionnaire

Instructions: The purpose of this questionnaire is to obtain an accurate picture of how you personally evaluate specific aspects of your work and work environment

Answer each statement by crossing the number that best reflects your perception. Work quickly and try to answer as accurately as possible. **There are no right and wrong answers.** We are only interested in your opinion. **Read each statement carefully and choose only ONE answer.**

Instruction: Below you find a series of statements with which you may agree or disagree. Using the scale, please indicate the degree of your agreement by selecting the number that corresponds with each statement.

	Strongly agree	Agree	Disagree	Strongly Disagree
1. I always find new and interesting aspects in my work.	1	2	3	4
2. There are days when I feel tired before I arrive at work.	1	2	3	4
3. It happens more and more often that I talk about my work in a negative way.	1	2	3	4
4. After work, I tend to need more time than in the past to relax and feel better.	1	2	3	4
5. I can tolerate the pressure of my work very well.	1	2	3	4
6. Lately, I tend to think less at work and do my job almost mechanically.	1	2	3	4
7. I find my work to be a positive challenge.	1	2	3	4
8. During my work, I often feel emotionally drained.	1	2	3	4
9. Over time, one can become disconnected from this type of work.	1	2	3	4

10. After working, I have enough energy for my leisure activities.	1	2	3	4
11. Sometimes I feel sickened by my work tasks.	1	2	3	4
12. After my work, I usually feel worn out and weary.	1	2	3	4
13. This is the only type of work that I can imagine myself doing.	1	2	3	4
14. Usually, I can manage the amount of my work well.	1	2	3	4
15. I feel more and more engaged in my work.	1	2	3	4
16. When I work, I usually feel energised.	1	2	3	4

SECTION C:

Experiences at work questionnaire (Short Form)

Please answer the following questions on how you have been feeling during the past month. Place a checkmark (✓) in the box that best represents how often you have experienced or felt the following:

1	2	3	4	5	6
Never	Once or twice	About once a week	Two or three times a week	Almost every day	Every day

	STATEMENTS	SCALE					
	During the past month at work, how often did you…						
1	feel happy?	1	2	3	4	5	6
2	feel particularly interested in something?	1	2	3	4	5	6
3	feel grateful?	1	2	3	4	5	6
4	feel upset?	1	2	3	4	5	6
5	feel depressed?	1	2	3	4	5	6
6	feel bored?	1	2	3	4	5	6
7	experience satisfaction with your job?	1	2	3	4	5	6
8	feel confident to think or express your own ideas and opinions?	1	2	3	4	5	6

9	feel good at managing the responsibilities of your job?	1	2	3	4	5	6
10	feel really connected with other people at your job?	1	2	3	4	5	6
11	find yourself learning often?	1	2	3	4	5	6
12	feel that your work is meaningful?	1	2	3	4	5	6
13	feel that the work you do serves a greater purpose?	1	2	3	4	5	6
14	focus a great deal of attention on your work?	1	2	3	4	5	6
15	get excited when you performed well on your job?	1	2	3	4	5	6
16	feel energised when you work?	1	2	3	4	5	6
17	feel you had something important to contribute to this organisation?	1	2	3	4	5	6
18	feel that you really belong to this organisation?	1	2	3	4	5	6
19	feel this organisation is becoming a better place for people like you?	1	2	3	4	5	6
20	feel that people in your organisation are basically good?	1	2	3	4	5	6
21	feel that the way your organisation works, makes sense to you?	1	2	3	4	5	6

SECTION D:

Workload

Please use the scale to indicate the degree to which your answers accurately describe your own situation and feelings within your job.

	Items		1	2	3	4	5	6	7	
WL1	I work under time pressure	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
WL2	I attend many meetings.	Never	1	2	3	4	5	6	7	All the time
WL3	I experience difficulty in meeting my own performance standards.	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
WL4	I am confronted with work issues that affect me personally.	Never	1	2	3	4	5	6	7	Always
WL5	My work is demanding	Never	1	2	3	4	5	6	7	All the time
WL6	I am unable to take sufficient breaks during working hours.	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
WL7	In my work, I come into contact with difficult people. (Students, co-workers colleagues, managers or administrators).	Never	1	2	3	4	5	6	7	All the time

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SECTION E:

Online teaching and learning

The following questions relate to online teaching and learning. For every statement select the best response.

	Items	Strongly disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
OTL1	The drive towards online teaching and learning in my department is progressing well	1	2	3	4	5	6	7
OTL2	I believe that the introduction of online teaching and learning will increase my workload.	1	2	3	4	5	6	7

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OTL3	The drive towards online teaching and learning has made me feel unsettled about my work.	1	2	3	4	5	6	7
OTL4	The implementation of online teaching and learning will allow me to focus on other work-related matters.	1	2	3	4	5	6	7
OTL5	My involvement in online teaching and learning initiatives has left me feeling anxious about my work.	1	2	3	4	5	6	7

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SECTION F:

WORK-FAMILY CONFLICT

The following 15 statements are about <u>how you feel</u> about your work and family conflicts. 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' (zero) after the statement. If you have had this feeling, indicate how often you feel it by choosing the number (from 1 to 3) that best describes how frequently you feel that way.

0	1	2	3
"Practically Never"	"Sometimes"	"Often"	"Practically Always"

	Practically Never	Sometimes	Often	Practically Always
How often does it happen that ....?				
1. You are irritated at home because your work is demanding	0	1	2	3
2. You do not fully enjoy the company of your spouse/family/friends because you worry about your work	0	1	2	3
3. You find it difficult to fulfil your domestic obligations because you are constantly thinking about your work	0	1	2	3
4. You have to cancel appointments with your spouse/family/friends due to work-related commitments	0	1	2	3
5. Your work schedule makes it difficult for you to fulfil your domestic obligations	0	1	2	3
6. You do not have the energy to engage in leisure activities with your spouse/family/friends because of your job	0	1	2	3
7. You have to work so hard that you do not have time for any of your hobbies	0	1	2	3
8. Your work obligations make it difficult for you to relax at home	0	1	2	3
9. Your work takes up time that you would have liked to spend with your spouse/family/friends	0	1	2	3
10. The situation at home makes you so irritated that you take your frustrations out on your colleagues	0	1	2	3
11. You do not fully enjoy your work because you worry about your home situation	0	1	2	3
12. You have difficulty concentrating on your work because you are preoccupied with domestic matters	0	1	2	3

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13. Problems with your spouse/family/friends affect your job performance	0	1	2	3
14. You arrive late at work because of domestic obligations	0	1	2	3
15. You do not feel like working because of problems with your spouse/family/friends	0	1	2	3

SECTION G:

RESEARCH DEMANDS

Instructions: With regard to the following set of items, <u>please indicate how strongly you Totally Disagree or Totally Agree</u> with each statement by placing a check mark (✓) in the box

1	2	3	4	5
Totally Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Totally Agree

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	1 Totally Disagree	2 Somewhat Disagree	3 Neutral	4 Somewhat Agree	5 Totally Agree
I experience stress at the thought of my colleagues' assessment of my publications output.	1	2	3	4	5
I feel forced to spend time on my publications outside office hours.	1	2	3	4	5
I cannot find sufficient time to work on my publications.	1	2	3	4	5
I have no peace of mind when working on my publications.	1	2	3	4	5
I can combine working on my publications with my other tasks.	1	2	3	4	5
At home, I do not feel stressed about my publications.	1	2	3	4	5
The current publication climate puts pressure on relationships with fellow-researchers.	1	2	3	4	5

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I suspect that publication pressure leads some colleagues (whether intentionally or not) to cut corners.	1	2	3	4	5
In my opinion the pressure to publish scientific articles has become too high.	1	2	3	4	5
My colleagues judge me mainly on the basis of my publications.	1	2	3	4	5
Colleagues maintain their administrative and teaching skills well, despite publication pressure.	1	2	3	4	5
Publication pressure harms science.	1	2	3	4	5
When working on a publication, I feel supported by my co-authors.	1	2	3	4	5
When I encounter difficulties when working on a publication, I can discuss these with my colleagues.	1	2	3	4	5
I have freedom to decide about the topics of my publications.	1	2	3	4	5

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When working on a publication, many decisions about the content of the paper are outside my control.	1	2	3	4	5
I cannot cope with all aspects of publishing my papers.	1	2	3	4	5

Thank you for your participation in completing the questionnaire. Kindly check your questionnaire to ensure that all questions have been answered.

Your input is valued and appreciated.

Appendix 6: PowerPoint presentation (Job crafting focus group)

Slide 1

Slide 2
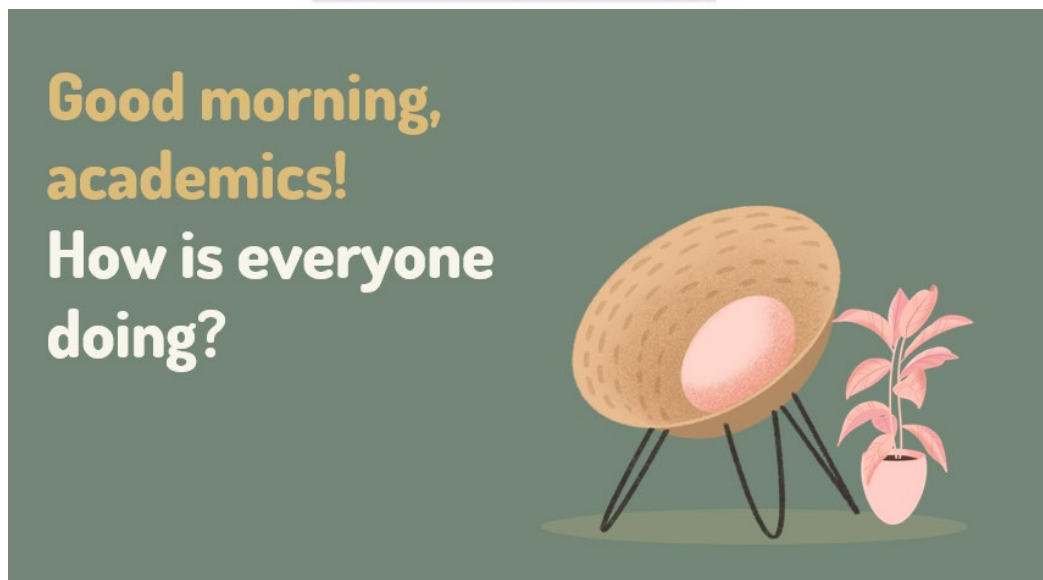
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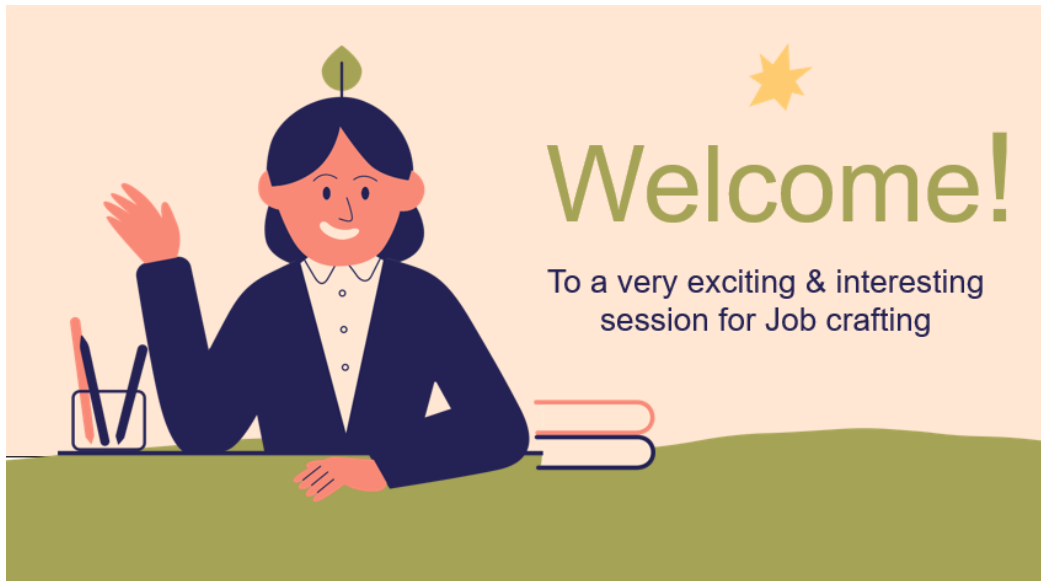
Slide 4

Slide 5

1. Overview of what job crafting is
2. The JD-R Model
3. Principles of Job crafting
4. Benefits of job crafting
5. What job crafting needs to work properly
6. The purpose of a JC Intervention
7. Tips on how to craft your job

Slide 6

Your Comfort Zone

Where the magic happens
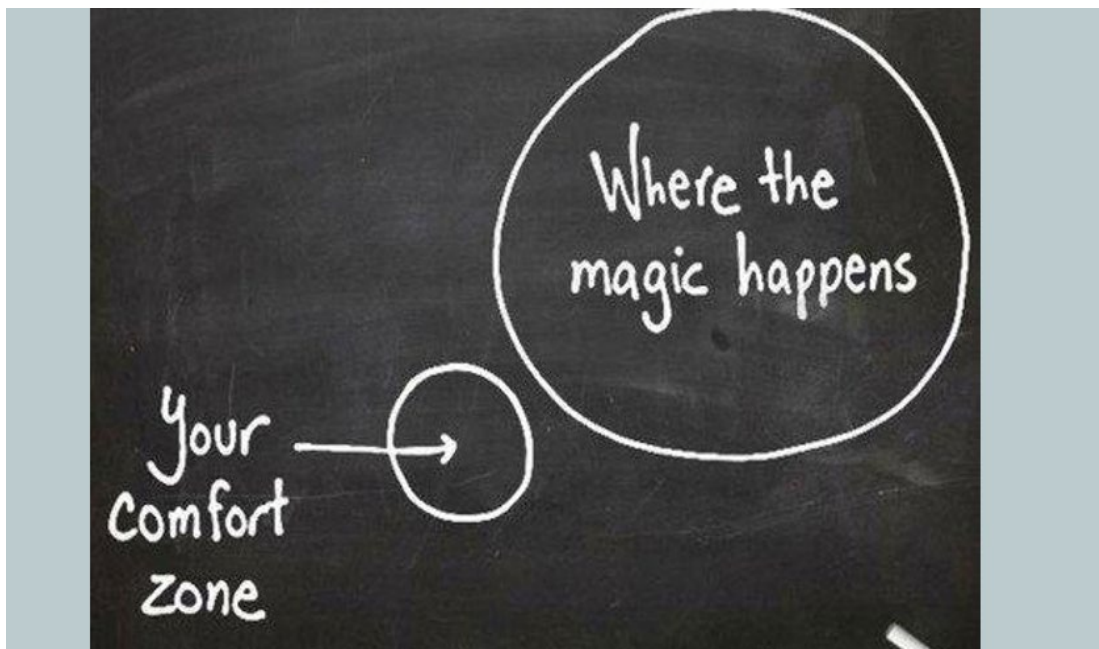
Slide 7

HISTORY OF JOB CRAFTING

Job crafting is defined as the changes employees may make regarding their job demands and job resources.

This conceptualization takes the job demands–resources (JD-R) model (Bakker and Demerouti, 2008) as a starting point.

The JD-R model proposes that all job characteristics can be categorized as either job demands or job resources. By framing job crafting in terms of job demands and job resources, we are able to capture many aspects (i.e. job characteristics) that employees may alter in their jobs.

Job crafting is a powerful way by which individuals can change their work design and can be redesigned to increase work quality (Knight et al., 2021)

Therefore it is **about taking proactive steps and actions to redesign what we do at work, essentially changing tasks, relationships, and perceptions of our jobs**

Slide 8

THE JOB DEMANDS AND RESOURCES MODEL INCORPERATING THE JOB CRAFTING COMPONENT

Bakker and Demerouti, 2014, p. 10

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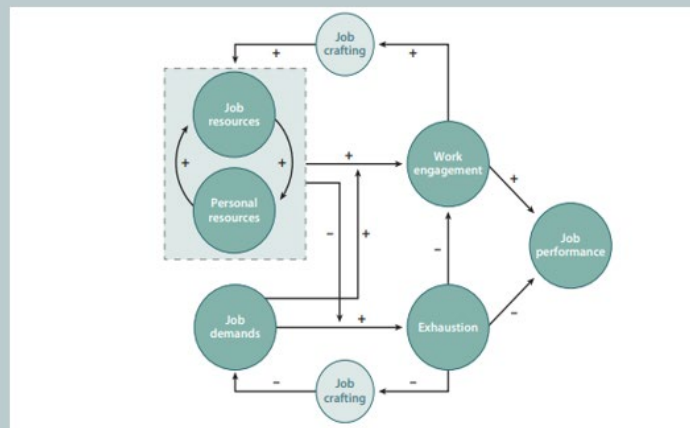
Slide 9

THE JD-R MODEL

The model describes the relationship between job demands and job resources as being a balancing act:

Too much of the former results in strain, whereas sufficient amounts of the latter result in high motivation.

More specifically, the occurrence of job strain results from a depletion of energy caused by a situation where job demands are high, and the employee is not provided with a sufficient amount of the needed job resources (Bakker & Demerouti, 2007).

In contrast, when demands are high and an employee has sufficient resources, employees are motivated and engaged (Brenninkmeijer & Hekkert-Koning, 2015).

Slide 10

PRINCIPLES OF JOB CRAFTING

The key to this definition is the word 'proactive': employees follow their own initiative, and act voluntarily, to affect their daily tasks, the scope of their assignments and the characteristics of their work environment in such a way that the balance of job demands and job resources is shifted towards greater workplace engagement, satisfaction and feelings of efficacy and purpose.

This improves the fit between one's work and their individual preferences.

By being able to design your own job can bring about numerous positive outcomes, including engagement, job satisfaction, resilience, and thriving.

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Slide 11

Job crafting practices focus on changing the job-demands and resources present in a job and fall into one of four categories related to the way they increase or decrease these:

- **Increasing structural resources:** Structural resources relate to the content of the work, and the way that the work is done. An employee exercising autonomy in the way they do their tasks and the processes involved in completing their tasks are examples of increasing structural resources.

- **Increasing social resources:** Social resources relate to the amount of support an employee feels they have, and the quality of feedback they receive. Adding more meaningful social interaction into work or seeking additional feedback are examples of increasing social resources.

- **Increasing challenging demands:** Challenging demands relate to stimulating and novel tasks and appropriate time pressure and workload and are classed as positive as they lead to personal growth. Adding stimulating tasks to a job or actively seeking out training to widen skillsets are examples of increasing challenging job demands.

- **Decreasing hindering demands:** Hindering demands relate to those pressures that hinder an employee's ability to function optimally and achieve goals, thereby preventing personal growth. Reducing hindering demands includes actions such as removing difficult or unenjoyable tasks or altering unrealistic time demands.

Slide 12

BENEFITS OF JOB CRAFTING

"Job Crafting is a win-win process; research consistently finds it positively impacts a host of outcomes beneficial to both workers and their organizations."

Here are a just a few of the benefits of successful job crafting:
Less stress – Doing a job that you don't enjoy, or that you feel you're not good at, can wear you down mentally. It can even result in exhaustion and burnout, which can lead to more employee absences and higher employee turnover rates.

More motivation – Employees who modify their jobs to take advantage of their best talents and abilities will be more engaged with their work, which leads to more productivity and efficiency and more commitment to the organization. Of course, all of that also translates to a better ROI for employers.

More satisfaction – Happier employees are more likely to stay with your organization long-term. They tend to perform better, too.

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Slide 13

What Job Crafting Needs to Work Properly

Years ago, employees may have done well by simply waiting for directions from a manager and then following them. Factories, in particular, need plenty of workers who can do exactly what they're told, following specific instructions for a precise result, over and over again.

In the current market landscape, though, **creativity and initiative** are generally what workers need to succeed. Beyond just waiting for directions to follow, the best employees make the **effort to see the bigger picture** and improve their work without waiting for official approval.

Even seemingly inflexible jobs can have surprising room for change and evolution if you an employee empowered to make positive changes — and encouraging **job crafting at your own workplace** requires encouraging that sense of empowerment.

Being open to **feedback and listening to ideas carefully.**

Know the **impact that your work makes** both on clients/customers/users, and in the community and in the world. Those things make it much easier for you to focus on how your individual role make a difference.

Slide 14

"Tell me, and I hear.
Show me, and I see.
Involve me, and I learn."

**Confucius**

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Slide 15

Slide 16

JC Intervention purpose

- The goal of a job crafting intervention is to make employees more aware of the tasks they perform and on which tasks they spend most of their time (van Wingerden, Derks, & Dorenbosch, 2013).

- By doing this, employees have more insight in their jobs, and can decide whether this aligns with their desires. This will result in more **knowledge and better understanding** of one's job, where the employees have the initiative to change their jobs and create more ideal working circumstances.
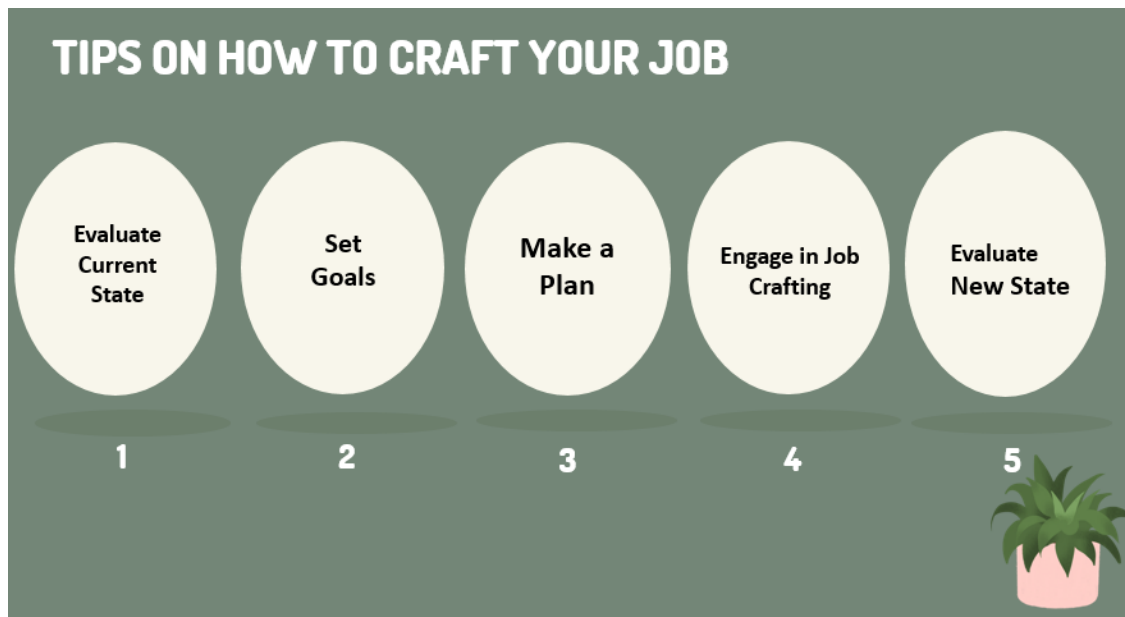
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Slide 17

Slide 18

Slide 19

Set Goals. This step mainly involves you determining how your job would look if it were a good fit for you.

Think about what you enjoy doing, what you do not enjoy doing, what your strengths are and how your job would look if it were to fit in with your preferences.

However, make sure to keep the scope of your position in mind; you will still have your current responsibilities and tasks to complete.

The change will come in any extra tasks you may have, how you do your tasks and the way you interact with others around you. Once you have determined what your desired job looks like, set some concrete goals. These goals should speak directly to specific changes in your work design that you wish to make. Try to ensure that your goals, should they be achieved, are not going to adversely affect anyone in your team.

In the setting of goals, it is also important to keep in mind that one's motivation to complete that goal is determined by: the likelihood to the goal being achieved, the importance of the goal and the level of support in achieving the goal. Therefore, it is important that goals are realistic, relevant to the needs of the individual and likely to be supported by colleagues.

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Make a Plan. This stage is concerned with the development of a detailed plan to achieve the goals that have been set.

Keeping this is mind, consider how you may engage in job crafting practices to achieve your goals. For example, how might you recruit more social resources or add some challenging tasks to your job in order to transform a task that you find disorganised into one that is more efficient?

Again, it is important to consider how your actions may affect other people in your workplace. For example, research has demonstrated that the benefits from engaging in job crafting to reduce hindering demands may be minimal and may actually place further pressure on team members. Therefore, it is recommended that your plan is focussed around increasing resources and challenging job demands.

This does not mean that issues you are facing at work should not be challenged. Instead, focus on increasing resources so that you can fix these issues rather than simply ignoring or passing them along.

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Slide 21

Engage in Job Crafting. This step involves simply enacting the plan and attempting to craft the job toward your desired state. Remember, you should execute your plan in a way that is respectful of your colleagues. For example, ensure you ask the person you report to, to endorse important changes you may wish to make.

Evaluate New State. You should endeavour to evaluate any job crafting interventions you completed in the workplace. It is important for you to know if an intervention worked and why or if it did not work and why.

Whether your intervention was successful or not also relates to how close the new state of your work is to your desired state. Therefore, it may be useful for you to look at the ways your job and motivations have been altered. This new work state will also have implications for the next time you wish to engage in job crafting. Finally, you may want to think about you can sustain changes moving into the future, and how future job crafting attempts can be supported.

Slide 22

Quick exercise

Lets start setting goals for ourselves

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Slide 23

Slide 24

Slide 25

Appendix 7: Ethics clearance letter

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UNIVERSITY of the
WESTERN CAPE

26 July 2019

Mrs M Naidoo-Chetty
Industrial Psychology
Faculty of Economic and Management Sciences

Ethics Reference Number: HS19/6/11

Project Title: Job demands and resources of academic leaders at a public higher education institution in the Western Cape: A mixed-method approach

Approval Period: 26 July 2019 – 26 July 2020

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

BSSREC REGISTRATION NUMBER - 130416-049

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

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03 December 2020

Mrs M Naidoo-Chetty
Industrial Psychology
Faculty of Economic and Management Science

Ethics Reference Number: HS19/6/11

Project Title: Job demands and resources of academic employees at higher education institutions.

Approval Period: 03 December 2020 – 03 December 2023

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report by 30 November each year for the duration of the project.

The permission to conduct the study must be submitted to HSSREC for record keeping purposes.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

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