



**An investigation of the Continuous Professional Development
activities of secondary school teachers in Kwazulu-Natal in
relation to their job demands and resources.**

by

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towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are
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This dissertation has been submitted with my approval

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ABSTRACT

Teaching is a demanding profession, and teachers report high levels of strain as a result of high job demands. The concern exists that job demands may also affect the engagement of in-service teachers in Professional Development activities. Previous research (e.g., Job Demands-Resources Model, Bakker & Demerouti, 2007) postulates that high job demands may indeed be associated with increased strain levels, which may further affect the individual and the organisation. However, resources could counteract the effects of job demands reducing their non-beneficial impact on the strain and potentially allowing employees to remain motivated and engaged. Thus, this study aimed to investigate the relationship between Continuous Professional Development (CPD) activities, job demands, and teachers' job resources. First, the study aimed to discover what types of Continuous Professional Development (CPD) activities teachers engage in and how long and how often they engage in these activities. Second, levels of job demands and resources of teachers were investigated. Third, it was assessed how job demands and resources link with teacher CPD activities by conducting a set of hierarchical regression analyses. A quantitative study was conducted based on responses from 123 respondents from a range of secondary schools in the Pinetown and Umlazi districts of KwaZulu-Natal (KZN). The descriptive findings indicate that teachers do engage in several Continuous Professional Development (CPD) activities. Respondents predominantly engage in workshops, and they read material on classroom management or their subjects. Teachers face moderate to high levels of job demands (i.e., disruptions by learners, workload, cognitive, and emotional demands). At the same time, they seem to experience moderate to high levels of resources (i.e., support from colleagues, support from management, and having a healthy social community at work). Results from hierarchical regression analyses showed that demands are negatively associated with CPD engagement and job resources are somewhat positively related to the CPD engagement of teachers. This study is relevant for practice; it assesses levels of job demands of teachers in schools in two districts in KwaZulu-Natal as well as their resources. This study also assists in making aware which Continuous Professional Development (CPD) activities respondents engage in and which other CPD activities are less frequented. Based on these results, the opportunity exists to design targeted interventions to increase the CPD engagement of teachers in their respective contexts.

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LIST OF ACRONYMS

KZN- KwaZulu-Natal

CPTD- Continuous Professional Teacher Development

CPD- Continuous Professional Development

SACE- South African Council for Educators

SMT- School Management Team

HOD- Head of Department

HoD- Head of Department (School-based)

SGBs- School Governance Bodies

RCL- Representative Councils of Learners

SASA- South African Schools' Act (No 84 of 1996)

DoE- Department of Education

DBE- Department of Basic Education

NGO- Non- Government Organisation

EMIS- Education Management Information Systems

FET- Further Education and Training

GET- General Education and Training

SPSS- Statistical Package for the Social Sciences

TALIS- Teaching and Learning International Survey

OECD- Organisation for Economic Co-operation and Development

COPSOQ- Copenhagen Psychosocial Questionnaire

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CHAPTER ONE

BACKGROUND AND ORIENTATION TO THE STUDY

1.1 Introduction

Teaching and the education sphere are constantly changing and evolving. Teachers need to continuously learn and develop to meet the requirements of their profession. Hargreaves (2005) illustrates that the constant change in the nature of teacher work requires that teachers continuously adapt to the changing environment of the profession. Teachers are required to be lifelong learners, as stated by Reeve, Harrison, Edwards, and Cartwright (2002). Reeve et al. (2002) furthermore highlight that lifelong learning is beneficial for the efficacy, proficiency, modernisation, and output related to the teaching profession.

Thus, my study focuses on the Continuous Professional Development (CPD) of teachers. I want to explore what kind of activities teachers engage in and how often they do so. In addition to this, I want to investigate which job demands teachers' report, which may hinder them from engaging in CPD activities. Moreover, it is explored which resources (personal and job resources) may assist them in participating in CPD activities.

I will first present an introduction and background to the study in this chapter, including my motivation for the study, the relevance of Professional Development of teachers in South Africa, and the international debates on teachers' CPD. After that, I will explain the study's purpose and research aims. Accompanied by the descriptions of the key concepts, I will explain the study's significance. In conclusion, I will explicate the study's organisation and display a summary of the study.

1.2 Personal Motivation for the Study

In this section, I outline my motivation to conduct such a study. I am a student teacher since 2014, and I am a qualified teacher since 2017. In 2018, I started to pursue my Honours in Education degree, and in 2019 I started to work towards a Masters' Education degree as a form of CPD. Darling-Hammond (1994) states that teacher Professional Development (PD) is a progression of enhancing teaching's professional standing by intensifying the knowledge base upon which the occupation attracts and teachers' methodological mindfulness. Thus, this aptly states that it is a phase of intellectual growth and knowledge acquisition. Moreover,

a description by Evans (2002) articulates that teacher PD refers to a process of professionalism and pertinently describes it as a process of advancing your knowledge base.

I was involved in retail work before studying for my Bachelor of Education degree and studied part-time through correspondence, meaning I worked full-time and did all the modules and assignments remotely. I did not attend any of the lectures. Therefore, I decided to resign and pursue my studies full-time, earning too little and not having enough time to perform my daily tasks. It was challenging; the financing of my studies was particularly difficult. However, this was not the only challenge. I often felt exhausted and discouraged as I studied. However, the thought of developing myself further and achieving all my goals is what motivated me.

Moreover, having served time in schools, I felt the extreme pressures of workload, cognitive and emotional demands, as well as learner ill-discipline that discouraged me significantly. Therefore, I aim to discover other teachers' job demands at their schools and relate them to their CPD engagement and involvement.

Personally, I have experienced that many factors play a role in hindering or assisting teachers in engaging in CPD activities. In addition to my own experience, I have noticed that fewer of the teachers I know got involved in CPD activities. I have seen that these teachers are wearier, more frustrated, overworked, and burned out and seem very reluctant to engage in CPD activities.

However, I also had resources that helped me to go on. Apart from my own personal motivation and determination, my family was a great source of motivation, and the idea to be the first to graduate in the family at a higher degree level kept me going. Their support is what also helped me to persevere. Thus, I identify from my personal experience that it can be quite challenging to get involved in CPD activities and pursue a postgraduate degree.

Some resources may help teachers perform their jobs better and help teachers engage in CPD activities. When these resources are made available to teachers, they may not only feel less burned out; but they also might be able to perform their jobs to the best of their abilities and develop professionally. For example, when I have the support of my colleagues and superiors, I can perform my job with ease because I know I can count on them for motivation and advice. This is also true for other teachers when faced with the relevant resources, and they are able to perform better. Moreover, as stated by Mukeredzi (2013) that if teachers are not trained efficiently or getting involved in CPD activities, they will, in turn, produce this in their work, and it will be evident in learners' results in some cases. Additionally, Bertram, Mthiyane, and

Mukeredzi (2013) ascertain that teachers gain more confidence, content knowledge, discipline strategies, structuring of lesson plans, and carrying out lessons when placed in a CPD environment. Therefore, CPD activity engagement is essential for teachers.

1.3 Professional Development in South African Schools

There are roughly 6 000 high schools and 20 000 primary schools in South Africa. There are 11 municipal districts in KZN, which are divided into eight regions, namely Durban, the South Coast, the North Coast, Pietermaritzburg, the Midlands, the Drakensberg, the Battlefields, the Zululand, and the Maputaland or Elephant Coast (Warm Welcome to KwaZulu Natal, 2020). My research is based in the KwaZulu-Natal region, focusing on secondary schools in this province, and in particular in two districts in the Durban area (i.e., Pinetown and Umlazi).

CPD, according to the Department of Basic Education (2015), refers to equipping oneself with knowledge, skills, and expertise on a recurrent basis to develop. There are various forms of Continuous Professional Teacher Development (CPTD). For example, the South African Council for Educators (SACE) document founded by the Department of Basic Education (DBE) (2009 lists Type 1 activities/programmes which are teacher-initiated, type 2 activities/programmes which are school-initiated, and type 3 activities/programmes which are externally-initiated (DBE, 2015). These policy structures potential CPD activities of teachers: Type 1 activities involve attending workshops, reading up on educational material, and coaching or mentoring other teachers. Type 2 activities include school meetings and seminars, school projects, and community action research, while Type 3 activities encompass subject committees, induction programmes, training, and self-diagnostic assessments. Moreover, CPD programmes involve teachers in workshops on new styles of teaching, discipline strategies, educational games for classroom environments, content coverage, and expansion of knowledge on new sections (Department of Education, 2015).

The Integrated Quality Management Systems (IQMS) was introduced to structure and foster CPD activities (Mestry, Hendricks & Bisschoff, 2009). IQMS is a requirement stipulated by the Education Labour Relations Council (2003) as the driver of formulating an environment for teacher CPD, to monitor the complete usefulness of the organisation, to appraise the performance of teachers, to recognise the precise requirements of teachers for support and expansion, and to endorse responsibility.

These were introduced to equip teachers for their profession and evolve and change with it.

However, even if teachers see any merit or value in CPD, they might be reluctant to engage because of the (potentially overwhelming) job demands that the teaching profession is engulfed with. Mokhele and Jita (2010) speak of secondary school Mathematics and Science teachers requiring CPD activities to keep up to date with the changes in the profession, but these activities need to actually equip the teachers for the classroom.

The situation in South African schools is complex and challenging. It may make it more difficult for teachers to engage in CPD. South African teachers face a discipline problem in schools, and many teachers struggle with classroom management (Rossouw, 2003). Moreover, learners are not showing respect or following the instructions of teachers (Rossouw, 2003). I have personally experienced this, and so have my colleagues and various teachers involved in my previous research. I presume respondents in this study will express similar sentiments. For instance, teachers are concerned about having to deal with learners from various backgrounds, work in schools that are under-resourced with a lack of learning materials or furniture, running water, as well as other necessary facilities. The same is expressed by Jane (2015, p. 58) who states “some of the schools visited had broken windows, with poorly maintained ablution facilities, and the strong odour from the facilities hang in the school environment”. These are some factors that teachers are faced daily within our country. The Technical School Monitoring Survey (2017-2018) summarises the infrastructural complications as challenging for teachers. While teachers manage their daily work, they teach with no electricity or running water at their schools, which can add to their fatigue (to engage in CPD activities).

Amidst everything teachers face, they have several tasks to fulfil, and this can be demanding. The situation in the schools is part of the demands that may hinder teachers from getting involved in CPD. Moreover, teachers' workload can be relatively high (Philipp & Kunter, 2013), which can also be a contributing factor to the lack of CPD engagement. I have also encountered that teachers need to complete a multitude of tasks, including administrative obligations or marking of learners' work contributing to an enormous workload. Furthermore, there are seven roles set out by the Norms and Standards for Educators (DoE, 2000), which need to be fulfilled by teachers. However, Morrow (2007, p.11) is concerned that “the ‘seven roles’ ignore the reality of the conditions in which the majority of teachers in South Africa work and, in this way, inflates the conception of their workload”.

In addition, teachers are often not updated with the latest trends fast enough and this is a major demand, as it hinders them from moving forward effectively in the profession (Van den Berg & Schulze, 2014). It is mentioned by Van den Berg and Schulze (2014) that research pointed to implications of a nonappearance of discussion with teachers in the construction of new policies and suggested interventions proposing to advance adaptive proficiency. I find this personally frustrating, as it causes more confusion adding to the already demanding workload.

In South Africa, teachers are faced with daily complications of not only discipline, safety, and learner personal background problems. Galand, Lecocq, and Philippot (2007) contend that many factors hinder CPD activities, and this is what South African teachers are exposed to daily, including harassment by students, ferocity, student disobedience, diminished wellbeing, and victimisation. Likewise, this is also confirmed by White, Gina, and Coetzee (2015) and expound that results showed that learners and teachers are not safe in their schools. Lack of safety and security is recognised by the weakness of schools problems regarding aggression, fighting, sexual harassment, assaults, the use of derogatory language. Teachers face these various job demands on a daily basis.

Such daily job demands may adversely affect teachers and may hinder them in engaging in CPD activities. There are many job-related demands that teachers face physically in the educational system, like infrastructural demands (Jane, 2015).

On the other hand, job resources can assist teachers, for example, by being supported by colleagues, having a social community at work, and technological devices (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). It is noted by Galand et al. (2007) that if management and superiors offer support, this could improve teachers' wellbeing. In addition, there are also personal resources (Hülshager & Schewe, 2011), namely meditation, exercising, or seeking therapy.

As argued above, Bertram et al. (2013) agreed that CPD is an essential factor and tool for teachers in South Africa because of the fluctuating changes that occur in our country, as well as to equip teachers with much-needed skills. Samuel (2008, p. 3) discusses that "fewer individuals now willingly choose the teaching profession. If they do, their accountability is seldom to quality teaching and learning; as professional teachers find themselves threatened on several fronts by contradictory and often competing forces". Thus, teachers are susceptible to harm or strain by such conflicting demands.

CPD has become a focal point in discussions about the Education system in South Africa. Guidelines have been implemented by different bodies, which are supposed to formalise teacher CPD. They are namely: Integrated Quality Management Systems (IQMS), The Role of the South African Council for Educators (SACE), The South African Qualifications Authority (SAQA), and the Organisation for Economic Co-operation and Development (OECD). There are constant changes in Education in South Africa, including new policies or curriculum changes. With all these changes, the following questions need to be answered: Are teachers engaging in CPD activities? What are the job demands that may hinder their CPD engagement? What are the potential resources that assist them in engaging in CPD? Therefore, I aim to investigate these questions in my study.

This overview intended to describe the reality of teachers' demands at their schools, which may affect their engagement in CPD activities and their implementation. Resources may counteract some of these demands and make it more likely that teachers engage in CPD activities. Below, I will now focus on international debates related to teacher CPD.

1.4 International Debates on Teacher CPD

Darling-Hammond (2017) illustrates that teachers' CPD is practised regularly, and teachers are offered rewards and incentives for performing the tasks. The author summarised this for several countries such as Australia, Canada, Finland, Singapore, and the United States of America (USA). Darling-Hammond (2017) outlined that these countries have one thing in common, their systems for teacher and leader development. With that noted, teacher development is exceptionally practised in these countries around the world. International studies are conducted in Australia, England, Latvia, the Republic of Ireland, Scotland, Taiwan, and the USA (Collinson, Kozina, Lin, Ling, Matheson, Newcombe & Zogla, 2009). In these studies, the school was seen as a platform for lifelong development of teachers who will adapt and recondition organisations (Collinson et al., 2009). Therefore, teachers are invigorated to engross in learning collectively to advance teaching and learning. This illustrates that, as the world's practices have changed, so has the educational sphere for teachers, who have been encouraged to learn throughout their lives, transform, and develop themselves (Collinson et al., 2009). Hargreaves (2005) expresses similar sentiments when concluding that the nature of the teaching profession is perpetually evolving and shifting. Henceforth, there is a need for teachers to be involved in CPD activities continuously throughout their careers to keep up to

date with changes in the Education system. Different suggestions were introduced internationally, which will be outlined below.

1.4.1 Increasing International Emphasis of Teacher CPD

CPD is increasingly emphasised in other countries. Teachers are encouraged incessantly to engage in CPD activities. Globally, the focus on the CPD of teachers has increased over the years (Richter, Kunter, Klusmann, Lüdtke, & Baumert, 2011). The authors state that more activities need to be entrenched in education programmes. Professional Development needs to start from the progression of the university to teaching and needs to continue through in-service training of teachers at all phases of their careers. Harrison, Hofstein, Eylon, and Simon (2008) state that Science teachers at secondary school must engage in CPD activities often because of the changing nature of the subject.

Countries like the United States of America, Australia, the United Kingdom (UK), and England in particular, engage strongly in CPD (Collinson et al., 2009). Moreover, Collinson et al. (2009) state that Education is gradually but assuredly adjusting to a new mindset and is starting to implement changes that stimulate teachers and management to participate in CPD together to expand teaching and learning. Thus, it clearly expresses that there is an alteration of the teaching profession and a need to develop more highly qualified individuals. As stated above, most research refers to CPD for the enhancement of the teacher that will, in effect, positively develop the learner (Bertram et al., 2013).

1.4.2 Continuous Professional Development Incentives

Darling-Hammond (2017) states that various approaches are developed which link CPD and promotion to increased teacher engagement in CPD. When teachers engage in CPD in Finland, Singapore, and Canada, they are rewarded for their engagement (Darling-Hammond, 2017). Also, if teachers can prove how many hours they have spent on CPD or have completed a postgraduate degree in education, they are rewarded with promotions, higher salaries, and other incentives, which motivates and encourages teachers to push towards these goals. Therefore, it proves that CPD is an apprehension internationally and that countries take different approaches. Some of the strategies stem from the idea that teachers seem reluctant to engage in CPD activities, which could (partially) prevent the job demands they experience. Thus, Darling-Hammond (2017) emphasized that resources are fostered, and incentives are

provided for teachers to engage in CPD. This could be a motivator or stimulator to encourage teachers to engage in CPD.

In other countries like the USA, it is mandated that teachers continue with CPD activities to get their licences renewed to improve the school's growth and keep abreast with the current knowledge (De Vries, Van de Grift & Jansen, 2013).

Different countries, thus, have different approaches to encourage teacher CPD. However, in many, this remains a challenge.

1.4.3 Teachers Challenges for CPD Engagement

Cordingley (2015) argues that at the beginning of the 21st-century, there has been much investigation around CPD and its effectiveness. Additionally, it has been found that CPD can be effective. However, trying to engage in CPD can be difficult due to the demands teachers may experience.

First, the opinions and beliefs of teachers may be a challenge for engaging in CPD. De Vries et al. (2014) conclude that teachers' opinions about CPD differ vastly and affect their engagement in CPD activities. Teacher individual opinions and beliefs can augment how teacher education programmes are perceived (Beauchamp & Thomas, 2009). Furthermore, Korthagen (2017) ascertains that the variability of studies has produced an indication of the usefulness of CPD. Korthagen (2017) contends that teachers play an important role in the class and also their personal and PD. Teachers' thoughts about CPD are guided by their behaviours and opinions (Rosnow & Rosenthal, 1999). Some teachers see the importance of CPD, whereas others may not find it that relevant. Several authors refer to a gap between theory and practice (Mansour, EL-Deghaidy, Alshamrani, Aldahmash, 2014; Korthagen, 2017). For example, in the USA, teachers are encouraged to engage in CPD activities, but they are not doing enough, or if they are, it is not effective enough (Wei, Darling-Hammond & Adamson, 2010). Teachers find a gap between what is issued to them as guidelines or policies and what they actually have to do in the class and find the CPD does not equip them with the skills needed to do their jobs (Wei et al., 2010). Moreover, Mukeredzi (2013) argues that it is not enough to know what Professional Development is or what it should look like, but rather should be entrenched within the school environment. Therefore, even though some teachers may not be receptive to CPD, it does yield a positive influence.

To summarise, international debates move increasingly towards the teacher's (C)PD to enhance the quality of teaching and learning. Different countries have developed different approaches to formalise and standardise CPD and provide incentives for teachers to engage in CPD. Yet, even in countries with well-established CPD programmes and strong incentives, teachers still seem reluctant to engage in CPD because of various demands.

1.5 Purpose of the Study

The purpose of the study is to investigate the engagement of Continuous Professional Development (CPD) activities of secondary school teachers in KwaZulu-Natal. Therefore, I aim to explore the types of CPD activities secondary school teachers in the KwaZulu-Natal region engage in. I also aim to examine what types of CPD activities are teachers participating in, the time and frequency for their engagement.

Next, I will focus on the job demands that may play a role in teachers' lives, focusing on identifying their relative importance for teachers' CPD. I will be investigating the specific job demands teachers face (e.g., workload, emotional demands, discipline problems in class), which may hinder teachers from engaging in CPD activities.

Moreover, I will investigate job resources (e.g., social support, management support, or involvement and social communities at work) and how these resources assist teachers in their CPD engagement. This is a quantitative study that will allow me to discover levels of CPD activities and establish correlations between job demands in relation to teacher CPD engagement, as well as job resources in relation to teacher CPD engagement.

1.6 Theoretical framework

Two theoretical frameworks are underpinning this study. Both the Job Demands – Resources model (JD-R; Bakker & Demerouti, 2007) and the Conservation of Resources theory (COR; Hobfoll, 1989) form the basis of my work. These two frameworks have been selected because they work hand-in-hand to provide a lens for this study. The Jobs Demands – Resources (JD-R) model focuses on the job demands and resources of teachers, whereas the Conservation of Resources theory (COR; Hobfoll, 1989) focuses on the management of resources. These will be further expanded on in Chapter three.

1.7 Research methodology

The research methodology of this study is of quantitative nature. It uses a cross-sectional design of explanatory nature. In this explanatory study, hypothesised relationships between study variables were tested using a correlational design. The researcher is concerned about the amount to which two variables (or more) co-exist, i.e., changes in one variable are reflected in changes in the other (Bertram & Christiansen, 2014). Data was collected using questionnaires, as it is best suited for this type of quantitative study because it can target as many respondents as possible. Data was then analysed through a statistical programme (SPSS versions 26 and 27; IBM, released 2016, 2017), and thereafter, deductions were made. Purposive sampling was used because this study was aimed at specific respondents within the Umlazi and Pinetown districts. This aspect will be further elaborated in Chapter four of the study.

1.8 Quality criteria (Validity and Reliability)

This study uses a standardised questionnaire as the instrument of data collection. The questionnaire was structured and entailed both closed and open-ended questions. Closed questions (items) can be analysed using statistical methods (Bertram & Christiansen, 2014). Validity is when an instrument actually measures what it proposes to measure (Cohen, Manion & Morrison, 2007). Golafshani (2003) ascertains that validity involves deduction, reason, and fact, which allow asking questions about how to reach the intended level of validity. In my study, I ensured that the instrument (questionnaire) did address my research questions regarding CPD activities of teachers, demands, and resources of teachers. Moreover, the instrument was piloted with teachers from several schools in KwaZulu-Natal (details provided in Chapter four) to ensure context validity.

In general, all the items of measures are supposed to reflect the same underlying construct, so respondent's scores on those items should be correlated with each other (Jhangiani, Chiang & Price, 2015). Reliability is when a researcher can depend on study variables operationalised using specific instruments and assume that they are measured consistently (Cohen et al., 2007). This means that when variables are assessed again with a similar or the same group of respondents, results should be equivalent. Cohen et al. (2007) refer to internal consistency as a measure of reliability. Internal consistency is measured as Cronbach's Alpha (Cohen et al., 2007). Cronbach's Alpha is a coefficient that assesses inter-item correlations,

i.e., the correlation of each item with the summation of all the other related items, and is beneficial for multi-item scales. Kimberlin and Winterstein (2008, p. 2277) argue that “reliability coefficients range from 0.00 to 1.00, with higher coefficients indicating higher levels of reliability”, as this ensures replicability and stability for internal consistency (acceptable levels are .70 and higher). I ensured my study was reliable by ensuring the consistency of respondents' responses across the items of a multiple-item measure.

Mertler (2016) states that in order for the research or a research instrument to be valid and reliable, it must intend to address the research questions or hypotheses. Reliability was ensured by calculating the internal consistencies (Cronbach's Alphas) of scales in the pilot phase of the study and the main phase of the study (details provided in Chapter four).

1.9 Research Objectives and Research Questions

The following research objectives were formulated:

This research aims to

... explore which Continuous Professional Development (CPD) activities secondary school teachers engage in, as well as the time and frequency spent on these activities.

.... investigate the role of job demands for secondary school teachers' engagement in Continuous Professional Development (CPD) activities.

.... investigate the role of resources for secondary school teachers' engagement in Continuous Professional Development (CPD) activities.

In pursuit of the above research objectives, this study is guided by the following research questions:

RQ1: What types of Continuous Professional Development activities do secondary school teachers engage in, how often, and for how long?

RQ2: How do job demands of secondary school teachers influence their engagement in Continuous Professional Development activities?

RQ3: How do resources influence the engagement of secondary school teachers in Continuous Professional Development activities?

1.10 Significance of the study

This study can assess what types of CPD activities teachers engage in, which levels of job demands teachers in the selected districts face and which resources they have available to manage these demands. Such a study addresses an important topic that receives research attention nationally and internationally. In South Africa, with the many job demands teachers are confronted with, this even seems more relevant. Thus, it is crucial to focus on the CPD engagement of teachers. Knowing that many South African schools are under-resourced and teachers experience multiple job demands, it is necessary to investigate how this situation might contribute to their engagement in CPD activities. Apart from investigating job demands, the focus of this study is also on potential resources that may help teachers be able to engage in CPD activities.

Overall, such a study does allow for relevant conclusions on how to foster and support teacher CPD. In the South African context, CPD is an essential tool to help teachers manage the changing nature of teaching, which leads to quality education for learners (Mukan, Yaremko, Kozlovskiy, Ortynskiy, & Isayeva, 2019).

1.11 Definitions of Key Concepts

It is meaningful that research concepts be used in such a way to capture the intended meaning of the word. To fully appreciate what is being deliberated in this study, one should understand how the concepts are used. Definitions of key concepts are now defined.

1.11.1 Continuous Professional Development (CPD) Activities of Teachers

There are several definitions of CPD. According to De Vries et al. (2014) and Evans (2002), CPD can be described as continued or lifelong learning by teachers or other professionals. Leclercq (1996) describes CPD as ongoing education and training for practising educators to assisting them in keeping up to date with the rapid and numerous changes taking place in the school milieu. I have chosen this definition because it is well-established, and it expresses the meaning of CPD I aim to convey. Furthermore, Pedder, James, and MacBeath (2005) show similar views about continued learning. Therefore, CPD is teachers' and other professionals' continuous or ongoing specialised improvement. Mestry, Hendricks, and Bisschoff (2009) ascertain that CPD is essential in producing efficient school environments that will, in turn, benefit all, as CPD aims to advance the ethos of teaching, learning, and development within

schools, not only teachers of specific subjects. Further discussion on CPD will continue in Chapter 2.

1.11.2 Job Demands

Various demands may occur in the teaching profession; these are known as job demands. Bakker and Demerouti (2007, p. 312) refer to job demands as “physical, psychological, social, or organisational aspects of the job that require sustained psychical or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological or psychological costs”. As expressed by Bakker and Demerouti (2007), examples of job demands are workload, emotional demands, and role uncertainty. These job demands often lead to stress and burnout (Bakker & Demerouti, 2007). Furthermore, Galton and MacBeath (2008) describe job demands as factors that may result in stress or burnout. Schulze and Steyn (2007) also refer to demands as stressors that may result in strain (i.e., stress or burnout). Furthermore, learner ill-discipline is now a growing demand faced by teachers as rules and regulations evolve (Schulze & Steyn 2007). Chapter two will provide a more detailed description of teacher job demands.

1.11.3 Resources

Hobfoll (1989) broadly describes resources as individual features, circumstances, or dynamics of an individual. Examples of resources are mastery, self-confidence, socio-economic rank, support by others, and many more. Resources are factors that assist a person in remaining well. Resources can be distinguished as personal resources or job resources that help a person manage their demands or assist in relieving stressor burnout (Bakker & Demerouti, 2007). Examples of job resources are social support from colleagues or supervisors, as well as a social community in one’s school atmosphere. These resources are located at the level of the organisation, i.e., the school, university.

Resources at a personal level are progressively focused on (Xanthopoulou et al., 2007). For example, equipping yourself with skills that will benefit the individual is considered a personal resource. Hülshager and Schewe (2011) highlight specific personal resources, such as coping styles that may help alleviate stress.

1.12 Organisation of the study

This study is divided into seven chapters, and each chapter deals with a different aspect of the research processes.

Chapter One is the introductory chapter of the study. It outlines the study's background and motivation, its focus, research objectives, and research questions. It also intends to highlight the significance of the study. Last, the key concepts were defined, and the organisation of the document was provided.

Chapter Two presents the literature review on the current state of knowledge about teachers' Continuous Professional Development (CPD) activities and the demands and resources to CPD. This chapter also focuses on the definitions, forms, and outcomes of CPD engagement. Moreover, this chapter also focuses on the demands and resources to CPD engagement.

Chapter Three outlines the theoretical frameworks which form the foundation of this study, i.e., the Job-Demands Resources (JD-R) model and the Conservation of Resources (COR) model.

Chapter Four describes the research process, design methodology, and methods, as well as a justification for methodological choices. Moreover, this chapter also focuses on statistical analyses, quantitative data, and ethical considerations.

Chapter Five presents the data findings. Descriptive statistics, as well as correlation analyses, are presented to respond to the three objectives and research questions. Finally, a comprehensive model based on a series of hierarchical regressions is presented.

Chapter six summarises the main findings, interpretations, and discussions. The chapter provides conclusions and recommendations for the future improvement of CPD activity engagement and teachers' demands and resources.

Chapter seven provides limitations of the study and the recommendations for future studies.

1.13 Summary

In this chapter, I presented an introduction and background to the study, the purpose and the rationale, motivation for the study, the focus, research objectives and questions, the significance, definition of concepts, and the organisation of the study. The next chapter discusses the relevant literature review, which underpins this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, I discuss the relevant literature on my research topic. First, the literature will focus on teachers' Continuous Professional Development (CPD). Secondly, on the job demands teachers experience, and lastly, the chapter will summarise the literature on job resources, which may enable teachers' Continuous Professional Development (CPD). This study focuses on the South African teacher in particular.

2.2 Definitions and Central Aspects of Continuous Professional Development (CPD)

Continuous Professional Development (CPD) is a topic that is researched tremendously, and a large number of definitions have been suggested. Below, I will provide interpretations from various authors, some of the seminal descriptions date back to 1994, and I will also present more recent definitions. The point of introducing these meanings is to illustrate how they relate to each other and how similar they are when describing CPD; each interpretation reflects on the previous one.

I would like to start by highlighting the need for Continuous Professional Development (CPD). Darling-Hammond (1994, p. 490) elucidates that "knowledge is exploding at an ever more rapid rate, and decisions about particular ways of construing that knowledge are always to some extent arbitrary". The author presents that knowledge is igniting or setting off very quickly, and verdicts about how to interpret and understand this knowledge are subjective and up for debate. Even though this is an aged definition, it is apt because knowledge is ever-changing, and innovative ways of gaining knowledge are often debatable. Therefore, we need more highly qualified individuals who will explore these new avenues and give facts or information that our country needs to succeed. This knowledge will positively affect the individual, the school, and eventually, the learners through quality teaching. Thus, CPD is an essential element of education. Next, I will summarise definitions of CPD.

CPD is a planned, continuous, and lifelong process in which teachers aim to develop their personal and professional qualities, advance their knowledge, skills, and practice, which is leading to their empowerment (Padwad & Dixit, 2018). Padwad and Dixit (2018) further state that it leads to the improvement of teacher agency, the development of the organisation they

work at, and – in some cases - even their learners. Darling-Hammond (1994, 2017) describes teacher Professional Development as a procedure of enhancing teaching's professional standing by intensifying the knowledge base upon which the profession draws and increasing teachers' knowledge. This definition highlights that CPD is essential for intellectual growth and knowledge acquisition. Moreover, a teacher's Professional Development refers to a process of professionalism and describes advancing his or her knowledge base (Evans, 2002). It implies a trajectory with increasing age. De Vries et al. (2014, p. 80) mention that "the CPD activities that individual teachers undertake, actively and voluntarily over the course of their career" assist in their growth and development. This is especially relevant when considering what Körkkö, Kyrö-Ämmälä, and Turunen (2016) state. Körkkö et al. (2016) describe the teaching profession that involves lifelong learning. Additionally, Engelbrecht, Ankiewicz and De Swardt (2007) state that CPD activities are there to equip and enhance the skills of teachers continually. Day and Sachs (2004, p. 4) summarise quite broadly that "CPD is a list of all the activities in which teachers engage in during their careers which are designed to enhance their work". It illustrates broadly, CPD consists of various activities teachers perform during their teaching vocation, which grows and improves them and their quality of work. My reason for selecting these definitions was to understand how CPD is described in general.

It seems that even though these authors use different wording over time, the definitions of CPD are very similar over the years. These definitions relate to my study by clarifying what CPD is and shows the relation between the definitions. In the following sections, I will now present different forms of CPD. Various countries are adopting different policies and strategies to encourage the Professional Development of teachers. Opfer, Pedder, and Lavicza (2011) explain Professional Development as elevating teachers' personal quality and expertise within and outside of their field. Overall, there are various descriptions of the core or essential focus of Continuous Professional Development (CPD) and explain how Professional Development is beneficial and enhances the teachers' life. Teachers are lifelong learners and need to be kept abreast of new knowledge relevant to their development. There will undoubtedly be challenges associated with development and change (Orr, 2009). Thus, to address these gaps, teachers need to be involved in CPD activities. De Jongh, Frantz, and Rhoda (2014) highlight that for teachers to become equipped with skills for globalisation and the changes in the world, they need to be involved in effective Professional Development activities that will enhance and equip them with skills. Again, as the profession advances,

teachers need to be aware of the changes and implement strategies accordingly (Bertram et al., 2013), updating knowledge constantly. Therefore, proving that CPD is essential for the continuous development of the teacher and schools.

Thus, this study focuses on teacher Continuous Professional Development (CPD), and this focus will allow for a better understanding of what contributes to teacher CPD, which will eventually contribute to their schools and their learners. There are various forms or types of CPD activities in which teachers can get involved in.

2.2.1 Forms of CPD

This section will provide some of the forms of CPD that are available for teachers. According to Coldwell (2017, p. 189), the core of CPD is explained as “formal and informal support and activities that are designed to help teachers develop as professionals. This includes taught courses and in-school training, as well as activities such as coaching, mentoring, self-study, and action research”. Various forms of CPD include reading and performing various tasks to keep up to date in the field (Berdondini & Elton, 2020). The central focus of Professional Development is illustrated by Day (1999; 2002), Hargreaves (2000), Opfer and Pedder (2011), and Verloop (2003) who all echo similar sentiments and refer to activities that develop the individual teacher to learn, adapt to society’s needs, apprising knowledge and skills, insightful undertakings and group effort. Based on Coldwell (2017), this section is divided into formal and informal forms of CPD. It will also be summarised, which benefits it provides for teachers, and where CPD can and should take place (at the school level, team level, or individual level). Moreover, such a topic is now more relevant than when I started this study. During the global COVID-19 pandemic, Kitto (2020) states that CPD has to evolve and change to many tasks being carried out remotely.

Formal CPD activities involve workshops, seminars, and formal observations. Workshops are CPD activities in which teachers are equipped with powerful tools to do their jobs more enjoyably, skillfully and furnish teachers with higher levels of content and teaching strategies (Mokhele, 2011). Singh (2011) expresses the concern that despite the potential of Professional Development workshops, they do not adequately emphasise teachers' professional requirements sufficiently, or if they do not meet the standard or purpose they are intended for, they might not have these beneficial effects. Additionally, Holmes (2013) argues that many Professional Development activities of teachers involve fragmented

monotonous workshops, in which teachers pay attention inertly to specialists about non-teaching correlated topics. Other forms of formal CPD activities are available, such as attending conferences and seminars, peer observation, and coaching, which equip teachers with the skills on how to coach their peers and how to be receptive towards coaching. Frick and Kapp (2007) state that learning in formal CPD programmes is quite significant. Given all this evidence gathered, one can now state that CPD activities are intended to make teachers learn and grow.

Informal CPD activities are less formalised and standardised and rely a lot on the teacher's individual engagement. Informal CPD activities include attending informal seminars where teachers share their ideas and opinions based on a knowledge-sharing discussion. This category also includes on-the-job training and experiential learning. Darling-Hammond (2017) mentions that teachers in various countries choose to equip themselves with additional knowledge through such activities. Additionally, there are learning groups in which teachers meet to discuss content knowledge, ways of performing lessons, and any other relevant information that will benefit each teacher (Dogan, Pringle & Mesa, 2016).

Individual CPD focuses on the growth of the individual, whilst collective forms of CPD focus on growing groups of people at an institution. I will distinguish between individual and collective forms of CPD. Individual CPD activities focus on the growth of the individual. One crucial form of individual CPD activity is the pursuit of a postgraduate degree. Studying towards a degree forms part of teacher Professional Development because it is a form of growth as described by Evans (2002) and Darling-Hammond (1994). Teachers are encouraged to improve themselves and study towards a postgraduate degree, which grows them intellectually. Obtaining a postgraduate degree will also open opportunities for teachers to be promoted to become Senior or Master teachers.

Collective forms of CPD include growing teachers in a group as a whole. Growing teachers in a group are when teachers go to workshops as a group. Different teachers may represent their school by attending a workshop held by the Department of Basic Education (DBE). Another form of informal CPD is when professional learning communities are formed. These are when teachers get together to share their thoughts and ideas on a specific topic (Sacramento, 2019). For example, teachers sit down together to discuss discipline strategies that could be implemented at their school or the schools in the district. Teachers could discuss

their teaching strategies on what worked for them on specific aspects of a subject. Sharing knowledge allows teachers to give their input and, this grows the entire professional learning of teachers. Another type of CPD activity that teachers can engage in is called mentoring or peer coaching. Robertson (2005), as cited in Hooker (2013, p. 130), states that peer coaching is “a special, sometimes reciprocal, relationship between (at least) two people who work together to set professional goals and achieve them”. What this means that each of them sets goals that they work on as a team.

Moreover, Rhodes and Beneicke (2002) state that coaching, mentoring, and peer-networking instruments in schools act as a means to enhance Professional Development, entrench reformed training, and inspire the communication of teacher knowledge to learner education inside classrooms. Vescio, Ross, and Adams (2008) advocate that well-developed professional learning communities positively influence both teaching practice and learner achievement. It is evident that when teachers join other teachers, there are benefits for both the teachers and learners involved, as all share their learnings and ideas. Moreover, Lieberman, Miller, Wiedrick, and von Frank (2011, p. 16) ascertain that “learning communities create and maintain an environment that fosters collaboration, honest talk, and a commitment to the growth and development of individual members and to the group as a whole”. It is apparent that when teachers join together, collaboration occurs, and teachers are able to speak honestly and openly, which can foster their Continuous Professional Development.

Other categories have also been suggested. Garet, Porter, Birman, Desimone, and Yoon (2001) provide an in-depth explanation of various categories of CPD activities and summarise them as the fundamental structures of professional development activities that have substantial, positive effects on teachers'. Teachers report that their knowledge and skills and fluctuate in classroom practice: (a) focus on content knowledge; (b) opportunities for active learning; and (c) coherence with other learning activities. It is through these aspects that teachers' learning is affected. For example, (a) the form of the activity (e.g., workshop vs study groups); (b) collective participation of teachers from the same school, grade, or subject; and (c) the duration of the activity. In addition to considering formal *versus* informal activities or individual *versus* collective activities, the duration and time spent on these activities also need to be considered.

In summary, it could be seen that the activities of CPD included in this study need to be diverse. Besides the inclusion of a combination of formal and informal activities, CPD activities

at individual and collective levels need to be taken into account in the study and the time and duration spent on these activities. Moreover, engaging in CPD activities have probable outcomes that affect various levels of an institution.

2.2.2 Possible Outcomes of CPD Engagement on Different Levels

This section provides an overview of the potential effects of CPD on different levels (e.g., people involved or institutions transformed). The impacts of CPD can be positive or negative and can affect different levels either way. If done successfully, CPD is constructive and helpful for the individual teacher, a group, or at the school level. If teachers regularly and constructively engage in CPD activities, they gain relevant skills to function professionally as teachers. Cordingley (2015) ascertains that being engaged in CPD activities has a host of benefits, including (among others) enhanced subject knowledge, more efficient teaching and learning approaches, better-quality self-assurance, and skills in pairing teaching and learning strategies with specific needs. McArdle and Coutts (2010) argue that getting teachers more associated with operative reflective thinking and common practice will allow for complete immersion and effective CPD engagement. Teachers may also gain a sense of satisfaction as they accumulate knowledge, skills and may be inspired to do better at their jobs (Wabule, 2016). Thus, CPD activities have the potential to affect the individual teacher positively.

Other positive effects can be expected at the group level (i.e., the class level). Easton (2008) argues that “professional learning needs an innovative plan for systems that are involved in refining teachers so that all children can acquire knowledge. Another benefit of CPD is that teachers gain relevant knowledge and skills, and through this, their teaching quality will increase (Coe, Frick & Carl, 2010). Such a process will benefit various stakeholders and, most importantly, learners. Additionally, Coe et al. (2010) argue that CPD is not just for the enhancement of learners' learning, it also increases the individual growth of teachers. In essence, these activities should be organised by a combination of the teacher, school, and government, so that all spheres are involved and have a say (Easton, 2008).

Moreover, effects can unfold at the school level. Evans (2014, p. 179) clarifies that “it is consensually accepted that educational leaders should promote and facilitate professional learning and development in their schools”. One can assume that this will not only assist teachers in engaging in CPD activities but will eventually benefit the school. School development can be fostered through CPD by having more skilled and qualified teachers,

more skillfully equipped learners, which contributes to a skilled society (Boaduo, 2010). However, not all schools participate in CPD, and not all school leaders and management encourage teachers to engage in CPD activities.

Apart from beneficial effects on these levels, some concerns have been expressed concerning CPD engagement. As much as the CPD of teachers has a vast potential for professional growth, what we see in reality may differ. Concerns have been raised that CPD can be seen as a management tool and a performance tool (Aseltine, Faryniarz & Rigazio-DiGilio, 2006). If used as a management tool, it includes managing staff, their workload, and even discipline in the classroom (Aseltine et al., 2006). In addition, if CPD is used as a performance tool, it is linked to incentives like salary increases or promotions. As mentioned by Darling-Hammond (2017; cf. 1.4.2), teachers may receive promotions (to becoming a manager), or teachers may receive a percentage increase in their salaries based on their score of CPD points. Guskey (2002, p. 382) argues that “the majority of [Professional Development] programmes fail because they do not take into account two crucial factors: (1) what motivates teachers to engage in professional development, and (2) the process by which change in teachers typically occurs”. The international examples mentioned in Chapter one show that CPD is often linked to performance management (Darling-Hammond, 2017). The concern is that teachers may perhaps not engage in CPD activities or are less engaged because of their intrinsic motivation but because of extrinsic incentives (e.g., promotion or salary increase) which may change the nature of the activities they attend, i.e., formal activities which are standardised and recognised rather than individual informal activities.

Another concern is that with increasing job demands (such as ill-discipline of learners, a high workload), teachers may find it challenging to also engage in CPD activities. Guskey (2002) utters this about integrating CPD into teachers' lives learning to be skillful at something new needs time and determination. Any change that promises increasing teachers' capability and improving student learning will probably necessitate additional work, particularly at the start. The requirements of additional vigour and time can tremendously add to teachers' workload. Additionally, change brings a convinced quantity of apprehension and can be very intimidating. It seems a cycle might even unfold in which teachers are concerned that their workload and other job demands might even increase through CPD.

In summary, schools, teachers, and learners can benefit tremendously from CPD. However, the conditions on how CPD is introduced (as a tool for individual growth, as a management

tool, or as a performance management tool) may affect teacher CPD engagement. Research indicates that while specific demands may prevent or discourage teachers from developing professionally, some resources could foster teachers' Continuous Professional Development. Coe et al. (2010) does indeed capture the essence that CPD outcomes have an effect on the individual teacher, the learners, and the school as a whole. Moreover, Easton (2008) ascertains that the CPD activities should be a joint effort and contribution by all spheres involved in order to have a lasting impact. I will summarise research on relevant job demands and resources below.

2.2.3 The Influence of Job Demands on Teacher CPD

Various factors might influence CPD engagement. This section will provide a summary of different factors in the workplace that might prevent CPD engagement. Bakker and Demerouti (2007, p. 309) clearly state some job demands that may hinder individuals from developing professionally: "research has revealed that job demands such as high work pressure, emotional demands, and role ambiguity may lead to sleeping problems, exhaustion, and impaired health". South African teachers face daily job demands, resulting in teacher stress, which may, in turn, hinder their CPD involvement (Field & Buitendach, 2012). This link will be further explored in the next chapter. Hakanen, Bakker, and Schaufeli (2006) contend "job demands may become stressors in situations which require high effort to sustain an expected performance level, consequently eliciting the negative response". This demonstrates that even though there may be incentives involved in performance, it can be a demand that heavily weighs the teacher down. Hakanen et al. (2006) state that three main demands, namely (1) disruptive learners, (2) work overload, (3) poor physical work environment, which I believe are very relevant for our South African context today and to my current study in KwaZulu-Natal.

Coldwell (2017, p. 190) mentions that "research largely from the UK, USA, and Australia on the factors that influence teachers' retention in the profession indicates that lack of job satisfaction, due to teachers' heavy workload and other pressures, appears to be a more important reason for leaving the profession than a lack of PD". Thus, the workload is seen as a job demand for teachers, both locally and internationally, which may even lead to teacher attrition and can be assumed to affect their CPD engagement. Pisanti, Gagliardi, Razzino, and Bertini (2003) contend that job demands can severely affect teachers to the extent that they

become physically ill or may even – in some cases – lead to depression. Kittel and Leynen (2003) highlight the latter. They state that teachers can even develop depression symptoms due to the exposure to the enormous job demands placed on them. Maistry (2008) elucidates that support for teachers is disjointed, leading them to irregular teacher learning groups and an absence of Professional Development for areas of necessity. Teachers are bombarded with work demands that they cannot meet as regularly as they would like, leaving these groups fragmented and jagged (Shalem & Hoadley, 2009). Teacher workload is consists of numerous duties that keep piling up, leaving teachers tired as the nature of teachers' work can be very draining (Shalem & Hoadley, 2009).

Job demands might negatively affect teachers and hinder their CPD engagement in line with the Job Demands-Resources Model described in the next chapter (Bakker & Demerouti, 2007). Borko (2004, p. 3) mentions that “changing demographics and high rates of poverty in urban communities around the globe pose special challenges for teachers in twenty-first-century classrooms”. Such a development is also reflected in the learners’ behaviour in the classroom. Galand et al. (2007) advocate that school violence amongst learners leaves teachers fearful and detached. Such a detachment from the profession might also make teachers less likely to engage in CPD.

Singh (2011) clarifies that the school's physical and social environment changes on an ongoing basis. For teachers to fit into this ever-changing environment, they need to be involved in CPD activities. Therefore, the school's physical and social environment needs also to be considered.

Other structural constraints, like policy changes or other economic, social, and cultural changes, may affect teacher CPD engagement. As South Africa progresses, there were changes in the curriculum. Clasquin-Johnson (2011) states that teachers were implementing their curriculum and what worked for them. Then they were introduced to a new curriculum called the National Curriculum Statement (NCS) in 2004 and were not efficiently trained to implement this. Therefore, they continued implementing their own curriculum that they were passionate about and that they understood, even though this was not what the government was expecting teachers to do. Clasquin-Johnson (2011, p. 2) states that “their response could best be typified as ‘reluctant compliance’”. This was quite frustrating for teachers, and once they overcame this, other changes still caused them to be weary and confused. Clasquin-Johnson (2011) clarifies that there was a gap between policy and practice, so teachers opted

to go back to the curriculum they were familiar with teaching. Teachers have been through a rollercoaster with all the changes in Education over the years.

In sum, different studies could show that job demands may relate to decreased teacher motivation or engagement. The same can be assumed for their engagement in CPD activities. The next section will focus on selected job demands, which will be investigated in this study.

2.2.3.1 Workload and Cognitive Demands as a Job Demand of Teachers

Teachers in South Africa report various job demands. These reports varied from workload demands, financial restrictions, learner ill-discipline, unfavourable teacher-learner ratios, and violence directed towards teachers (Nunan, 2018). Van Tonder and Fourie (2018) explain that teachers are inundated with the administrative workload, which may leave them 'drowning' and contributes to their ill-being. Van Tonder and Fourie (2018) further clarify that when teachers are besieged with high workload demands, they are unable to adapt to changes and are left with few opportunities to engage in CPD activities. Additionally, teachers' high levels of workload negatively affect their mental and physical health (Van Tonder & Fourie, 2015). It is confirmed by Chisholm (2005) that teachers spend less time on teaching than the policy requires of them because they are burdened with the workload of overcrowded classrooms, administrative duties, and the demands from the curriculum. Shalem and Hoadley (2009) ascertain that teachers' work has been spread out, covering much more than in the past. Past inequalities, economic inequalities, and the misinformation on teachers' work play a role in the way in which teachers carry out their work in combination with the type or quintile of schools they are placed in (Shalem & Hoadley, 2009).

Some teachers work in well-resourced schools, while others face the challenges of working at an under-resourced school. Moreover, Hoffman, Sayed, and Badroodien (2016) state that teachers in different schools have diverse experiences. Some teachers require pastoral care-work, while others require pedagogical expertise or job status. Therefore, it is made explicit that teachers' ideas of work and needs differ depending on the school they are placed in. Moreover, Chisholm (2005) as expressed in the Educator Workload Study (2005) claims that there is a gap between policy and practice, that teachers workload exceeds the hours that they are expected to work. Clasquin-Johnson (2011) also confirms this gap between policy and practice, as mentioned in the previous section. Teachers found gaps in the policy and what they were expected to teach to the learners, and some tend to seek their old ways of

teaching and following the curriculum they were familiar with instead of following the new curriculum.

In the following section, I am going to summarise international results. Philipp and Kunter (2013, p. 1) state that “teachers from a range of different countries have shown that stress and burnout of teachers are associated with high workload and time pressure”. This is evident that the workload experienced by teachers in numerous countries causes a high burden of stress amongst the health issues that teachers experience. Sellen (2016, p. 7) summarises that “workload represents a significant barrier to accessing professional development according to 60 percent of teachers in England”. Teachers all over the world experience high levels of workload in various aspects of the profession, which can have different effects on teachers. Teachers also experience high cognitive demands. Boston and Smith (2009) state that teachers often select high levels of cognitive demands when asked questions about their demands. Teachers had to manage various tasks, which means that teachers have to keep their eyes on many tasks at once. Soysal (2020) argues that teachers are put in challenging situations and are forced to make difficult decisions within the profession. It is also said that teachers need to be required to come up with new ideas and remember many things in the profession, which is a high demand and causes much strain on teachers (LoewenbergBall & Forzani, 2009).

2.2.3.2 Learner Discipline and Emotional Demands of Teachers

Nkambule and Amsterdam (2018) raise the concern that there is a lack of support of teachers in South African schools, leaving them unequipped to deal with the demands of the profession and, thus, less likely to engage in CPD activities. Learners' misbehaviour and ill-discipline are major job demands of South African teachers (Motseke, 2020). Teachers may feel frustrated and spend most of their time disciplining learners, making them feel emotionally exhausted and burned out (Motseke, 2020) and, thus, less likely to engage in CPD activities. Makhasane and Khanare (2018) also clarify that violence against teachers in South African schools has grown rampant and is a concerning demand.

An intense display of demands faced by South African teachers is specified by Jackson and Rothmann (2005), who ascertain that racism, antisocial values, behavioural disorders, the working conditions, lack of resources and support may all contribute to teacher burnout, and thus, to a lack of CPD engagement (aligned with Job Demands Resources Model, Bakker &

Demerouti, 2007). Shaikhnag and Assan (2014) state that learners demonstrate arrogance, viciousness, impoliteness, truancy, and other types of misconduct, making teachers' lives very difficult. Some learners may have personal problems at home, and this is negatively reflected in the classroom. In other cases, learners may withdraw, which creates a different dynamic in the classroom (Suter, 2000). Moreover, Suarez (2007) contends that learners may be physically but not psychologically engaged in the class. Teachers have to deal with both of these behavioural problems in the classroom, which can be very demanding and may preoccupy them to an extent where they feel less likely to engage in CPD activities.

As a side-effect of learner ill-discipline, teachers may also face emotional demands in the classroom. Tuxford and Bradley (2015) argue that teachers face numerous emotional demands that place teachers in disturbing situations. Sometimes teachers continue thinking of these problems, even when they go home, leaving teachers highly strained. Chang (2009, p. 193) maintains that “learner behaviour and other teaching tasks may contribute significantly to teachers’ repeated experience of unpleasant emotions and those emotions may eventually lead to burnout”. Teachers experience negative learner behaviour and emotional demands, which leave them highly stressed and burned out. It is claimed by Santavirta, Solovieva, and Theorell (2007) that teachers find their jobs highly emotionally exhausting and found it very difficult to keep their momentum going.

2.2.3.3 Infrastructural Demands of Teachers

Depending on the region, area, and quintile/type of the school in which they teach, teachers face infrastructural demands. Roschelle, Knudsen, and Hegedus (2009) argue that the type of schools and the technological devices that teachers have access to play a role in how they can deliver lessons. It is evident that teachers may find it challenging to deliver a specific lesson if they do not have the correct technological devices needed to teach the lesson.

Nicodemus and Magutu (2018) claim that governments need to do more to provide schools with electricity or that energy changes need to take place for learners to learn effectively and teachers to teach efficiently. Moreover, Khan and Iqbal (2012) state that operative teaching was not conceivable in congested classes, and most of the teachers were experiencing discipline, physical, and assessment problems. Teachers find it extremely difficult to teach in an overcrowded classroom. This setup is not conducive to teaching and learning. Apart from these factors, of course, other infrastructural demands can be challenging. Lack of sanitation

is a worrying factor that also contributes to teachers' demands. Aremu (2012) contends that teachers and learners in Nigeria both get ill due to the lack of sanitation at schools and therefore are absent frequently. Teachers who experience a set of unfavourable infrastructural demands (e.g., a lack of electricity or computers at schools) might need to invest energy into overcoming these demands and may be less likely to engage in CPD activities.

2.2.4 Resources of Teachers

This section summarises research on teacher resources, encapsulates the role of resources for CPD engagement, and distinguishes between personal and job resources. Resources play a considerable role in CPD engagement and teachers' lives as a whole. Resources are needed to assist and guide the teachers toward developing professionally (Hobfoll, 1989).

There are two types of resources, i.e., personal resources and job resources. Personal resources are those in the personal domain, namely family support, supporting friends, or individual coping strategies with life or work stress (e.g., meditation, venting, or humour). Job resources are resources provided in the work environment, e.g., support from colleagues or supervisors and incentives (Bakker & Demerouti, 2007), making one perform one's job more effectively. It is expressed by Coldwell (2017), who speaks of the role of guidance, mentoring, and support, which can all help teachers to be motivated and develop themselves professionally. Additionally, Collinson et al. (2009) reiterate similar views. They indicate that collaboration with teachers on their required resources would positively change and assist with Professional Development.

Resources can assist teachers in developing professionally. Vähäsantanen, Hökkä, Eteläpelto, Rasku-Puttonen, and Littleton (2008), confirm that having sufficient resources for Professional Development was regarded as one of the most satisfying facets of the teacher educators' work and a significant element contributing to the responsibility of their work. This demonstrates that resources play an essential role in developing teachers in their field of work and as individuals. Job resources are vital predictors of work engagement (Xanthopoulou et al., 2007). However, the authors suggest that in addition to job resources, the personal resources of individuals should be considered. Moreover, Hökkä and Eteläpelto (2014) claim that relevant resources are organisational support (a job resource) as well as an individual agency (a personal resource) which highlights that apart from job resources, personal

resources should also be considered. Gana and Boblique (2000) state that personal resources and personal coping strategies assist teachers to a certain degree when dealing with burnout. First, I will focus on job resources that include social support from various people in a school as well as autonomy or access to information. Geldenhuys and Oosthuizen (2015, p. 203) highlight the non-beneficial role of “insufficient contribution of the school management to teachers' CPD; and teachers' reluctance to participate in CPD activities”. Principals and school management could positively affect teacher’s Professional Development through mentoring and coaching (Jones, 2015).

Resources are beneficial and can foster engagement in Continuous Professional Development. I will focus on three job resources, i.e., support from colleagues, support from supervisors/management, and social community at work. Support from colleagues is seen as a significant resource for teachers. Tatar (2009, p. 107) states, “many studies have reported teaching to be a stressful occupation. One of the most valuable coping strategies that teachers may employ is turning for help when pressed”. Teachers listed support from colleagues as one of the leading resources in the profession (Tatar, 2009). Jones, Youngs, and Frank (2013) argue that teachers need their colleagues' assistance. This helps lessen their burden, being aware that they have someone to lean on when they become vulnerable.

Moreover, Lorenz (2013) argues that support from management, supervisors, or principals is also a valuable resource for teachers. This author states that teaching is stressful in mainstream and special schools, but having support and guidance from your superior makes the load a little lighter. Moreover, Mitchell, Hirn, and Lewis (2017) argue that teachers need support from management to understand new policy changes or other reforms that may occur effectively. Having the support of their superiors assists them in doing their jobs correctly and getting tasks done efficiently.

Having a social community at work/school helps one tremendously when facing difficult situations; knowing that one has an entire team for support will have a positive effect. Kruse, Louis, and Bryk (1994) state that in schools where the professional community is strong, teachers work together more effectively, are more motivated, and achieve better results. Teachers' well-being benefits by being part of a strong social community network at school. It is also argued by Halverson (2003) that developing professional communities or social communities at work are very imperative for creative noble working relationships and building each teacher as they seek guidance and help from one another. Teachers have a

higher sense of satisfaction when they have a social community at work. When teachers have a strong social community, they are able to teach more effectively and more likely to influence their classes and learners to also engage in social and group communities that build each other (Baker-Henningham, Walker, Powell & Gardner, 2009). Teachers grow in their engagement when they have a social community at work. Therefore, if teachers feel frustrated and are unsure about specific aspects of their profession, they can reach out to their colleagues, management, or their social community networks at school. This could mean that, amidst the demands teachers face, having support as their main resource, they could still effectively engage in CPD activities.

Coping strategies are personal resources that teachers use in their personal capacity, perhaps outside of the school. For example, exercising, going for a walk, or meditating may help them calm down and manage job demands. Konza and Pappas (2008) contend that meditation has helped teachers deal with their demands of teaching. In some cases, teachers adopt various coping strategies in order to deal with their demands. Teachers often use various coping strategies, like taking walks, exercising, or speaking to a friend (Cancio, Larsen, Mathur, Estes, Johns, & Chang, 2018) to help them deal with their demands. It can be assumed that having a range of different coping strategies available will help teachers manage demands better and result in an increased engagement in CPD activities.

Resources can play a dual role in CPD engagement. First, they may have a direct effect contributing to more CPD engagement. The Job Demands-Resources Model (Bakker & Demerouti, 2007) postulates this and describes a motivational pathway (for more details, c.f chapter three). Second, they might have a buffering effect and may reduce the negative effect of job demands on CPD engagement. This means that they would – somewhat – reduce the detrimental effect job demands have and would result in a less strong negative relationship of job demands with CPD activities (c.f Chapter 3 for a description of the Job Demands-Resources Model; Bakker & Demerouti, 2007).

2.3 Summary

In this chapter, I have presented an overview of the relevant literature on teacher CPD and the role of job demands and resources in relation to teacher CPD. The specific job demands of teachers (in South Africa) were addressed, highlighting the role of high workload, cognitive demands, learner ill-discipline, emotional demands, and infrastructural demands.

Furthermore, I have discussed job resources (social support by colleagues, support from management and social community at work) and personal coping resources of teachers as well as the different effects on teacher CPD suggested in the literature (direct *versus* buffering effect). The next chapter discusses the theoretical framework that underpins this study.

CHAPTER THREE

THEORETICAL FRAMEWORKS

3.1 Introduction

This chapter describes the theoretical frameworks underpinning this study. Both the Job Demands – Resources (JD-R; Bakker & Demerouti, 2007) model and the Conservation of Resources (COR; Hobfoll, 1989) theory will form the basis of my study. These two frameworks have been selected because they work hand-in-hand to provide a lens for this study. The Job Demands – Resources (JD-R) model focuses on the job demands and resources of teachers, whereas the Conservation of Resources theory (COR; Hobfoll, 1989) focuses on the management of resources.

3.2 The Jobs Demand – Resources (JD-R) model

The JD-R model aims to explain that each occupation comes with its specific job demands and demonstrates two factors to consider, which are the job demands and job resources of an employee. The model extends and combines previous models, the Job Demands-Control model (Karasek, 1979) and the effort-reward imbalance model of Siegrist, Falck, and Joksimovic (2005). The JD-R model aims to show that there are imbalances between the demands and resources in employees' professions, leading to concerns about well-being. The model makes different assumptions about relationships between job demands and job resources and well-being and engagement.

First, I will focus on the assumptions regarding job demands. It states that job demands may negatively affect the well-being of employees, as well as have effects on organisational outcomes (c.f Figure 1 for details). When demands outweigh resources, they are also negatively associated with employee motivation and engagement. Below is a representation of the illustration of the Jobs Demands – Resources (JD-R) model by Bakker and Demerouti (2007).

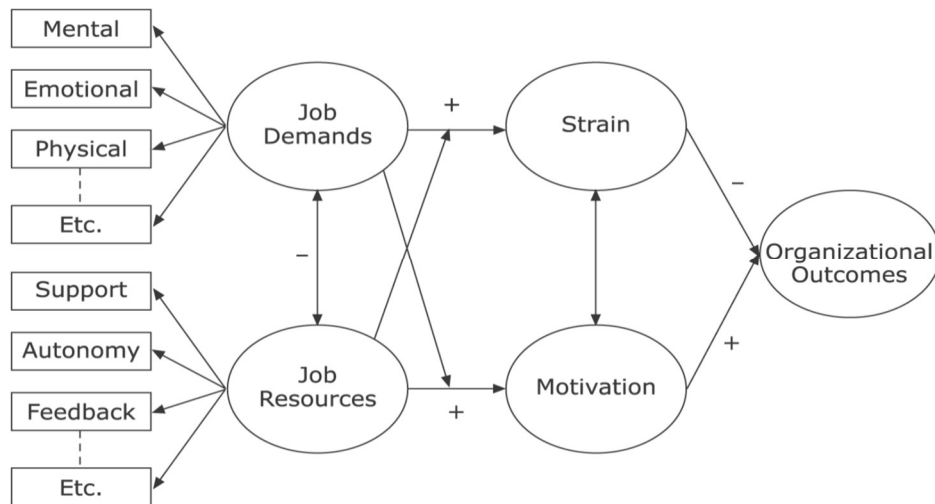


Figure 1: Job Demands-Resources Model (Bakker & Demerouti, p. 313).

The JD-R model explains two interlinked processes: a) an energetic process and b) a motivational process. The energetic process is triggered by various job demands, like workload or emotional demands, or physical working conditions (Bakker & Demerouti, 2007). An increase in such job demands leads to increased investment in effort and, thus, to an energetic process. It involves depleting one's energy when faced with constant job demands, poor job design, and a high workload. Energy depletion, in turn, causes health impairments and eventually strain (chronic stress or burnout). According to Maslach (2003), the consequences of an energetic process include exhaustion, both physically and mentally, fatigue, and the draining of individuals' energy (indicators of burnout). Over time, this might also affect other outcomes, e.g., performance or engagement in work-related activities.

Bakker and Demerouti (2007, p. 312) refer to job demands as "physical, psychological, social, or organisational aspects of the job that require sustained psychical or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological or psychological costs". This definition illustrates that demands affect employees both physically and psychologically. The typical demands in the context of this model are high workload, emotional demands, physical demands, and job stress (Hakanen et al., 2006). Several other job demands include physical and psychological aspects like poor job design or environmental/infrastructural demands (Halbesleben & Buckley, 2004).

The demands relevant for teachers are high workload, emotional demands, for example, having to deal with ill-disciplined learners, cognitive demands and physical demands, for

example, the lack of school resources and lack of support, which lead to impaired health of teachers (Tonder & Fourie, 2015).

The role of job demands, and the energetic process they may trigger, illustrate that job demands play a significant role in an individual's physical, mental, and emotional health. Moreover, these job demands may hinder employees from performing their day-to-day tasks (Bakker & Demerouti, 2007). Apart from describing the role of job demands, the JD-R model postulates the role of job resources in this process. According to the model, job resources can foster a motivational process contrary to the energetic process described above. The motivational process involves being recognised and motivated to do better at their jobs. An employee may feel more motivated to become engaged and perform exceptionally. This fosters intrinsic development, for example, refining the individual's evolution and learning and development. These constitute a direct effect of job resources on employee motivation or engagement.

However, the JD-R model (Bakker & Demerouti, 2007) also states that job resources may also have a buffering effect. This buffering effect can occur when job resources counterbalance the negative effect of job demands on employee well-being. Implying that an employee with high job demands may not experience a substantial decrease in his or her well-being if sufficient job resources are provided.

Job resources refer to those physical, social, and organisational aspects of a job helping in achieving work goals and stimulating personal growth, learning, and development (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Job resources include social support, job enhancement activities, increased control and autonomy, and increased participation in decision-making (Rothmann & Joubert, 2007). Job resources are not only important in terms of employees dealing with job demands but are also significant in their own right (Hakanen et al., 2006). Job resources are typically assistance or aids that help an individual to perform better and manage the demands of their profession (Bakker & Demerouti, 2007). Moreover, Bakker and Demerouti (2007) illustrate that job resources are social support, supervisory coaching, performance feedback, and time control. While much of the teacher research has been fixated on teacher stress, research on teacher engagement and job satisfaction has recognised some potential job resources. The job resources explored in previous studies include teacher autonomy, positive and supportive relations with colleagues, as well as with the school administration and the parents, perceived fairness, teachers' opportunities for

learning and development, value consonance, and collective culture (Collie & Martin 2017; Fernet et al., 2013; Hakanen et al., 2006; Simbula et al., 2011; Skaalvik & Skaalvik 2011a, b). Recently, the JD-R model also started to acknowledge the role of personal resources in addition to job resources (Xanthopoulou et al., 2007). The authors focused on the role of job resources for work engagement and exhaustion. Xanthopoulou et al. (2007, p.122) argue that “job resources are those physical, social, or organisational aspects of the job that (a) are functional in achieving work-related goals, (b) reduce job demands and the associated physiological and psychological costs, and (c) stimulate personal growth and development”. Therefore, it is evident that some job resources are able to reduce job demands and the adverse effects thereof. Additionally, in some cases, job resources can be seen as motivators; if sufficient job resources are available, individuals become committed to their jobs and strive to achieve their best since they derive accomplishment.

The JD-R model was already transferred into the teaching profession in a large-scale study conducted by Hakanen et al. (2006). The three job demands mentioned by Hakanen et al. (2006) are (1) disruptive learner behaviour, (2) work overload, and (3) a poor physical work environment. On the other hand, the job resources that the authors focus on are (1) job control, (2) access to information, (3) supervisory support, (4) innovative school climate, and (5) social climate. It was discovered by Hakanen et al. (2006) that job demands were positively associated with burnout and ill-health, while job resources were positively associated with engagement and organisational commitment and negatively connected to burnout. Also, burnout symptoms were negatively associated with organisational commitment and positively related to ill-health. However, job engagement was positively related to organisational commitment.

Next, I will describe the main assumptions of my second theoretical framework, the Conservation of Resources Theory (Hobfoll, 1989) which emphasises the role of resources for the development of individuals in detail.

3.3 Conservation of Resources (COR) Theory

The second theoretical framework selected for this study is the Conservation of Resources Theory (COR) by Hobfoll (1989, 2001) to further elaborate on the role of resources. The COR theory states that human well-being is based on the preservation and accrual of resources. The COR theory explains that the stress of individuals has increased tremendously. However,

at the time, there were not many models that allowed for conclusions on how to reduce stress (Hobfoll, 1989). Hobfoll (1989, p.513) explains that “current models are tautological and so can do little to move stress investigators toward new horizons of research”. The model has since been updated (Hobfoll, 2001) and is still a relevant model in the field.

Hobfoll (1989, p .516) defines resources as “the single unit necessary for understanding stress. Resources are defined as those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for the attainment of these objects, personal characteristics, or energies”. Therefore, we see that Hobfoll (1989) has introduced four sub-sections that can help assist one in achieving one desired goals in all spheres of life. Hobfoll (1989) articulates that these four characteristics, i.e., object resources, conditions, personal characteristics, and energies, offer different facets that help relieve or reduce stress and aid individuals in progressing in their jobs or own lives.

One of the theory's main assets is its description of different cycles of resource allocation, and it describes gain and loss spiral effects. According to Hobfoll (1989), a loss spiral means that individuals lack or do not have the resources available to offset the loss they have already experienced. For example, if someone is in debt and borrows more money to pay off this debt, he instead ends up with more obligation of having to try and escape his debt cycle. A loss spiral unravels as more resources are diminished when trying to offset the already present loss. According to Hobfoll (1989), a loss can result in physical impairments like material matters (a car or house, or health deteriorating – ending up in hospital/depression). Moreover, it could be the loss of a partner or loved one in bereavement. The loss could also refer to the loss of motivation and excitement about work. Hobfoll (1989) describes that such a loss spiral can eventually lead to disengagement and depression. Therefore, loss spirals can result in physical, personal, and emotional impairment.

On the other hand, a gain spiral involves equipping oneself with resources when one is not in a very stressful situation. The motive for increasing their resource pool is so that to strategise for future challenges. Such a gain spiral could be related to different domains such as work, family, financial, or even the person itself. However, a gain spiral can be set off when the anticipated availability of the relevant resource does not necessarily meet the individual's expectations. In some cases, adverse outcome dominates, or adverse consequences need to be deducted from the positive outcome and diminish their extent. Each person acts differently when faced with challenging situations. However, this theory shows that it is

essential how individuals 'invest' their resources to avoid or counteract a loss spiral or set off a gain spiral.

This theory is also relevant to teachers. A loss spiral refers to losing more resources while still trying to regain what an individual had before. For example, when teachers taught years ago, the calibre of learners was different, and they did not have to use as much of their energy and resources to perform their lessons. Now when dealing with a new calibre of learners, they are trying to revive their strategies from the past and, in turn, may end up investing a large number of resources in counterbalancing this (e.g., spending much energy on classroom management or buying resources for their lessons). However, their efforts are not appreciated and recognised by the learners, which then leaves teachers more demotivated than when they first started and lost more resources to gain new outcomes. Teachers who experience a high workload, a lot of emotional demands in their class and teach at an under-resourced school may face a loss spiral because the energy that goes into teaching under these conditions cannot be replenished when little resources are available. Such a teacher may not be inclined to engage in CPD activities because of this energy depletion. A loss spiral is set off. Not engaging in CPD means that even fewer resources become available (no new knowledge is obtained, no support from colleagues can be sought, teachers become frustrated), which feeds into the loss spiral.

A gain spiral can unfold if a teacher under such conditions as described above can invest resources by engaging in CPD activities, which may increase their knowledge on their subject, their pedagogical knowledge, knowledge on classroom management, or other areas. Moreover, when engaging in collective CPD activities, teachers may gain social support from others and experience a supportive atmosphere, even fostering the gain spiral. A gain spiral can also occur when teachers engage in CPD activities, are rewarded for engaging (either by incentive, recognition, certification, or promotion). This, in turn, assists them in wanting to engage further in these CPD activities. Additionally, teachers will use these skills in their profession and motivate them to want to gain more of these skills, which positively changes their mindset. Moreover, Bakker and Leiter (2010, p. 205) state "how engagement breeds engagement as the positive emotions, energy, self-efficacy, and other outcomes associated with engaging work, in turn, provide resources that increase future levels of engagement". This demonstrates that when teachers go through a phase of gain spiralling, they are more motivated and breed positive emotions, which spill into the school environment.

To sum up, the Conservation of Resources (COR) theory is a relevant theoretical framework for this study because it unravels the extent to which teachers may conserve resources to manage their job demands or even set off a gain spiral, which can lead to increased engagement in and profiting from CPD activities.

3.4 The Interweaving of the Theoretical Frameworks

Both these frameworks contribute to my study because they support one another, are intertwined and are linked with the Professional Development of teachers and their growth. The Job Demands – Resources (JD-R) model by Bakker and Demerouti (2007) speaks of two aspects, the energy and motivational pathways (as explained above). Every job (including the teaching profession) will come with its own set of job demands, which may reduce energy levels and lead to increased strain and less ability to engage on CPD. Yet, when personal or job resources are available, teachers will be more engaged and able to do their jobs to the best of their capabilities (direct effect). On the other hand, at least these resources can assist in reducing the demands of the job so that teachers are less burnt out and maybe more ready to engage in CPD (indirect effect).

Additionally, the Conservation of Resources (COR) theory by Hobfoll (1989) explains that if teachers are feeling less burdened (by investing resources to counteract a loss spiral) or can conserve resources to set off a gain spiral, they become more accomplished, they will be able to achieve their goals and engage in CPD activities. Consequently, how teachers deal with demands, how much resources they have available, and how they use them is crucial for their Continuous Professional Development.

Thus, both frameworks are interlinked because one attempts to explain how to relieve stress and develop motivation and engagement. The other theory adds how an individual can get more inspired and encouraged. One theory demonstrates the demands and outlines the effects of resources, but on a briefer scale (JD-R model). The other conveys more explicitly how the effects of resources may unfold and how they are managed (COR theory).

3.5 Summary

In this chapter, the theoretical frameworks were discussed, i.e., the Job Demands – Resources (JD-R) model and the Conservation of Resources (COR) theory. The relevance of both theoretical frameworks for this study was highlighted. It was further explored how job

demands and resources may hinder or cultivate the Continuous Professional Development (CPD) activities of teachers. In the next chapter, the research design and methodology of this study will be outlined.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter aims to outline the research methodology used in this study. The chapter then describes the context of the study, respondents in the study, procedures of data collection, method of data analysis, issues of validity and reliability will be and ethical considerations, limitations, and recommendations will be discussed in chapter seven. This chapter locates the study within the positivist paradigm. The research was conducted as part of a project (see further information below).

4.2 Research Design

Maree (2007) describes a research design as an approach that determines how to choose respondents, data collection, and data analysis procedures. In this study, I used a quantitative approach. In quantitative research, there are two types of strategies, i.e., experimental and non-experimental designs (Patten & Newhart, 2018). The non-experimental designs include: descriptive research studies, observational research, survey, and correlational studies as well as causal-comparative studies (Patten & Newhart, 2018). In this research, a non-experimental, correlational study was conducted, and, in particular, an explanatory correlational study design was chosen (Mertler, 2016). First, Mertler (2016, p.119) describes a correlational study as “research in education that seeks out traits, abilities or conditions that covary or co-relate with each other”. According to Mertler (2016), it is essential in such studies to comprehend the nature and relationship between two or more variables. Mertler (2016) further argues that an explanatory correlation study allows a researcher to understand and define specific associated proceedings, situations, and behaviours. Upon internalising and analysing this view of an explanatory correlational study by Merlter (2016), my objective was to achieve this in my study. I adopted this design because I sought to comprehend and display or rather describe the relationship between two or more variables: CPD activities, demands, and teachers' resources.

The objectives of the study were to investigate levels of CPD activities and correlate these with teacher job demands and job resources, which was to be conducted quantitatively through responses to questionnaires. Therefore, I used a quantitative design to collect data. According to Blanche, Durrheim, and Painter (2006), quantitative research seeks to prove or

disprove findings using figures and use arithmetical types of data analysis. Quantitative research allowed me to identify the types of CPD activities teachers are engaging in, quantify the time spent on those and how many teachers engaged in different types of CPD activities, and the levels of job demands and resources they are reporting. Furthermore, it allows me to calculate the strength of the relationship between job demands and resources and teacher engagement. Following the argumentation of Mertler (2016), I have conducted a non-experimental explanatory correlational study. As mentioned above, Mertler (2016) describes this type of study as a way of comprehending and describing the relationship between two or more variables, and this is what I have aimed at achieving in this study. I aimed at assessing the relationship between teacher CPD activity engagement, job demands and resources of teachers.

4.3 Research Paradigm

A positivist approach was the paradigm of choice for this study. Positivists assume that there is only one reality that exists, and the researcher should discover that reality (Bertram & Christiansen, 2014). Furthermore, positivist researchers have confidence that the world is well-ordered and functions conferring to systematic scientific regulations (Robson, 2002). Positivists believe that the inquirer and the inquired people are independent of each other, denoting that they do not persuade each other. They perceive that the goal line of research is to originate worldwide laws. Furthermore, positivists maintain that the researcher should continue to be unbiased to avoid principles and prejudices from manipulating their studies (Bertram & Christiansen, 2014).

Bertram and Christiansen (2014) further argue that positivists derive their investigational and experimental approaches from the Natural Sciences. Bertram and Christiansen (2014) contend that quantitative methods are principally used in the positivist paradigm. Moreover, Cohen et al. (2007) ascertain that positivists seek to investigate by using surveys or experiments to discover their results.

This research is positioned in the positivist paradigm that accentuates interpretation and experiences. The positivist paradigm was used because the researcher was dealing with the respondents in their context. Furthermore, the researcher was trying to investigate the phenomena through the collection of answers by the respondents through a questionnaire. The purpose of researching in this paradigm is to develop regulations or universal ideologies

that oversee phenomena and permit the forecast of pending proceedings (Bertram & Christiansen, 2014). Moreover, Cohen et al. (2007) elucidate that the positivist paradigm is used when the researcher treats the social world as a natural world, as an external object in a scientific investigation.

In the case of my research, teacher engagement in CPD activities was investigated, and the relationship between the job demands of teachers and their resources calculated via statistical procedures. This means that I aimed to prove the relationships between demands teachers face daily and their resources that assist them in managing their demands and engaging in CPD activities. I aimed to prove that a high level of demands teachers face negatively affects teachers' CPD engagement in a negative way. Whereas the resources that assist teachers in managing their demands positively and positively affect teachers' CPD involvement.

4.4 Sampling and Recruitment of Respondents

According to Bertram and Christiansen (2014), sampling is a strategy used to choose respondents' settings, events, or behaviours. In this study, purposive sampling was used. Bertram and Christiansen (2014) state that purposive sampling aims to choose a sample of respondents that are from a specific group or has specific characteristics. Patten and Newhart (2018) echo similar sentiments about purposive sampling, which purely reiterates that the sample selected will form a sound foundation of information.

For this study, schools in the Umlazi and Pinetown districts were targeted. There is a total population of 161 secondary schools in the Pinetown district. The Umlazi district has 159 schools (List of All Primary and Secondary in Umlazi/Pinetown, KwaZulu Natal, 2021). The focus was on secondary teachers because their set of job demands differs from primary school teachers. By including schools from different quintiles, teachers from various backgrounds could be included in the study. The study was conducted in the Umlazi and Pinetown districts because teachers in these areas face a specific set of job demands (purposive sampling). Of the entire population of schools, 51 schools were contacted based on convenience sampling. Of these, 18 schools agreed to participate in the study (18 schools, 4 schools were from the Pinetown district and 14 were from the Umlazi district). The response rate was 5.6% of the overall population and 35% of the contacted schools.

Of course, not all teachers in these areas could be recruited for the study. Therefore, only a part of the entire population was included to answer the research questions. This smaller group or subset, as mentioned by Cohen et al. (2007), is known as the sample. Cohen et al. (2007) demonstrate that this group or subset will satisfy the need for exemplifying a sample of the population that is required.

Before conducting the study, permission was sought from the Department of Basic Education (DBE) in the province of KwaZulu-Natal (KZN), as well as from the Humanities and Social Sciences Research Ethics Committee at the University of KwaZulu-Natal based on gatekeeper letters indicating schools' interest in the study. Upon receiving relevant permissions, schools were approached by different researchers, and it was explained thoroughly what the study aims to do, which research topic is addressed, and paper-pencil questionnaires were handed out to teaching staff. Many teachers were reluctant to participate, but in some cases, principals encouraged teachers to participate. Completed questionnaires were returned after a week and were collected in a sealed box to protect respondents' identities (c.f the section below on other precautions taken to protect respondents.)

This study was part of a larger project entitled "Demands and personal resources of teachers in two districts in KwaZulu-Natal as predictors of their levels of strain and ill-being". This project was funded by the National Research Foundation (NRF) through the Human and Social Dynamics Funding Instrument (HSD170621242989) to investigate teaching conditions and their relevance for teacher wellbeing in the Pinetown and Umlazi districts in KwaZulu-Natal. The project consists of different phases, and the data reported here was part of a first data generation wave conducted from September to December 2019.

4.5 Schools and Respondents

In total, 150 questionnaires were distributed, and a total of 123 questionnaires were returned; 22 questionnaires had to be discarded due to missing data or incomplete codes. One hundred one questionnaires could be used for data analysis (return rate: 82%).

The sample consists of 123 teachers from 18 different secondary schools in KwaZulu-Natal that participated in the study. The quintiles ranged from 1 to 5, indicating that teachers worked at a range of schools, from well-resourced to under-resourced schools. Teachers from various backgrounds participated in the study.

Respondents differed in age, experience, and gender. The ages of the teachers ranged from 22 years to 69 years, showing that a broad age range was represented. On average, the teachers were 44 years old ($M=44.03$, $SD=12.29$, see Table 1 below).

Table 1: Age of respondents as well as time spent in the profession (N=117-119).

	Min	Max	M	SD
Time in the profession	.00	45.00	18.58	12.13
Age	22.00	69.00	44.03	12.29

Some were teaching for up to 45 years and were close to retirement, while others were newly appointed teachers. 21% of the respondents were male, and 79% were female. Teachers came from schools with different profiles. The majority came from Quintile 5 schools (53%), and only a few teachers from Quintile 1 schools participated (8%).

Table 2: Respondents according to Quintiles of Schools they worked at.

	Frequency	%
Quintile 1	8	7.6
Quintile 2	17	16.2
Quintile 3	5	4.8
Quintile 4	19	18.1
Quintile 5	56	53.3

4.6 Data Collection Tools

The data collection method used in this study is a questionnaire. Bertram and Christiansen (2014, p.73) describe a questionnaire as “a list of questions that the respondents answer”. Moreover, Cohen et al. (2007, p. 317) explain a questionnaire as “a widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and often being comparatively straightforward to analyse”. Below there are other explanations about the different types of questionnaires.

There are different types of questionnaires (Cohen et al., 2007), and they can use different types of response formats. Questionnaires could use open-ended questions that allow the

respondents to give their own opinions and express themselves verbally. Close-ended questions (so-called items) allow respondents to select a single option choice from the list provided. A prevalent format for close-ended item responses is Likert-type response scales which offer respondents to choose from a predesigned set of responses. Likert-type response scales have the advantage of measuring responses at an interval scale level (Kossowski & Hauke, 2012). Dichotomous items make respondents answer with a simple "yes" or "no." The questionnaire in this study makes use of these three forms of response formats. Please find a summary of variables assessed and items used below, including the response formats for the items.

The study instrument was piloted in 2018. Respondents in the pilot were between 23 and 59 years old ($M=37.38$, $SD=10.38$) from nine schools in KwaZulu-Natal. The majority of the respondents came from secondary schools (78%), followed by respondents who worked at junior/senior primary schools (15%) or technical schools or other schools (7%). Ethical Clearance for the pilot study was granted by the Humanities and Social Science Research Committee of The University of KwaZulu-Natal, and permission for the study was obtained from the Department of Education in the province of KwaZulu-Natal (South Africa). As part of the pilot study, instruments had been tested for their reliability (internal consistency) before being used in this study. Based on the results of the pilot study, instruments were adjusted by omitting items to a) increase internal reliability of scales or b) to make them more economical for the respondents.

Various scales were included in the questionnaire to assess teacher's engagement in CPD activities, the job demands of teachers, and their resources. CPD engagement was assessed by providing a list of 12 CPD activities (for example, attending courses/workshops, attending conferences/seminars, or studying towards a degree at a tertiary education institution). Apart from these formal activities, the list also contained informal activities (for example, reading material on classroom management or reading material on the subject). The internal consistency of this scale was acceptable (Cronbach's Alpha = .71). Teachers were asked if they had attended/engaged in CPD in the last six months, how many hours they have spent on each activity, and who had organised these activities. This list was adapted from the Teaching and Learning Survey (TALIS) Study published by the Organisation for Economic Co-Operation and Development (OECD) (2009). Responses were captured as follows: dichotomous

response on attending the activity (yes/no), the number of hours spent on the activity, and if oneself (1), the school (2), or someone from outside the school (3) had organised the activity. Teachers were also asked to report how many professional development activities they engaged in, in the last six months (single item, self-developed).

Respondents' answers were quantified based on the dichotomous variable for attendance for each of the listed CPD activities. Thereafter, the total hours were quantified by calculating a sum score of hours spent on an activity or all activities.

Job demands of teachers were assessed, i.e., workload, cognitive demands, disruptions by learners, emotional demands as well as infrastructural demands.

The workload of teachers was assessed by three items (for example, "Is your workload unevenly distributed, so it piles up?"). One item was reverse coded. The items were taken from the Copenhagen Psychosocial Questionnaire (COPSOQ) by Petjersen, Kristensen, Borg, and Bjorner (2010). The internal consistency of this scale was just below the cut-off and is considered acceptable (Cronbach's Alpha = .69).

Cognitive demands were assessed using five items (for example, "Does your work require you to make difficult decisions?") from the COPSOQ by Kristensen et al. (2010). The internal consistency of this scale was good (Cronbach's Alpha = .73).

Emotional demands of teachers were assessed with seven items (for example, "Does your work put you in emotionally disturbing situations?"), again from the COPSOQ in the format developed by Kristensen et al. (2010). These scales were assessed on a 5-point Likert-type response scale ranging from 1 – Never/Hardly Ever to 5 – Always. The internal consistency of this scale was good (Cronbach's Alpha = .72).

Six items from on Customer-related Social Stressors and burnout (CSS) scale from Dormann and Zapf (2004) were used to assess *disruptions by learners* (for example, "I had to deal with learners who argued with me"). Responses were captured on a 5-point Likert-type response scale ranging from 1 - strongly disagree to 5 - strongly agree. The internal consistency of this scale was good (Cronbach's Alpha = .74).

Furthermore, *infrastructural demands* of teachers were assessed with four items which were adapted from the Infrastructure item School Management Survey (SMS) by Technical report School Monitoring Survey (TRSMS) 2017-2018 published by the Department of Basic Education (DBE). A list of potential infrastructural demands was presented to the

respondents. For each item on the list, they had to choose if their school is equipped with this or not (for example, internet facilities for staff). The internal consistency of this scale was just below the acceptable cut-off and can be considered acceptable (Cronbach's Alpha = .64).

The following scales assessed *the resources* of teachers. Job resources were assessed: support by colleagues, support by management, and social community at work. Coping strategies were assessed as a personal resource of teachers. *Social support by colleagues* was assessed using three items (for example, "How often do you get help and support from your colleagues?"), *social support by management* was also assessed by three items (for example, "How often is your nearest superior willing to listen to your problems at work?") and so was a *social community at work* (for example, "Do you feel part of a community at your place of work?"). Items for all three scales came from the COPSOQ (Pejterson et al., 2010). All were assessed on a 5-point Likert-type response scale ranging from 1 – Never/Hardly Ever to 5 – Always. The internal consistencies for these scales were good (Cronbach's Alpha – support from colleagues = .79, Cronbach's Alpha – support from management = .81, Cronbach's Alpha – a social community at work = .76).

As a personal resource of teachers, coping mechanisms were assessed based on the Brief Cope (Carver, 1997). There are 20 items in this scale, assessing if teachers seek emotional support, meditate, or trying to focus on other things (for a full list, c.f the questionnaire attached in the appendix). Respondents were asked to respond on a Likert-type response scale ranging from 1 = Never/Hardly ever to 5 = Always. The internal consistency of this scale was good (Cronbach's Alpha = .89).

Demographic information of the teachers was assessed by asking them to state their gender (female vs. male), their age, and the time they spent in the profession. Also, information on the school was assessed, i.e., the quintile of the school teachers work at. These were used as control variables in the statistical analyses.

In addition to these close-ended items, the following open-ended questions were integrated into the questionnaire:

What are the most difficult things in your job as a teacher? (job demands)

Which aspects of your job helped you to manage the demands of teaching? (job resources)

What are YOUR most important strengths which help you manage the demands of teaching? (personal resources).

What else? (open category for additional comments).

4.7 Quantitative Data Analysis

Questionnaire data were entered into SPSS version 25 and then analysed using versions 26 and then 27 (IBM, released 2015, 2016, 2017). Missing data were treated by SPSS as default (listwise deletion). Field (2005) describes statistics as using numerical values to express data. First, data were analysed descriptively (Means (*M*), Standard Deviations (*SD*), and Frequencies). Next, I used inferential statistics to calculate the strength of the relationships between job demands or job resources and CPD activities. Effects were tested using inferential statistics (bivariate Pearson product-moment correlations) to establish bivariate effects between demands/resources and teacher CPD.

There are different types of Pearson correlations that one can use, namely bivariate, partial, distances, and canonical correlations. For my study, I have chosen the Bivariate Pearson Product-Moment Correlations. Hauke and Kossowski (2011, p. 88) state that “Pearson’s correlation coefficient is a measure of the strength of the linear relationship between two such variables”. In my study, those two such variables are the job demands and resources of teachers in relation to CPD activities. The reason I have chosen this type of correlation is that I wanted to measure the strength of the relation between the job demands and resources of teachers in relation to CPD activities and engagement of teachers. Bivariate Pearson product-moment correlations were chosen to assess linear relationships between study variables. Moreover, items were assessed at interval scale level (using Likert-type scales), which is a prerequisite for Pearson Product-Moment Correlations (Kossowski & Hauke, 2012).

Finally, to calculate a model containing the relative effects of all independent variables (job demands, job, and personal resources) on the dependent variables (CPD engagement and selected CPD activities). A series of hierarchical regressions were calculated for the different dependent variables. In each regression, control variables (age and quintile) were entered first, followed by job demands, and in step three, resources were entered into the model. In order to analyse the strength of the relative effects of all independent variables, standardised betas are reported. In order to show how much variance was explained by each model, R^2 and Adjusted R^2 are reported.

By entering resources in step three of the hierarchical regression model, buffering effects can be tested because the reported effects also take the effects of job demands into account in the same model.

4.8 Quality criteria

This section focuses on the quality criteria within quantitative research, which include validity, reliability, and internal consistency. First, validity will be explained, and then there will be a focus on content and construct validity. After that, a focus on reliability and internal consistency. This study uses a questionnaire as the instrument of data collection. The questionnaire was standardised and structured, consisting of both closed and open-ended questions. In the following sections, I summarise information on important quality criteria in quantitative research and reflect on the validity and reliability of the instrument used in this study.

4.8.1 Validity in Quantitative research

Validity is referring to something justifiable (Bertram & Christiansen, 2014). Golafshani (2003) describes validity as a quality criterion that measures what it anticipates to measure or measures how authentic the results are. Validity, as defined by Kimberlin and Winterstein (2008, p.2276), “is the extent to which the interpretations of the results of a test are warranted, which depends on the particular use the test is intended to serve”. Cohen et al. (2007, p.133) state that “while earlier versions of validity were based on the view that it was essentially a demonstration that a particular instrument, in fact, measures what it purports to measure”. Additionally, newer versions assist researchers to make conclusions more reliable, efficient and precise (Mertler, 2016).

Additionally, Mertler (2016, p.138) states that “validity of research refers to the degree to which research conclusions can be considered accurate and generalisable”. These definitions summarise the essence of what validity within quantitative research is.

4.8.2 Face validity

Cohen et al. (2007, p. 163) state that “face validity is where, superficially, the test appears – at face value – to test what it is designed”, which means that the questions represented in a questionnaire are going to measure what they intend to test in the eyes of fellow researchers. Moreover, this definition is confirmed by other authors such as García-Pérez (2012) or Jhangiani et al. (2015). Face validity is the degree to which a measurement method appears “on its face” to measure the construct of interest.

4.8.3 Content validity

Content validity is achieved by making professional judgements about the relevance and sampling of the contents of the test to a specific domain. It is involved with handling and demonstrative rather than with patterns of responses or scores (Cohen et al., 2007). Content validity is described by Kimberlin and Winterstein (2008, p. 2279) as a “type of validity that addresses how well the items developed to operationalise a construct provide an adequate and representative sample of all the items that might measure the construct of interest”. Moreover, Cohen et al. (2007) argue that content validity is about making proficient verdicts about the sampling and significance of the content. It is more concerned with coverage and whether it represents the target population. Moreover, content validity is the degree to which a measure embodies or signifies the construct of interest (Jhangiani et al., 2015), which means that if you are doing a study on teachers' wellbeing, all factors should include questions focusing on this topic. Items and scales selected for this study were previously developed and tested by the authors of the instruments. It has been established that the scales have been scrutinised by researchers internationally and are thus content valid. Piloting has also contributed to this prior to the study.

4.8.4 Construct validity

Construct validity means that an instrument does measure what it intends to (Bertram & Christiansen, 2014). Construct validity is defined by Kimberlin and Winterstein (2008, p. 2279) as “a judgment based on the accumulation of evidence from numerous studies using a specific measuring instrument. Evaluation of construct validity requires examining the relationship of the measure being evaluated with variables known to be related or theoretically related to the construct measured by the instrument”. Golafshani (2003) ascertains that construct validity comprises of the preliminary idea, belief, inquiry, or hypothesis that regulates which data is to be collected and how. These definitions of construct validity capture the essence that this type of validity is based on collecting data relevant to the specific study and measures what is necessary for the study. Construct validity is when the instrument measures and asks questions that seek to prove what the construct determines (Cohen et al., 2007). Upon analysing these definitions of construct validity, my instrument is based on existing and well-established scales used before in similar research. Construct validity could be established by

correlating different scales measuring theoretically related constructs and by testing if these correlations indicate significant relationships.

4.9 Reliability in Quantitative Research

Reliability refers to the consistency or dependability of the results (Bertram & Christiansen, 2014). Golafshani (2003) argues that reliability in quantitative research is when there is replicability of results or testability, which means that it will most likely produce the same or similar results when the research is performed again. Saldaña (2014) ascertain that reliability refers to replicability and accuracy of measures within data. Kimberlin and Winterstein (2008, p. 2277) establish that “reliability estimates are used to evaluate (1) the stability of measures administered at different times to the same individuals or using the same standard (test-retest reliability) or (2) the equivalence of sets of items from the same test (internal consistency) or of different observers scoring a behaviour or event using the same instrument (interrater reliability). Reliability coefficients range from 0.00 to 1.00, with higher coefficients indicating higher levels of reliability”.

Reliability thus refers to the consistency of a measure. Three types of consistency are to be considered: over time (test-retest reliability), across items (internal consistency), and different researchers (inter-rater reliability) (Jhangiani, Chiang & Price, 2015). In this study, the second aspect of reliability is relevant and was assessed.

Kimberlin and Winterstein (2008) define internal consistency as an approximation of the equality of sets of items from the same test and state that it is important to note that the coefficient of internal consistency should approximate the reliability of measurement. Moreover, Kimberlin and Winterstein (2008) state that Cronbach’s alpha is the most common measure of internal consistency. It is a function of the average intercorrelations of items and the number of items of the scale. The reliability tests’ rationale is that an acceptable Cronbach’s Alpha is .70, which means, in this test, Cronbach’s Alpha proves how closely related a set of items in a group are, this is known as the internal scale reliability (Cohen et al., 2007).

In this study, Cronbach’s Alpha was used to calculate scale reliability. In order to ensure that acceptable internal consistencies of scales were achieved, Cronbach’s Alpha was calculated, and it was checked that scales met the acceptable standard of Cronbach’s Alpha needs to be

.70 or higher. Some scale items were also deleted to ensure reliability and internal consistency.

4.10 Ethical considerations

McMillan and Schumacher (2006) state that ethical considerations denote all the safeguards, stages, and precautions which researchers need to put into place to protect the research respondents. Ethical considerations are related to research in general and those pertaining to the nature of the particular study. The ethical considerations will be with an orientation to self-respect, familiarity, and confidentiality.

Cohen et al. (2007) argue that ethics is understood as honouring the rights of respondents and protecting their rights. Additionally, Terre Blanche and Durrheim (2002) elucidate that ethical research has to protect the well-being and the civil rights of research respondents. Correspondingly, Babbie, and Mouton (1998; 2009), state that the researcher needs to ensure that respondents take part voluntarily and that they are not harmed. Thus, in my research, all respondents were aware of their conscious and available right to withdraw at any time from the study. They were presented with informed consent documents and were briefed about the study in personal visits to the schools. They were also assured anonymity and confidentiality of their responses. Maree (2007) says to be able to accomplish that, pseudonyms or codes can be used instead of the real names of the respondents. In this study, respondent codes were created by the respondents at the beginning of the questionnaire and only known to them.

Another ethical consideration is autonomy (Cohen et al., 2007). Autonomy means that a person can make a decision on whether they would like to be a part of research or not, as well as having a right to agree or disagree with being a part of the research (Cohen et al., 2007). Moreover, researchers have to respect the decisions of respondents to participate or not in research. Autonomy was ensured by explaining to the respondents that I need their consent or agreement to participate in my study and also ensured that they were aware and that they are free to withdraw or leave at any time. Moreover, non-maleficence (which means to do no harm) was also ensured (Cohen et al., 2007). I did not intend to traumatise or harm my respondents in any way. That is why I ensured that the respondents felt free to withdraw from the research at any time that they had felt uncomfortable. Respondents were also not forced to answer any questions that made them feel uneasy. And, the respondents answered the questionnaires at their leisure. In addition, a sealed box with a small opening at the top

was left for teachers to drop their answered questionnaires into based at the reception area of each school. This was done to prevent teachers from feeling overwhelmed, victimised, or scared of someone else reading their answers. Therefore, the box was placed at a neutral place for respondents to drop their questionnaires to alleviate the stress and fear of being victimised by colleagues or superiors.

Furthermore, another ethical consideration is that of beneficence, which means it should be of benefit to those directly involved or indirectly involved (Bertram & Christiansen, 2014). I believe that this will be of interest to the respondents as it may inspire them to get more engaged in CPD activities, and perhaps influence others to do so, and/or create resources that allow for professional development to happen. Additionally, I believe it is of benefit to other researchers as there is not much research done on my topic, and I think that this will open doors to similar studies such as mine. Ethical clearance was obtained from the Humanities and Social Sciences Ethics Committee at the University of KwaZulu-Natal (c.f Appendix A for Ethical Clearance certificate).

4.11 Summary

This chapter provided information on the methods used in this research. It not only illustrated the appropriateness of the quantitative research approach used in this study. However, it also described the nature of the study, the method used to collect data, and the data analysis procedures. It was also described how ethical concerns were considered in the study. The data that was generated through the use of these methods will be presented in the subsequent chapters. The next chapter will summarise the results in relation to the research questions/objectives of this study. Furthermore, it exemplifies the findings from the generated data.

CHAPTER FIVE

RESULTS AND DATA PRESENTATION

5.1 Introduction

The previous chapter outlined the research design and methodology of this study. The purpose of this chapter is to present the results and interpret these findings. In this chapter, I will present the findings based on the research questions. First, I will look at descriptive statistics summarising the different types of CPD activities teachers engage in and how often they do this. Secondly, I will analyse and note the various job demands that teachers have reported and present how they are related to the CPD activities of teachers. Thirdly, I will present findings on the resources of teachers and how they are related to the CPD activities of teachers. Finally, I will present a comprehensive model on how job demands, as well as resources, are related to CPD engagement of teachers using linear regression.

Open-ended items were included in the instrument to allow respondents to further elaborate on relevant aspects of the study. The results are then discussed in terms of the research questions presented in chapter one and the theoretical frameworks outlined in chapter two.

Creswell (1994) states that human collaboration in a study and setting are joined at the hip. To be able to recognise social interaction, one needs to know the context where human interaction occurs. Hence, it is vital that I provide a portrayal of both the research site and the respondents. Lastly, there is a presentation and analysis of the findings in terms of graphs and interpretation.

5.2 CPD activities that secondary school teachers engage in

Respondents reported that they engaged in an average of four CPD activities in the last six months ($M=3.94$, $SD=4.41$, Range 0-28 activities).

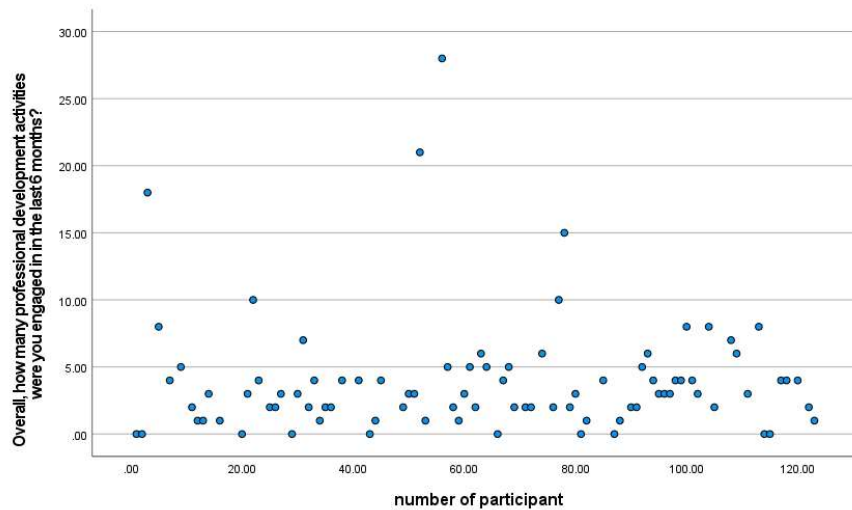


Figure 2: Scatterplot of the number of CPD activities attended in the last six months across respondents (N=123).

Whereas the majority of respondents attended up to five activities, very few teachers report high numbers of activities. A total of 13 Continuous Professional Development (CPD) activities were presented in the questionnaire as options for teachers to choose which ones they had attended. In this way, I could find out which types of activities teachers were engaged in. To address my first objective/research question (RQ1) on the types of CPD activities teachers engage in, I have analysed information on CPD activities at scale level and individual item level using descriptive analyses.

Table 3: Types of CPD activities attended by teachers in the last six months (N=113-120).

Type of CPD activity	Number of teachers attending this CPD activity	Percentage of teachers attending this CPD activity
Reading material on my subject	116	97
Reading material on classroom management	94	78
Reading material on... (please specify)	77	76
Participation in a network of teachers from my school	70	61
Participation in a network of teachers including teachers from other schools	79	68
Attending courses/workshops	85	73
Enrolling in online workshops	25	21
Attending a conference/seminar	50	44
Conducting observation visits to other schools.	28	24
Conducting individual or collaborative research	45	39
Engaging in mentoring and/or peer observation and coaching	54	47
Studying towards a degree at a tertiary education institution	33	29
Other (please specify)	10	24

For the CPD activity section, results indicate that most teachers engage in reading material on their subject (97%) or reading material classroom management (78%), and finally, they also engage in workshops (73%) as part of their Continuous Professional Development (CPD) activities. These are the most prevalent activities that the majority of the respondents have been engaging in.

Out of 123 respondents, 85 respondents stated that they engaged in workshops as part of their CPD activity involvement, which is more than half of the respondents that indicate that workshops are one of their most practised forms of CPD engagement (cf. table 3 above for more details). Additionally, 116 respondents engage in reading material on their subject as a form of CPD, which is more than 94% of the respondents. Moreover, I have noticed that fewer

teachers engage in ongoing studies (postgraduate studies and other degrees = 29%). Similarly, fewer teachers engage in enrolling in online workshops and conducting observation visits to other schools as a form of CPD.

Moreover, after analysing the data, it is quite evident that most teachers predominantly engage in workshops and reading material on subject or classroom management as part of their Continuous Professional Development (CPD) activities when choosing from the list of 13 possible activities. Furthermore, teachers engage less in studying towards another degree and enrolling in online workshops as a form of CPD.

It was noted that the maximal amount of time was spent on CPD activities such as workshops, reading material on the subject, and reading material on classroom management. It is noted that whilst there may be plenty of CPD opportunities out there for teachers to engage in, they spent most of their time engaging in workshops and reading material on subjects and reading material on classroom management (cf. Table 4). It was also noted that a minimal amount of time was spent on CPD activities such as enrolling in online workshops, conducting observation visits to other schools, and studying towards another degree (postgraduate studies).

Table 4: Types of CPD activities in the last six months and time spent on these activities (N=10-101).

Type of CPD activity	N	Time spent on these activities	
		M	SD
Reading material on my subject	101	29.90	78.24
Reading material on classroom management	83	14.76	25.48
Reading material on... (please specify)	65	25.18	45.55
Participation in a network of teachers from my school	65	34.63	200.30
Participation in a network of teachers including teachers from other schools	61	19.18	95.60
Attending courses/workshops	68	8.04	12.04
Enrolling in online workshops	17	20.24	47.43
Attending a conference/seminar	14	7.14	10.60
Conducting observation visits to other schools.	30	11.03	17.34
Conducting individual or collaborative research	33	67.48	261.95
Engaging in mentoring and/or peer observation and coaching	44	9.14	15.46
Studying towards a degree at a tertiary education institution	24	42.29	68.11
Other (please specify)	10	30.20	50.96

The time spent on CPD activities by the respondents varies (c.f as represented by Table 4 above). It is important to note that teachers spent a significant amount of time conducting individual or collaborative research. On the other hand, less time was spent on workshops, conferences, and seminars, as well as engaging in mentoring and/or peer observation and coaching. It can also be seen from Table 4 in as much as respondents show engagement in certain CPD activities less, for example, workshops. It is interesting to note that they spent more time in their personal capacity doing their own research and reading on various topics of their preference.

On engaging with some of the responses to the open-ended questions, I noted that most teachers said that they would like more engaging workshops to develop skills that they were not already using; or else, that they would like to avoid monotonous workshops that give them the same information that they were already aware of. Teachers require new and innovative workshops that build on the skills that they already have or expose them to new skills that will be beneficial to them and the profession as a whole.

For example, teachers complained about having to attend workshops on subject matter that has not changed. Teachers were required to attend the same, repetitious workshops that explained aspects that they were already fully trained in and subject matter that remained the same. They wanted more intriguing tasks, like engaging in technological advances (in the technology subject or all subjects), skills training on operating technological devices within the classroom setting, or else new skills to teach reading and writing, new methods of teaching certain Mathematics concepts like long division for example. Teachers simply required something new, innovative, and refreshing.

Teachers did not want to just keep attending workshops religiously for the sake of achieving CPD points, but finding that it was not beneficial to them. They sought more prospects for progress and workshops that were advantageous and dynamic. They asked for workshops or reading material that equipped them with new skills and knowledge. Educators did not want to obtain information and skills that they have previously obtained and are already practising. On the other hand, receiving knowledge in their reading materials (on classroom management), that was not relevant or beneficial to their specific classroom and school context, therefore, did not assist them in any way. Moreover, the reading materials did not show new methods or ideas on how to deliver lessons more effectively.

First, some of the responses mentioned by teachers in the open-ended questions include: “Classroom control, safety, limited resources. Actual workshops that assist in managing the classroom would be beneficial to all teachers, as learner discipline dwindles” (MI07).

“Learners discipline is bad. Skills and workshops are needed to assist with learner discipline” (L0217).

“Fulfilling workshops that equip teachers with skills are needed and lacking” (MA3M).

“More innovative workshops that give us skills that we do not already have” (AM220C).
 “Current workshops are boring and monotonous; they keep sharing the same old information with us. We need more, we need something new and refreshing” (MO0609).

“Having CPD activities such as workshops that do not equip us with technological skills needed as the profession changes and progresses” (RO23SE).

“Achieving more and more CPD points, but not actually gaining any real skills that I can use in my job” (MI0123).

“Schools and government need to offer teachers more intriguing and captivating CPD activities, so as to grow us with happiness and enjoyment” (SA0710).

“Having workshops that are not vigorous, or only having to attend workshops. No other CPD activities to choose from” (BY0223).

“We need to be equipped with skills to assist us in our professions, meaningful skills that I can use in the classroom. That is what workshops should include” (FA01).

After engaging with the open-ended responses to the questionnaire, it is evident that most respondents shared similar sentiments in terms of CPD engagement, workshops, and reading materials on subjects and classroom management.

5.3 Job Demands of Respondents

There are various job demands experienced by teachers. In response to my second objective/research question two (RQ2), first, descriptive statistics will be used to report levels of job demands experienced by teachers, i.e., levels of workload, cognitive demands, emotional demands, disruptions by learners, and infrastructural demands.

Table 5: Descriptive Statistics of Job Demands (N=123).

	Min	Max	M	SD
Workload*	1.00	4.67	2.89	.80
Cognitive demands*	1.80	5.00	3.85	.75
Emotional demands*	1.57	5.00	2.96	.66
Disruptive learners**	1.00	5.00	3.33	1.02
Infrastructural demands***	1.30	2.00	1.70	.20

Note: Responses on a 5-point Likert-type response scale: *1-Never/Hardly Ever to 5-Always, **1-Strongly Disagree to 5-Strongly Agree, *** Dichotomous response: 1-no, 2-yes.

Teachers were asked about whether they were getting behind with their work and about not having enough time to complete their tasks as part of their workload. The results in Table 5 show that the teachers experienced moderate to high levels of workload in the profession. The results also show that teachers do report high levels of other job demands, i.e., quantitative cognitive and emotional demands as well as disruptive learners and low levels of infrastructural demands.

The highest levels of job demands were reported for cognitive demands (having to switch between tasks and focusing on a lot of things at the same time). This seems especially challenging for the teachers in this sample.

Another job demand also seemed to be high and that many teachers seem to find challenging was disruption by learners. Teachers mentioned this demand often in the open-ended questions in the questionnaire. Most teachers mentioned how difficult disruptive learners make it problematic and stressful to perform their jobs to the best of their ability.

Second, this is one of the major demands of teachers and is also expressed in the responses to the open-ended questions quoted below. Numerous teachers state the argumentative nature of the learners and that learners often interrupted the class flow and criticised the teacher. Teachers found the disruptive nature, ill-mannerisms, and ill-discipline of learners extremely demotivating and strenuous. Some of the responses mentioned by teachers in the open-ended questions include “Discipline; Lack of support from senior management and Department of Education. Parents not involved in their children's education” (FA01).

“Cooperation of other teachers. Learners under the influence of drugs. Uncooperative parents. Too many demands by the department” (FA23DE).

“Admin work is extremely frustrating. Monitoring and control by the department are limiting. Delivery of the curriculum should be of paramount importance, not deadlines, these are restricting!” (MA02DE).

“Big/Large classroom sizes, Uncooperative learners, Cell phone usage by learners, Violence at schools are chief demands faced by teachers” (KA23JU).

“Ill-discipline, disrespect, the arrogance of learners. Increasing workloads. Poor results leading to frustration, disillusionment, low levels of motivation. Lack of parental involvement and support is a demand for me” (RA8JU).

“Teaching overloaded classes where the majority of learners have ADHD, substance abuse problems or are just plain rude, disobedient and uncooperative or blatantly obstructive” (AN13JA).

“Learner discipline, large class sizes, so few free lessons, having to serve relief for absent teachers, Heavy workload” (JU28NO).

Summarising these comments made by all the respondents, it can be noted that there three main demands mentioned by teachers: 1) Learner ill-discipline, 2) workload/administrative duties, 3) emotional demands, and 4) cognitive demands.

Teachers also faced minimal infrastructural demands at the school they are currently working at, which might be associated with the quintiles of the schools (7.6% Quintile 1, 16.2 % Quintile 2, 4.8% Quintile 3, 18.1% Quintile 4, and 53.3 % Quintile 5). Quintile 1 being the most disadvantaged/under-resourced, to quintile 5 being the most advantaged/resourced. Most of the respondents that participated in this study and returned questionnaires were part of the quintile 4 and 5 schools. It is interesting to note that perhaps because most respondents who participated in the study were from quintile 4 and 5 that they faced very few infrastructural demands.

Next, correlations were calculated to investigate the relationship between job demands and CPD activities of teachers (c.f table 6 for details).

Table 6: Correlation Table for Job Demands and CPD activities (N=86-123).

	1	2	3	4	5	6	7	8	9
1 Workload	-								
2 Cognitive demands	.33**								
3 Emotional demands	.32**	.51**							
4 Disruptive learners	.34**	.21*	.51**						
5 Infrastructural demands	-.15	-.17	-.07	-.27**					
6 CPD activities	-.03	.10	-.21*	-.18*	-.05				
7 Attending workshops	-.08	-.00	-.10	-.20*	-.10	.21*			
8 Studying towards a degree	-.25**	-.25**	-.20*	-.22*	-.03	.27**	.13		
9 Overall, how many professional development activities were you engaged in in the last 6 months?	-.01	.14	-.08	.09	-.14	.21	.14	.06	-

Note: ** $p < .01$, * $p < .05$.

Looking at the correlation tables between the demands of teachers and CPD activities of teachers, it is evident that the results show some significant levels in each of the demands in relation to each other and in relation to the CPD activities. It is evident that cognitive demands are highly correlated with the workload. Moreover, when looking at emotional demands, this is also highly correlated with cognitive demands and workload. It can be perceived that cognitive demands, emotional demands, and disruptive learners are highly correlated with each other. These demands are negatively associated with certain CPD activities, namely, studying towards an additional degree.

There are significant results represented by emotional demands, cognitive demands, and disruptive learners. It is also evident that infrastructural demands do not show any or relatively little significance in the correlation table between demands and CPD activities. Upon analysing the correlation between the job demands of teachers and their CPD engagement, it is noted that workload, disruptive learners, emotional demands, and cognitive demands are all negatively associated with CPD engagement. On the other hand, infrastructural demands do not play a significant role in the demands faced by teachers. This could be owing to the quintiles that participated and returned the questionnaires in the study. To correlate the results, it is also imperative to note that teachers were moderately engaged in CPD activities, which means that they were not highly or fully engaged in CPD activities.

5.4 Resources of Teachers

To address my third objective/research question three (RQ3), I also conducted a mix of descriptive and inferential statistics.

First, I will present the descriptive statistics summarising the levels of resources of the respondents. Teachers reported the levels of support from colleagues, support from supervisors, experiencing a productive social working environment, and the levels of these resources are presented in Table 7 below.

Table 7: Descriptive Statistics of Teachers Resources (N=121-123).

	<i>M</i>	<i>SD</i>
Social support from colleagues	3.48	.89
Social support from management	3.64	1.00
Social community at work	3.85	.95
Coping Strategies	2.94	.74

Note: Responses on a 5-point Likert-type response scale: *1-Never/Hardly Ever to 5-Always.

These figures prove that teachers enjoy equally high levels of resources. The respondents express the highest levels of the social community at work, followed by support from supervisors and then by support from colleagues. Their coping strategies, however, are ranking lower. Still, coping resources are at a moderate to high level. The coping strategies are personal coping strategies that teachers use in their capacity to help them deal with their demands—for example, going for a walk, praying/meditating, exercising, or seeking advice from a friend/psychologist.

Third, some of these resources can be perceived by the respondents' responses to the open-ended questions regarding what resources assist you. Here is what some respondents stated:

“Having supportive colleagues who assist and support me” (2014AP).

“Teamwork and sharing the load” (SA24MA).

“Great colleagues, however, only now that I am full time at the school (as part-time last year), close contact with supportive and friendly staff really lightens the load” (AN16MA).

“Colleagues that are open and willing to guide you and assist you. Teamwork is important this is what assists me to engage fully in CPD activities” (KA23JU).

“Being cognizant of the fact that we work as unto God and our fellow beings and not unto ourselves and our own selfish needs or wants and being challenged by the great potential dormant in our children which needs to be provoked and realised, this is my mindset and how I cope” (IR03MA).

“Getting support from my HOD” (AN31OC).

“Real support, assistance, understanding, and encouragement from colleagues and management are what assist me greatly to perform my job to the best of my ability” (EL29SE).

“Use of technology and digital projector in certain subjects and lessons helps me” (RA17JU).

“Having a good relationship with colleagues and superiors makes teaching a little better” (JA15AU).

“Support from senior members help offered” (RB28).

“The fact that I can always go to the people in my team for help and guidance” (SA28FE).

“Fellow staff were always supportive, welcoming and friendly. The principal, plus deputy principal were supportive and proactive in almost all serious issues” (NA23SE).

“Good work environment and colleagues who are always there for support” (AN17JU).

“Co-operation and empathy of colleagues. Sharing of workload” (TO28JU).

“Understanding superiors. Support from superiors. Access to technology” (LO14SE).

“My department is very co-operative and helpful. We are friendly with each other, and feel like family. This helps when I am stressed or emotional, or if I have a lot to get through” (AU16MA).

“Real support, assistance, understanding, and encouragement from colleagues and management” (EL28SE).

Therefore, we see that the three main resources mentioned by respondents are: Support from colleagues, support from principals/management, and social community at work. These

resources assist teachers to perform their jobs proficiently and effectively. Moreover, help them to manage the job demands and daily challenges that they may experience. Having the support from colleagues and supervisors, as well as having a close-knit group at work that one can turn to in times of distress, can assist one tremendously.

My third objective/research question three is also relating to teachers' job and personal resources to their CPD engagement. Teachers stated various resources (including job resources such as support or community at work and coping as their personal resource) that assist them in their CPD engagement and to perform their jobs effectively. These relationships were tested in the next step through bivariate correlations.

Table 8: Correlations between resources and CPD activities of teachers (N=86-123).

	1	2	3	4	5	6	7	8
1 Support by colleagues	-							
2 Support by management	.62**	-						
3 Social community at work	.68**	.47**	-					
4 Coping strategies	-.06	-.05	-.08	-				
5 CPD activities	.03	.11	.14	.00	-			
6 Attending workshops	-.03	-.02	.11	-.18	.21*	-		
7 Studying towards a degree	.03	.01	-.09	-.18	.27**	.13	-	
8 Overall, how many professional development activities were you engaged in in the last 6 months?	.11	.14	.09	-.05	.21	.14	.06	-

** $p < .01$, * $p < .05$.

It is evident from the data in Table 8 that support by colleagues and support from management (HOD's, principals, supervisors, etc.) are highly correlated with each other. When adding on the social community at work, it can be seen that social community at work is also highly correlated with support by colleagues and management. Moreover, another important observation I have made is that attending workshops and CPD activities are also correlated. Finally, studying towards a degree as a form of CPD is highly correlated in this table of resources. This is further elaborated on in the next chapter. Additionally, it is imperative to note that none of the resources is significantly related to the CPD scales.

In a final step, I analysed all job demands and resources in one model to investigate their relative influence on CPD activities. The results of a series of hierarchical regressions are presented below (c.f table 9).

Table 9: Results of Series of Hierarchical Regressions of job demands and resources on CPD

Model	CPD activities			Attendance of workshops			Studying towards a degree		
	B	SE	β	B	SE	β	B	SE	β
1 (Constant)	1.33	.105		1.34	.21		1.72	.21	
Age	.00	.00	.19 [†]	.01	.00	.16	-.01	.00	-.33**
Quintile	.00	.02	.04	.03	.03	.08	.03	.03	.08
	R ² =.04 Adj. R ² =.02			R ² =.04 Adj. R ² =.01			R ² =.11 Adj. R ² =.09		
2 (Constant)	2.07	.30		2.43	.62		3.49	.57	
Age	.00	.00	.10	.00	.00	.12	-.02	.00	-.44**
Quintile	.00	.02	.02	.02	.04	.06	.02	.03	.07
Workload	-.02	.03	-.07	-.02	.07	-.04	.02	.07	.03
Cognitive d.	.06	.04	.21 [†]	.04	.08	.07	-.02	.07	-.04
Emotional d.	-.08	.05	-.22	.01	.11	.01	-.18	.10	-.25 [†]
Disruptive l.	-.05	.03	-.21	-.12	.06	-.27*	-.09	.06	-.20 [†]
Infra. d.	-.26	.13	-.22*	-.40	.26	-.18	-.41	.24	-.18 [†]
	R ² =.18 Adj. R ² =.11*			R ² =.11 Adj. R ² =.04			R ² =.25 Adj. R ² =.19**		
3 (Constant)	1.93	.32		2.63	.66		3.68	.62	
Age	.00	.00	.02	.00	.01	.03	-.02	.00	-.47**
Quintile	.00	.02	.01	.04	.04	.11	.03	.03	.09
Workload	-.02	.04	-.05	-.01	.08	-.02	.01	.07	.02
Cognitive d.	.06	.04	.19	.07	.08	.11	-.01	.07	-.02
Emotional d.	-.10	.06	-.29 [†]	.05	.12	.06	-.17	.11	-.24
Disruptive l.	-.05	.03	-.21 [†]	-.11	.06	-.23 [†]	-.09	.06	-.20
Infra. d.	-.22	.13	-.19 [†]	-.45	.27	-.20 [†]	-.43	.25	-.19 [†]
Support c.	-.07	.04	-.26 [†]	-.01	.09	-.02	.04	.08	.08
Support p.	.01	.03	.02	-.09	.07	-.20	-.10	.06	-.21
Social comm.	.08	.04	.31*	.11	.07	.20	.03	.07	.05
Coping	.05	.04	.15	-.12	.08	-.19	-.03	.08	-.05
	R ² =.24 Adj. R ² =.14*			R ² =.17 Adj. R ² =.06			R ² =.28 Adj. R ² =.17**		

Note: ** $p < .01$, * $p < .05$, [†] $p < .10$; cognitive d – cognitive demands, Emotional d – Emotional demands, Disruptive l – Disruptive learners, Infra d – Infrastructural demands, Support c – Support from colleagues, Support p – Support from the principal (management/HOD), Social comm – Social community at work.

This table summarises three different regressions of all my job demands and resources on three aspects of CPD: CPD activities scale, attendance of workshops, and studying towards a degree.

In step 1 of my model, I entered my control variables. Next, I took job demands into account in relation to a CPD activity, attendance of workshops, and studying towards a degree. This step already explained 11% of the variance in my dependent variable CPD activities, 4% of the variance in the dependent variable workshop attendance, and 19% of the variance in the dependent variable studying towards a degree. Adding resources to the model led to an amount of explained variance of 14% (CPD activities), 6% (workshop attendance), and 17% (studying towards a degree). The effects of job demands on CPD activities were tested in step 2 of the model. As expected, some job demands were associated with decreased CPD activities. These are namely; emotional demands, disruptive learners, and infrastructural demands. On the other hand, cognitive demands show a different pattern and seem to be associated with more CPD activities. When entering resources in step 3, one could see if they are able to reduce the effects of job demands (somewhat). Indeed, I could see this pattern. When resources are entered, the effects of job demands are decreasing for the job demands mentioned above. This can be seen as an interpretation for a buffering effect of resources.

As explained above by Chatterjee and Hadi (2012) that regressions are analysis used in statistics to find the relationships between dependent variables and independent variables. It is important to note the following:

In step 1 of my model, I took CPD activities, age, and quintile of respondents into account. In step 2 of my model, I took job demands into account in relation to a CPD activity about whether teachers pursue additional degrees or workshops as a form of CPD. This step already explained 11% of the variance in my dependent variable (Adj. $R^2=.11$). Adding on job resources to the model even increased the explained variance to 14%, and this is indeed a significant increase (Adj. $R^2=.14$, $p<.01$). Analysing the following result shows that teachers do face many demands, but when exposed to resources, they are able to manage their demands or engage in CPD activities more effectively so as to not experience loss spirals.

What is important to note is that in the regression model, disruptive learners as demand showed a significant effect on attending workshops ($\beta=-.27$, $p<.05$) and studying further ($\beta=-.20$, $p<.10$). However, the latter effect is only marginally significant. It is important to note that disruptive learners came through as a highly mentioned job demand. Moreover, emotional demands showed a similar trend (marginally significant effect on studying towards a degree ($\beta=-.25$, $p<.10$)).

These demands all have negative effects on different CPD outcomes, indicating that they reduce the engagement of teachers in these activities. Interestingly, cognitive demands show a different pattern in the regression analyses. Again, they positively affect CPD activities ($\beta=.21, p<.10$); yet this is only a marginally significant result.

Support from colleagues also showed a marginally significant effect on CPD activities ($\beta=-.26, p<.10$). Another important resource is the social community at work which showed a significant effect on CPD activities ($\beta=.31, p<.01$).

Upon analysing my results, this shows that demands are negatively associated with CPD engagement, and resources are positively associated with CPD activity engagement. This answers my research questions 2 and 3 that I had made in the previous chapters.

What is important to note is that the regression model on demands of teachers showed that disruptive learners as a demand displayed a significant relationship with workshop attendance ($\beta=-.27, p < .05$) which decreased somewhat when entering resources ($\beta =-.23, p < .10$) and the relationship is now only marginally significant. A similar pattern occurred for studying towards a degree. However, the relationship was only marginally significant in step 2 of the regression analysis. The results indicate that an increase in disruptions by learners is associated with fewer CPD activities (attending workshops, studying towards a degree). Emotional demands showed a marginally significant relationship with studying towards a degree ($\beta =-.25, p < .10$); this relationship became nonsignificant when entering resources to the model in step 3.

Interestingly, workload showed no significant relationship with the CPD activities. Infrastructural demands showed a significant relationship with overall CPD activities ($\beta =-.22, p < .05$), which became marginally significant when entering resources into the model ($\beta =-.18, p < .10$). A negative relationship was also found with studying towards a degree. However, the relationship was only marginally significant in step 2 and remained almost unchanged when entering resources in step 3 of the regression analysis. These results indicate that when teachers experience increased infrastructural demands, they are less likely to engage in CPD activities.

An unexpected pattern was found for cognitive demands. Increased cognitive demands are marginally significantly related to CPD activities ($\beta =.21, p < .10$). This relationship became

nonsignificant when entering resources into the model. Such a result might indicate that cognitive demands can make teachers more likely to engage in CPD activities.

In a third step, resources were entered into the model. Teachers who experience a higher level of social community at work are more likely to engage in CPD activities ($\beta = .31, p < .05$). An unexpected, albeit only marginally significant result, showed a negative relationship between social support by colleagues and CPD activities ($\beta = -.26, p < .10$). This result would imply that more social support might make teachers less likely to engage in CPD activities. This result was not found for attendance of workshops or studying towards a degree.

5.5 Summary

It was noted that most teachers predominantly engage in attending workshops, reading material on a specific subject matter, or reading material on classroom management as a form of CPD engagement. Moreover, even though teachers engaged predominantly in these forms of CPD, they also spent time doing their personal research in their own time. In terms of the job demands of teachers, it is evident that teachers face moderate to high job demands. Teachers' predominant demands were noted as cognitive and disruptive learners. Whilst workload and emotional demands played a moderate to a high role in teachers' job demands. Moreover, it was noted that infrastructural demands played a very small to moderate role in job demands. This could be because these are predominantly quintile 4 and 5 schools. In terms of job resources, teachers stated that the main job resources that assisted them in their professions were; support by colleagues, support by management (HOD's, principals, and supervisors), and having a social community at work. The model accounted for 11% for CPD activities in terms of job demands, 4% for workshop attendance, and 19% for studying towards an additional degree. When job resources were added to the model, the CPD activities now changed to 14%, 6% for workshops, and 17% for studying towards another degree. When adding resources to the model, we see that the percentages increase only decreases slightly for studying towards another degree. The next chapter focuses on the summary of the findings and discussions linking back to the literature.

CHAPTER SIX

INTERPRETATION AND DISCUSSION OF FINDINGS

6.1 Introduction

In this chapter, the findings reported in the previous chapter are discussed, and links to the literature are presented. After careful consideration of the data, certain clear conclusions emerge in terms of research questions formulated in chapter one. The discussion is presented aligned with the research questions of the study.

6.2 Responding to Research Question One

Linking back to my Research Question one (RQ1), it was found that most teachers do engage in CPD activities. Many teachers reported that they read on their subjects or classroom management and also attended workshops, but less attended online workshops. This study took place prior to the start of the Corona pandemic. Now during the pandemic, teachers would probably attend more online workshops.

When engaging in a CPD activity, most time was spent on reading material on the subject or taking part in a network of teachers. It seems that most time is indeed spent on informal activities. If teachers enrol in an online workshop (as a formal activity), they also spend a substantial amount of time in such a workshop. Less time was spent on attending conferences or workshops.

Overall, most teachers engage in informal activities like reading on their subjects or classroom management, which is also time-consuming. Formal activities like workshops are attended by many respondents because these required less time. It is, however, not surprising because formal activities like workshops are usually designed to be once-off activities.

When also considering the responses to the open-ended questions, it can be assumed that many teachers found these workshops boring and monotonous. Most respondents reported that they had attended workshops based on information that they were already aware of regarding subject information or curriculum. They sought, for example, new workshops that would equip them with skills in technological advancements. Many respondents stated that they wanted a more dynamic form of CPD that would actually allow them to grow. Moreover, they required workshops that would equip them with meaningful skills.

Day and Sachs (2004, p. 4) summarise quite broadly that “CPD is a list of all the activities in which teachers engage in during their careers which are designed to enhance their work”. This means that Continuous Professional Development (CPD) activities are meant to improve or increase the skills that teachers have, to increase the calibre of work they produce. As stated above, and on engaging with the verbatim quotes, it is evident that teachers say that these workshops that they attend are rather boring and monotonous and give them skills that they are already using. However, with that being mentioned, Orr (2009) states that there will undoubtedly be challenges associated with development and change. Singh (2011) expresses the concern that despite the potential of workshops, Professional Development workshops do not emphasise sufficiently the professional requirements of teachers, or if they do not meet the standard or purpose that they are intended for, they might not have these beneficial effects. It is evident that even though there is potential for growth and development in workshops, if they do not explicitly state their purpose, then the workshop becomes meaningless to the teacher. Additionally, Holmes (2013) argues that many Professional Development activities of teachers involve fragmented monotonous workshops, in which teachers pay attention inertly to specialists about non-teaching correlated topics. When analysing the verbatim quotes of the respondents, it is evident that teachers express similar sentiments. Teachers believe that the Department of Education (DoE) officials come to workshops and speak to them, not realising or comprehending what their actual classroom is like. It is evident that teachers do engage in CPD activities. However, they are predominantly workshops, and they find these workshops uninteresting and repetitive. Teachers spend less time studying towards another degree or conducting personal and collaborative research. Moreover, 47% of the respondents mentioned that they are mentoring others or are involved in peer coaching. This is a very promising result because mentoring and peer coaching are very powerful tools for teachers’ Continuous Professional Development (Hooker, 2013). The role of mentoring and peer coaching for CPD is to strengthen both parties involved. Therefore, as the team sets goals, they aim to achieve them together, not leaving each other behind. It is a safe space where teachers share their concerns and they can understand each other. The goals to be achieved are a team effort. The role also highlighted by Rhodes and Beneicke (2002) that peer coaching is practised to enhance professional learning amongst teachers so that they can effectively use this knowledge to teach the learners.

Almost a third of the respondents reported that they study towards a postgraduate degree (29%) (cf. Table 3). This percentage might be lower in comparison to the percentage of teachers engaging in other informal or formal activities, but, astonishingly, so many teachers are enrolled for a postgraduate degree. This is one of the most time-consuming and challenging forms of CPD and is aimed at the comprehensive Professional Development of teachers. Additionally, when teachers are engaged in CPD together, and that is meaningful, they gain many skills and including those on discipline strategies, etc. (Bertram et al., 2013). The majority of teachers engage in individual activities (like reading material), and they also spend much time on those. Fewer teachers engage in collective activities such as participation in a network of teachers at their school (61%); 68% engage in a network with teachers from other schools. Although these numbers are encouraging, it would be better if more teachers would engage in such an activity. It is noted by Vescio et al. (2008) that professional learning communities positively impact teachers and learners. Moreover, Lieberman et al. (2011) ascertain that when teachers are involved in professional learning communities, collaboration and honest sharing of ideas assist teachers in their development and growth (cf. 2.2.1). Therefore, professional learning communities offer a host of benefits for teachers and learners.

6.3 Responding to Research Question Two

In response to my Research Question two, I have discovered that teachers experience moderate to high levels of job demands. In particular, they reported experiencing cognitive demands quite frequently and fairly strongly agree that their lessons are disrupted by learners. These are followed by high levels of emotional demands and moderate to high levels of workload. My results are aligned with my work in the Literature Review. Numerous teachers complained about disruptive learners in their open-ended responses, and many selected this as an option often when asked if they experience disruptive learners. Motseke (2020) explains that learners' misbehaviour and ill-discipline are major job demands of South African teachers (cf. 2.2.3.2). Makhasane and Khanare (2018) further elucidate that violence is rampant amongst learners against the teacher, leaving teachers fearful for their lives (cf. 2.2.3.2).

Teachers expressed moderate to high levels of workload. It is possible that having to maintain requirements by the Department of Basic Education (DBE), to complete the syllabus and

manage demanding learners has added to this high workload. Additionally, teachers faced moderate to high levels of workload. Van Tonder and Fourie (2018) contend that teachers are left 'drowning' in the number of work tasks they have to complete (cf. 2.2.3.1). Moreover, Philipp and Kunter (2013) state that teachers faced high levels of workload and time constraints, which left them highly burnt out (cf. 1.3). Additionally, Sellen (2016) states that workload brings barriers to engaging in Continuous Professional Development (CPD) activities in some cases (cf. 2.2.3.1).

Cognitive demands occur when teachers are forced to teach while having to keep their eyes on lots of things at once. Teachers face high levels of cognitive demands, as stated by Boston and Smith (2009) that teachers found it extremely difficult having to juggle many tasks at once. They have to teach the material to the class, ensuring everyone understands. Monitor projects, get involved in CPD activities, meet other administration deadlines. Teachers experienced very high levels of cognitive demands. Additionally, along with cognitive demands, came a very high demand, namely the disruptive learners (cf. Fig 3).

Teachers also report that they experience infrastructural demands. Teachers in this study did not experience very high levels of infrastructural demands. This could be because teachers involved in this study were predominantly from quintile 4 and 5 schools. Meaning that these schools were well resourced and had access to libraries, the internet, and computers. Perhaps the results would have been different if more quintile 1 and 2 schools were involved in the research. I have been at various schools, and some schools are well ventilated and have proper sanitation, which makes it a pleasure going to school. Whereas, on the other hand, some schools do not have these facilities and make it a stressful and frustrating working environment. Some schools have one or no computer for teachers to share, whereas others have a well-equipped room where teachers can effectively use the resources and prepare for their lessons. Roschelle et al. (2009) state that when teachers do not have the correct material or technological devices to teach lessons, it hinders both the teacher and learners' understanding remains limited as well. Aremu (2012) explains that in some cases, when there is a lack of proper sanitation at schools, this leaves teachers and learners ill and frequently becoming absent, leaving gaps in learning and is seen as a demand. This is a Nigerian study, however, in South Africa, a relevant number of teachers are confronted with similar issues related to school infrastructure. For example, Khumalo and Mji (2014) mention that pit latrines cause health and safety concerns for teachers and learners in South African schools.

Katumbi and Oribo (2019) argue that the government needs to do more for schools to receive adequate electricity so that effective teaching and learning can take place. This is difficult for both the teacher and the learners. Nicodemus and Magutu (2018) argue that the government needs to do more for schools to receive adequate electricity so that effective teaching and learning can take place. Moreover, Khan and Iqbal (2012) contend that overcrowded classrooms make it difficult for teaching and learning to take place effectively. This is difficult for both the teacher and the learners.

Teachers also frequently experience emotional demands in the interaction with their learners. Teachers showed high levels of emotional demands (cf. Table 5). This is relevant as teachers are constantly using their emotions within their professions, which is potentially leaving them highly exhausted. Moreover, Tuxford and Bradley (2015) contend that teachers face numerous emotional demands that put teachers in enormously distressing circumstances. Teachers have to get their emotions involved when they are dealing with disruptive learners or having to also assist with learners' personal issues. Moreover, the teaching profession itself, dealing with learner behaviour and teaching tasks, makes teachers emotionally exhausted (Chang, 2009). Furthermore, Santavirta et al. (2007) state that teachers being exposed continuously to emotional demands makes it difficult for them to keep themselves going forward. Linking back to research on job demands, as stated by Van Tonder and Fourie (2018) and Motseke (2020), demands may weigh teachers down. Van Tonder and Fourie (2015) also state that high workload demands negatively affect teachers' physical and mental health. Teachers who face high levels of job demands may, in turn, be less likely to engage in CPD activities.

With all these job demands mentioned by respondents and the various obstacles that teachers face in the profession, I can state that teachers in the sample seemed to experience a set of job demands which may potentially affect their engagement in CPD activities.

Below is a hierarchical representation of the demands of teachers, namely the three major demands expressed by teachers. The most predominant job demands mentioned by teachers are cognitive demands (teachers having to juggle numerous tasks at once), followed by learner ill-discipline (rude and disrespectful behaviour in class). This is followed by the emotional demands teachers face and their workload (c.f Fig. 3 for a graphical representation of the results).

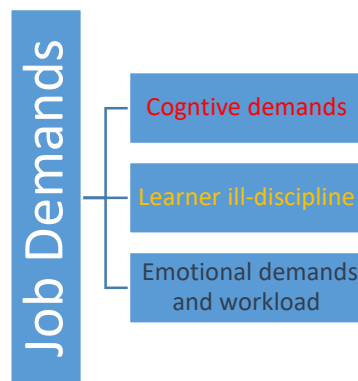


Figure 3: Hierarchical representation of the demands of teachers (Three main job demands of teachers).

These effects were tested using inferential statistics. The results of the bivariate correlations show that emotional demands are associated with reduced CPD engagement. Disruptions by learners also contributed to less engagement in CPD activities. Teachers were less likely to study towards a degree when experiencing a set of job demands (e.g., emotional demands or disruptions in class).

In the next step, a set of hierarchical regressions were conducted to estimate the relative effect of these job demands on CPD activities. As explained above by Chatterjee and Hadi (2012), regressions are analyses used to find the relationships between dependent variables and independent variables. In step one of my model, I entered my control variables. Then in step two, I took job demands into account, and in a third step, I took job resources into account.

The results highlight the relevance of disruptive learners. Teachers are less likely to attend workshops or study towards a degree when such disruptions are high. Nkambule and Amsterdam (2018) concur that when teachers face high disruptions in class from ill-disciplined learners, they are less likely to engage in CPD activities because they are highly strained. Moreover, Motseke (2020) advocates that teachers spend a tremendous amount of time having to discipline learners, and this leaves them drained and burnt out. Therefore, fewer teachers are likely to engage in CPD activities when in this situation.

Motseke (2020) states that learner misbehaviour and ill-discipline of learners is a major contributing factor to teacher demands. Teachers feel frustrated and spend most of their time

being tired out by disciplining learners. As a result, they may be less likely to engage in CPD activities.

Moreover, infrastructural demands seem to reduce the likelihood that teachers engage in CPD activities. Other studies have shown that the school context does have little effect on teacher wellbeing (Klusmann, Kunter, Trautwein, Lüdtke & Baumert, 2008) argue that teachers can be affected by other general demands in the profession and not necessarily their physical environment that has a negative impact. It is shown by Klusmann, Kunter, Trautwein, Lüdtke and Baumert (2008) that school-level variables only explain little variance in the emotional exhaustion of teachers. In my study, I believe the same is true. However, I also believe that because teachers in this study were predominantly from the quintile 4 and 5 groups, this could have affected the results. Perhaps, if more quintile 1 and 2 schools were involved in the research, the results would have differed. As mentioned previously, some schools have one or no computer for teachers to use. In contrast, other schools may have a room full of computers or books for teachers. For example, Shalem and Hoadley (2009) claim that teachers' work is bi-modal and covers a vast range of tasks. Shalem and Hoadley (2009) argue that the current curriculum tries to recompense past disparities. However, the harsh reality is that teachers are spread across the quintiles of schools. Moreover, Hoffman et al. (2016) establish that as teachers work in dissimilar schools, they are exposed to different environments, therefore having disparate experiences and practices. Depending on the school the teacher is in, they will require different resources needed to do their job. So, upon analysing the different nature and environments teachers are placed in, it is noticeable that their needs will differ.

In terms of the Job Demands – Resources (JD-R) model (Bakker & Demerouti, 2007), the energetic pathway explicates that certain demands may be associated with more strain, making it less likely to engage in additional activities. In line with this, the COR theory, Hobfoll (1989) argues that when teachers feel highly exhausted and stressed, they experience a loss spiral. They deplete their current resources while trying to accomplish their goal, which leaves them more exhausted and strained than when they had initially started. When teachers go through a loss spiral, they are negatively affected by experiencing individual health impairments, for example, and this negatively affects the productivity of the organisation as well, causing more costs for the organisation and the teacher. For example, suppose the teacher uses their own money to buy resources to use in the class but is not reimbursed. In

that case, the teacher will eventually become highly frustrated. Moreover, suppose a teacher has to constantly deal with the same problematic learners' behaviours; they may become highly strained and ill, leaving them worse off than when they started.

Interestingly, cognitive demands showed a positive effect on CPD activities. This means that even though teachers experience high levels of cognitive demands, they are able to engage in CPD activities. A gain spiral may unravel (in line with COR theory) cognitively challenging tasks, which may trigger an interest in further cognitive engagement and might, thus, result in engagement in and profiting from CPD activities. As teachers are faced with cognitive demands, they might be motivated to explore this, further triggering a gain spiral and breeding a positive mindset, motivating them to engage in more CPD activities that will benefit them as individuals and the organisation at large (Frederickson, 2000).

6.4 Responding to Research Question Three

As stated by Xanthopoulou et al. (2006) and Crowley (2013), resources are considerable aids in achieving one's best results. The literature highlighted the role of social support of colleagues or management. It was assumed that teachers need resources that allow them to engage in CPD activities. The various job resources highlighted in the literature were supported by colleagues (Tatar, 2009), superiors (Lorenz, 2013), and experiencing a beneficial social community at work (Halverson, 2003). Personal resources also received increasing attention Xantopoulou et al., 2007; cf. 2.2.4). Coping strategies as personal resources have been shown to be relevant for teachers (Gana & Boblique, 2000).

The findings displayed that teachers in the sample experienced moderate to high levels of support from colleagues and management and even higher levels of the social community at work.

The majority of the respondents stated that their demands and emotional downs are eased knowing that they have the support of their colleagues, management, and social communities at work. The levels of the job resources were high. Social community at work was at the highest level, followed by support from management, and lastly followed by support from colleagues. Less personal resources were expressed than job resources. Many teachers in this study work at quintile five schools, and it seems quite encouraging to note that teachers express such high levels of support and such a favourable atmosphere in their schools.

Below is a hierarchical representation of the resources of teachers, namely the three major resources expressed by teachers. The most predominant resource mentioned by teachers is a social community at work (having a group that they can turn to when in need of help), followed by support from management (nearest supervisor/manager/principal is able to provide guidance and assistance), which is then followed by support from colleagues. Displaying that teachers esteem having a shoulder to lean on when facing difficulties.

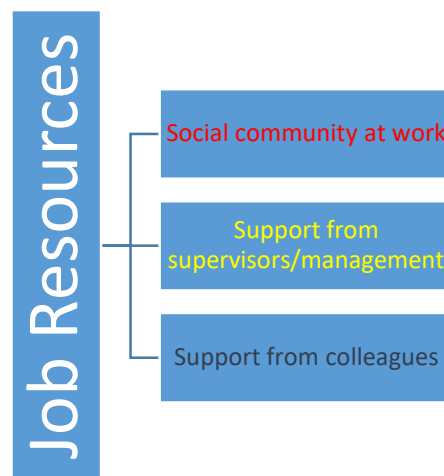


Figure 4: Hierarchical Representation of the Job Resources of Teachers (Three Main Resources of Teachers).

The correlations aligned with Table 8 (cf. 5.4) show that the three job resources – support by colleagues, support from management, and social community at work, are highly correlated with each other. These job resources show a strong relationship with one another. Coping strategies (personal resources) do not really show any correlations. It is also interesting to note that there is no apparent direct effect that can be found between resources and Continuous Professional Development (CPD) activities, which means that having these resources readily available to teachers does not mean that they will get more involved in CPD activities. Thus, the results do not indicate a motivational process (JD-R model; Bakker & Demerouti, 2007) or a gain spiral through resource use (COR theory; Hobfoll, 1989). However, an indirect buffering effect could be found, which will be discussed below.

Resources were added in the third step of the regression analysis. Especially a beneficial social community at work seemed to increase teacher CPD engagement. Unexpectedly, a trend

occurred which indicated that social support from colleagues is associated with less CPD engagement. This result needs further elaboration in future studies. Personal coping resources did not show a significant effect.

It can be demonstrated that by adding resources to the model, an indirect buffering effect could be tested as postulated in the JD-R model (Bakker & Demerouti, 2007). Such a buffering effect can be identified if the effects of job demands in step two of the model decrease or become nonsignificant in step three of the model when entering resources. This effect was found for workload when resources were added. Moreover, for disruptive learners' levels, the strength of the relationship also dropped. It is evident that resources may not start a gain spiral as postulated from the COR theory (Hobfoll, 1989), but that they might reduce a loss spiral that may occur. Such an indirect buffering effect allows for people involved not to lose what they have already gained. For example, adding resources does not mean those disruptive learners will suddenly disappear. However, the resources may assist teachers in managing the demands, and they will - in turn - not lose all that they have already gained.

6.5 Summary

In this chapter, the findings reported in the previous chapter were discussed, and links to the literature were presented. After careful consideration of the data, certain clear conclusions emerge in terms of research questions formulated in chapter one. The discussion is presented aligned with the research questions of the study. In response to research question one, it was found that teachers do engage in CPD activities; they predominantly attended workshops and read material on their subject or classroom management. In response to research question two, it was found that teachers experience moderate to high levels of demands. Their predominant demands were cognitive demands, disruptive learners, emotional demands, and workload. It was discovered that job demands are negatively associated with the CPD activity engagement of teachers. In response to research question three, it was found that job resources, namely; social community at work, support by management, and support from colleagues, play a significant role in the lives of teachers. However, there was no direct impact on teachers' CPD engagement; there was instead an indirect buffering effect. Which displayed that teachers can reduce their loss spirals if exposed to resources. Whereby some levels of demands were reduced when being exposed to resources.

CHAPTER SEVEN

LIMITATIONS AND RECOMMENDATIONS

7.1 Introduction

In this chapter, the limitations of this study are discussed, conclusions are drawn on what other studies should consider, and recommendations for future studies are presented. Based on the findings outlined in Chapter Five and the discussion in Chapter Six, recommendations on how these may contribute to teacher Continuous Professional Development in schools are made.

7.2 Limitations of this Study

7.2.1 Limitations of the Study in Relation to the Choice of Variables

The findings of this study are limited to 123 respondents from secondary schools in the districts of Pinetown and Umlazi, where the study was conducted. Thus, the results cannot be generalised. However, results reflect the situation of teachers from a variety of schools in these districts. Conclusions were, thus, drawn carefully and generalisation avoided. The choice of variables influenced my study. CPD activities were assessed as dependent variables, namely the workshops as a form of CPD and studying towards another degree as a form of CPD. Therefore, other variables could have been considered apart from these two.

Apart from job demands and resources, teachers' prior experience with CPD or beliefs about CPD could also be considered. Moreover, coping strategies were included in an aggregate manner. A more fine-grained analysis of different coping styles (Carver, 1997) may be useful to find further effects. It could be investigated which personal resources or coping strategies teachers use in specific situations or which combination is useful.

7.2.2 Limitations of the Study in Relation to the Study Design

Moreover, respondents provided self-reports of their situation. In order to get a more objective view, other measures like observations should have been included, during which the researcher spends time observing the respondents in the study, noting their experiences in their specific school (Rosenbaum, 2005).

Similarly, my data is quantitative, which means I can describe levels and relationships. However, on the other hand, studies that want to gain a deeper understanding of the experiences would have to be conducted using qualitative methods.

The explained variance in the regression models is low. This is not unusual in such studies and can be compared to results from Bogler and Nir (2015), who examined the effects of various job demands on teacher commitment and job satisfaction or to results from Rasku and Kinnunen (2003), who focused on teacher wellbeing. Additionally, Yin and Huang (2018) focused on the emotional demands of teachers and their effects on teacher wellbeing. Results show that teachers' wellbeing was negatively affected by emotional demands. Skaalvik and Skaalvik (2018) also ascertain that demands in the teaching profession lead to low or negative levels of teachers' wellbeing and motivation. Spilt, Koomen, and Thijs (2011) also ascertain that negative behaviour and ill-discipline from learners play a role in contributing to negative teacher wellbeing. In comparison to these results, one even expects to find that the variance explained by the model cannot be high because predictors and outcome variables are distal variables, and their relationship might be explained by moderating or mediating variables. Possible moderators (e.g., location of the school in rural vs. urban area) should be taken into consideration in future studies. It is possible that the location of the study influences the availability of CPD activities and may thus moderate the relationship between job demands and CPD activity engagement. Possible mediators (e.g., the wellbeing of teachers) could be focused on in future research. For example, teachers who experience high job demands may feel more emotionally exhausted and are thus, less likely to engage in CPD activities. Thus, future studies should also test more complex relationships between job demands and resources and teacher CPD engagement. The results presented here are and cannot be interpreted in a causal manner (Mertler, 2016). Future studies should, therefore, follow teachers over time to explore causal links between job demands, resources, and CPD activities of teachers. Diary studies could be considered to explore possible causal links over time.

7.3 Recommendations for Future Studies

7.3.1 Recommendations based on recruitment and sampling procedures

For future studies, perhaps one could analyse larger samples of teachers from different schools and school types in South Africa. This would allow researchers to generalise results and data to a larger scale or the larger population and yield interesting results for teachers from different quintiles of schools.

Additionally, the research could be conducted at a different time in the year. Perhaps the middle of the year, when teachers and learners are settled in, and not during an examination period.

The study was conducted during a busy time at school. Thus, some teachers may not have been able to participate. It was during the examination period. Consequently, some did not return or answer the questionnaires because of setting or marking examination papers. Another challenge was that many teachers had taken the questionnaires, promised to fill and return them, but upon arriving at the school, the boxes were empty, or only a few were handed in.

Furthermore, perhaps researchers can offer rewards of some sort for those respondents who fully complete and hand in their questionnaires.

7.3.2 Recommendations based on choice and operationalisation of constructs

In future studies, researchers can look at religion or spiritual beliefs as a coping mechanism. This seems quite interesting to see that how many teachers actually use meditation or seek help from their spiritual beliefs to deal with their demands. Additionally, perhaps future studies could also look into how many teachers are seeking help from a counsellor or psychologist in order to deal with their demands. I believe that these results will be interesting to see how many teachers are using these as their personal resources and coping strategies. Moreover, personal resources were not shown as relevant resources. It might be useful to explore different coping styles in more detail instead of including an overall score of coping strategies used.

The regression models indicate relevant results. However, the variance explained by the models is low. In fact, such levels of explained variance are not unusual in studies on similar topics (Bogler & Nir, 2015; Rasku & Kinnunen, 2003). In comparison to these results, one even expects to find that the variance explained by the model cannot be high because predictors and outcome variables are distal variables, and their relationship might be explained by moderating or mediating variables. For example, the relationship between job demands and CPD engagement might be mediated by levels of exhaustion or lack of recovery experienced by teachers. High workload, for example, may contribute to higher exhaustion levels and thus result in reduced CPD engagement. Or, effects between job demands and CPD activities could

be moderated by job resources, i.e., teachers working in high resource environments might be able to buffer job demands more efficiently and engage in more CPD activities.

This all indicates that future researchers will have to look further at what factors further influence the relationship between job demands and participation in CPD activities.

7.4 Recommendations for Practice

Based on the findings, the following recommendations for practice are made:

Teachers need more time; they experience elevated workload levels. Moreover, they express elevated levels of other job demands, too. Thus, they need training on addressing learner indiscipline, managing their emotions in the interaction with their learners, and learning time management skills having to deal with multiple tasks at once. This can be done by conducting meaningful workshops that will empower teachers with these skills.

Teachers need to be given more free periods to catch up with the demands of the profession. Given support from the Department of Education whereby learners are held accountable for their actions. This will lighten the load of teachers tremendously. Additionally, perhaps there can be conferences where teachers are equipped with skills and knowledge on how to deal with their emotions and what they experience in the classroom.

Furthermore, there is only so much a teacher can do from their side. Thus, the government or school organisations need to implement other forms of CPD activities for teachers to engage in. Some teachers seem bored and tired of monotonous workshops; they desire actual activities that build them up and equip them with much-needed skills. For example, technological advances or other skills that teachers are not already equipped with.

Teachers also require more support from school management, with learner discipline issues and also effective managing on how to perform certain tasks. Perhaps management can attend workshops on how to guide and manage staff efficiently and effectively. I believe these aspects will influence and foster effective CPD engagement of teachers.

7.5 Summary

This chapter outlined the limitations of this study, conclusions were drawn on what other studies should consider, and recommendations for future studies were presented. Based on the findings outlined in chapter five and discussion in chapter six, recommendations on how these may contribute to teacher Continuous Professional Development in schools were made.

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APPENDICES

APPENDIX A

ETHICAL CLEARANCE CERTIFICATE



20 September 2019

Prof Anja Philipp (61299)

School Of Education Edgewood Campus

Dear Prof Philipp,

Protocol reference number: HSSREC/00000425/2019

Project title: Demands and personal resources of teachers in two districts in KwaZulu-Natal as predictors of their levels of strain and ill-being.

Full Approval — Expedited Application

This letter serves to notify you that your application received on 05 September 2019 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted FULL APPROVAL

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach, and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid for one year from 20 September 2019.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when the study is finished.

Yours sincerely,

[Redacted Signature]

Dr. Rosemary Sibanda (Chair)

/spm

Humanities & Social Sciences Research Ethics Committee Dr. Rosemary Sibanda (Chair)

UKZN Research Ethics Office Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses: Edgewood Howard College Medical School Pietetmaritzbwg Westville

INSPIRING GREATNESS

APPENDIX B

PERMISSION LETTER TO THE KZN DEPARTMENT OF EDUCATION



education

Department:
Education
PROVINCE OF KWAZULU-NATAL

Enquiries: Phindile Duma
Ref.:2/4/8/2037

Tel: 033 392 1063

Prof. A Philipp
Private Bag X03
Ashwood
3605

Dear Prof. Philipp

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: “DEMANDS AND PERSONAL RESOURCES OF TEACHERS IN TWO DISTRICTS IN KWAZULU-NATAL AS PREDICTORS OF THEIR LEVELS OF STRAIN AND ILL-BEING”, in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

The researcher will make all the arrangements concerning the research and interviews.

The researcher must ensure that Educator and learning programmes are not interrupted.

Interviews are not conducted during the time of writing examinations in schools.

KWAZULU-NATAL DEPARTMENT OF EDUCATION

Postal Address: Private Bag X9137 • Pietermaritzburg • 3200 • Republic of South Africa

Physical Address: 247 Burger Street • Anton Lembede Building • Pietermaritzburg • 3201

Tel.: +27 33 392 1063 • **Fax.:** +27 033 392 1203 • **Email:** Phindile.Duma@kzndoe.gov.za • **Web:** www.kzndoe.gov.za

Facebook: KZNDOE....**Twitter:** @DBE_KZN....**Instagram:** kzn_education....**Youtube:** kzndoe

...Championing Quality Education - Creating and Securing a Brighter Future

Learners, Educators, Schools, and Institutions are not identifiable in any way from the results of the research. 5. A copy of this letter is submitted to District Managers, Principals, and Heads of Institutions where the Intended research and interviews are to be conducted.

The period of investigation is limited to the period from 07 October 2019 to 01 March 2022.

Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials, and Learners are under no obligation to participate or assist you in your investigation.

Should you wish to extend the period of your survey at the school(s), please contact Miss Phindile Duma at the contact numbers below.

Upon completion of the research, a brief summary of the findings, recommendations, or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.

Please note that your research and interviews will be limited to schools and institutions in the KwaZulu-Natal Department of Education.

Pinetown District

Umlazi District

A large black rectangular redaction box covers the signature area. A horizontal line extends from the right side of the box towards the text below.

Head of Department: Education Date: 11 October 2019

APPENDIX C

Final Thesis LM

ORIGINALITY REPORT

8%

SIMILARITY INDEX

7%

INTERNET SOURCES

4%

PUBLICATIONS

4%

STUDENT PAPERS

PRIMARY SOURCES

1

Submitted to University of KwaZulu-Natal

Student Paper

1%

2

researchspace.ukzn.ac.za

Internet Source

1%

3

hdl.handle.net

Internet Source

<1%

4

link.springer.com

Internet Source

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www.tandfonline.com

Internet Source

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archive.org

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Internet Source

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APPENDIX D

REQUEST FOR PERMISSION TO CONDUCT RESEARCH



Informed consent – Principal

Name of school:

Dear school principal,

My name is _____. I am a Master's / Doctoral student at the University of KwaZulu-Natal (UKZN). This is a formal invitation to request you to participate in the research project titled: *"Demands and personal resources of the teacher in two districts in KwaZulu-Natal as predictors of their levels of strain and ill-being."* The project is funded by the National Research Foundation (Human and Social Dynamics Funding Instrument). The project leader is Prof Anja Philipp (School of Education, UKZN). I am conducting my Master's / Doctoral study within this project.

The purpose of this project is to explore the job demands of teachers in schools in different Districts in KwaZulu-Natal. We aim to find out which job-related challenges teachers experience and how they contribute to their wellbeing and stress levels as well as teachers' engagement in continuous professional development activities. In comparison to this, we would also like to know more about the resources of teachers personally and at their schools. We also aim to compare teachers according to subjects (with a specific focus on Mathematics teachers).

In order to be able to compare results over time, we would like to repeat the questionnaire study about six months after the initial study. This is of high relevance because by repeating the study, we will be able to examine how teachers can be supported to manage the day-to-day demands of this profession and to improve their wellbeing over time.

Based on the results from the questionnaire study, we would also like to ask selected teachers to take part in an interview to gain a deeper understanding of this topic. The interviews will focus on the demands teachers experience and how they manage these demands.

We hereby request your approval to use the school premises to conduct this study.

The following instruments will be used as part of the Research Project:

Instrument	Duration	Respondents
A questionnaire containing open- and closed-ended questions	Approx. 1 hour Distributed twice with 6 months between data collection	Potentially aiming at all in-service teachers at your school.
Semi-Structured Interviews	Approx. 1 hour	Selected teachers from the questionnaire study

All instruments will be conducted outside of the regular school time or free periods. The respondents will be notified in advance of the exact date and time.

Questionnaires will be handed out to participants and can be completed within the participants' own time. Questionnaires will be collected in a closed box and will be obtained from the school by a project team member.

The interviews will be audio-recorded using a digital device (if participants agree) and then transferred to typed textual data for analysis purposes.

The study is dependent on your willingness to allow the teachers of your school to participate in this research project. Participants take part entirely *voluntarily* and can *withdraw* from this study at any time *without any disadvantages*. There are no financial incentives associated with the investigation.

Participants' information will be treated *confidentially* by using codes that are only known to the teacher to ensure the anonymity of individual participants. Electronic data will be saved on secure, password-protected devices. All participants will receive information outlining the research focus, as well as their right, take part voluntarily, to withdraw from the study at any time without disadvantages, and it will be outlined how data will be kept confidential. All data will be stored at the School of Education in a safe storeroom for five years. After that, it will be destroyed by incineration.

Questionnaire and interview data will be analysed within the research project and will be presented in academic reports, at academic conferences and published in academic journals. The data will also be used for Masters' dissertations and Doctoral theses of students aligned with the project.

Written reports summarizing the overall results of the study will be distributed to participants after completion of the study.

It would be great if your school would participate in this critical project.

Your schools' participation is, of course, voluntary, and you are free to withdraw from the project at any stage.

If you wish to have any further information about any aspect of the project, feel free to contact the student/project team member or the project leader under the contact details provided below.

Student/project team member address and Supervisor/Project leader: contact details

Prof Anja Philipp

Teacher Development Studies

School of Education

University of KwaZulu-Natal

Edgewood Campus

Phone: 031 260 3819

Email: philippa@ukzn.ac.za

Thanking you in anticipation!

Signature of student/project team member

Date

Prof Anja Philipp

Date

APPENDIX E

DECLARATION OF CONSENT BY PRINCIPAL AS GATEKEEPER

INFORMED CONSENT DOCUMENT TO CONDUCT RESEARCH

I _____ (Full Name of Principal)
have been informed about the research project entitled: “*Demands and personal resources of teacher in two districts in KwaZulu-Natal as predictors of their levels of strain and ill-being.*”

by: _____ (name of student/project team member on behalf of the project leader).

I understand the purpose and procedures of the project.

I have been allowed to answer questions about the project and have had answers to my satisfaction.

I declare that the participation of my school in this study is entirely voluntary and that I may withdraw my permission at any stage and for any reason. Withdrawal from this project will in no way result in any form of discrimination or disadvantage.

If I have any further questions/concerns or queries related to the project, I understand that I may contact the student/project team member and the project leader.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers, then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus, Govan Mbeki Building

Private Bag X 54001, Durban, 4000, KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609, Email: HSSREC@ukzn.ac.za

I hereby provide consent to (please circle your response):

Handing out of questionnaires	YES / NO	Audio-recording of interviews	YES / NO
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Signature of Principal

Date

School Stamp:

APPENDIX F

QUESTIONNAIRE

University of KwaZulu-Natal, School of Education

Project Leader: Prof. Anja Philipp

NRF-funded project on " Demands and personal resources of the teacher in two districts in KwaZulu-Natal as predictors of their levels of strain and ill-being" (Human and Social Dynamics, HSD170621242989)

Demands, resources, and wellbeing of teachers in two districts in KwaZulu-Natal

Dear teacher,

We are currently conducting a research project entitled: "Demands and personal resources of teachers in two districts in KwaZulu-Natal as predictors of their levels of strain and ill-being." The project is funded by the National Research Foundation (NRF) as part of the Human and Social Dynamics Funding instrument (HSD170621242989).

The purpose of this project is to explore which demands you as a teacher in a secondary school in one of two districts in KwaZulu-Natal experience. We also would like to know which school and personal resources you have available to manage these demands. We would also like to learn more about your personal well-being, your stress levels, and your engagement in professional development activities. Such a project will help shed light on how teachers can be supported to manage the day-to-day demands of this profession and to improve their wellbeing.

We kindly ask you to please fill in this questionnaire which forms the first part of the study. The questionnaire aims at exploring job demands of teachers in different schools in KwaZulu-Natal, resources teachers experience on the school as well as personal level as well as the wellbeing of teachers, their stress levels, and their engagement in professional development activities.

This study is designed as a longitudinal study and we intend to repeat it in approx. six months. This means that we will contact you again to fill in the questionnaire again. By repeating the study, we are able to draw conclusions on the development of your demands and resources over time and how this influences your wellbeing over the course of six months. In order to be able to link questionnaire information from different times of data collection, it is necessary to generate an individual code. The code will be designed by you and will not allow for any conclusion on your identity. Please use this code again should you take part in the study a second time in approx. 6 months.

The results of this project will be analysed within the context of Masters and Ph.D. theses of students, the research project, and will also be used for academic reporting and publication at conferences or in academic journals to communicate the results of the project to a wider audience.

We hope you support this important study by filling in this questionnaire.

Of course, your participation is voluntary. Your responses will be treated confidentially and will be analysed in line with academic standards.

Please do not leave out any answers. All your responses are of importance for this study!

If you are not quite sure, please choose the answer that seems most appropriate from your experience, there are no „right“ or „wrong“ answers.

Should you have any questions about the study, please contact:

Anja Philipp, School of Education, University of KwaZulu-Natal, 031 260 3819,
philippa@ukzn.ac.za

Please provide us with informed consent on your participation in the questionnaire:

I understand the purpose and procedures of the project.

I can contact the supervisor of this study to ask questions about the project.

I declare that my participation in this project is entirely voluntary and that I may withdraw my permission at any stage and for any reason. Withdrawal from this research will in no way result in any form of discrimination or disadvantage.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Important!

Please tick one of the following boxes:

Yes, I agree with the points above and give my informed consent to the study.	<input type="checkbox"/> ₁
No, I do not agree with the points above and do not give my informed consent to the study.	<input type="checkbox"/> ₂

Only if you ticked “Yes” and gave your consent to participate in the study, we kindly ask you to please fill in the following information and continue to fill in the questionnaire on the next pages.

Please prepare the code in line with the following instruction:

first two letters of the first name of the participants’ mother (example: Alicia – AL)

your day of birth (example: 13 October – 13)

first two letters of the mothers’ birth month (example: 07 January – JA).

Example code: AL13JA.

Please write down YOUR personal code: ____ ____ ____ ____

1. Challenges and Demands of teachers

The following questions address the challenges and demands teachers may face in their daily work lives. Please provide us with some information on your personal experience. First, we would like to know more about your workload.

Please tick the most appropriate answer.

	Never/ Hardly Ever . .	Sel- dom . .	Some- times . ..	Often . ..	Al- ways ...
Is your workload unevenly distributed so it piles up?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
How often do you not have time to complete all your work tasks?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Do you have enough time for your work tasks?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Do you get behind with your work?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Do you have to keep your eyes on lots of things while you work?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Does your work require that you remember a lot of things? . . .	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Does your work demand that you are good at coming up with new ideas?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Does your work require you to make difficult decisions?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Are you required to make difficult decisions in the classroom? . .	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...

How many hours do you work in an average week?	Hours . . .
How big is the largest class you teach this year?	number of learners . . .
How big is the smallest class you teach this year?	number of learners . . .
How many lessons are uninterrupted by learners?	Approx. %
How many lessons can you finish as planned?	Approx. %

Teaching can be associated with emotional demands. What is your experience?

Please tick the most appropriate answer.	Never/	Sel- dom . .	Some- times . ..	Often ...	Al- ways ...

	Hardly Ever . .				
Does your work put you in emotionally disturbing situations? . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Do you have to relate to other people's personal problems as part of your work?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Are you required to treat everyone equally, even if you do not feel like it?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Does your work put you in emotionally disturbing situations? . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Does your work require that you hide your feelings?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Are you required to be kind and open towards everyone – regardless of how they behave towards you?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

Please tick the most appropriate answer. . . .	Never/ Hardly Ever . .	Sel- dom . .	Some- times . . .	Often . . .	Al- ways . . .
Are you generally pleased with the learners you work within the classroom? . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Do you sometimes experience nerves in the classroom? . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Do you feel worn-out in the classroom? . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Do you experience headaches or stomach-ache due to classroom-related factors? . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Do you feel bad emotionally to the extent that it becomes difficult to think clearly? . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

What is your experience when interacting with your learners?

During the last week, I had to deal with learners	Strong- ly disagre ed . . .	Dis- agree . . .	Neithe r agrees or disagre ed . . .	Agree . . .	Stro ngly agre e . . .
...who argued with me. . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
...who interrupted the class flow. . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

...who demanded special treatment. . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
...who criticised me. . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
...who only replied when absolutely necessary. . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
...who had bad manners.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
...who were distracted during our lessons.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

In my school, we have	No . .	Yes
...school premises that are fenced.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...running water.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...working electricity.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...separate toilets for male and female learners.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...separate toilets for male and female teachers.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...library.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...enough textbooks for learners.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...internet facilities for staff.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...internet facilities for learners.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...computers for teachers.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .
...computers for learners.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .

Please remember an average day at work. We would like to know which emotions you felt on such a day when interacting with your learners in a class.

Please tick the most appropriate answer.	Never/ Hardly Ever . .	Sel- dom . .	Some- times .	Often .	Al- ways
On an average day at work, how frequently do you...					
Make an effort to actually feel the emotions that I need to display to others.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Try to actually experience the emotions that I must show.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Really try to feel the emotions I have to show as part of my job.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Resist expressing my true feelings.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

Pretend to have emotions I don't really have.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Hide my true feelings about a situation.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Display specific emotions required by my job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Adopt certain emotions required as part of your job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Express particular emotions needed for your job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Express intense emotions.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Show some strong emotions.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Express many different emotions.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Display many different emotions when interacting with learners.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...

Please also give us some insight into your emotions in class. The questions below involve two aspects of your emotional life. One is your emotional experience or what you feel inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the questions below may seem similar to one another, they differ in important ways.

Please tick the most appropriate answer.	Strongly disagree	Disagree	Neither agrees or disagree	Agree	Strongly agree
When I want to feel more <i>positive</i> emotion (such as joy or amusement), I <i>change what I'm thinking about</i>	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I keep emotions to myself.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I want to feel less <i>negative</i> emotion (such as sadness or anger), I <i>change what I'm thinking about it</i>	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I am feeling <i>positive</i> emotions, I am careful not to express them.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I'm faced with a stressful situation, I make myself <i>think about it</i> in a way that helps me stay calm.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I control my emotions by <i>not expressing them</i>	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I want to feel more <i>positive</i> emotion, I <i>change the way I'm thinking about the situation</i>	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I control my emotions by <i>changing the way I think</i> about the situation I'm in.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I am feeling <i>negative emotions</i> , I make sure not to express them.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I want to feel less negative emotion, I <i>change the way I'm thinking about the situation</i>	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

What are the most difficult things in your job as a teacher?

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2. Personal and work-related resources of teachers

The following questions address aspects of the school you currently work at. The focus will be on your individual strengths, followed by resources in your work at your school as well as support from management or colleagues.

Please tick the most appropriate answer.

	Never/ Hardly Ever . . .	Sel- dom . . .	Some- times . . .	Often . . .	Al- wa ys . . .
How often do you get help and support from your colleagues?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
How often are your colleagues willing to listen to your problems at work?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
How often do your colleagues talk with you about how well you carry out your work?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

Please tick the most appropriate answer.

	Never/ Hardly Ever . . .	Sel- dom . . .	Some- times . . .	Often . . .	Al- wa ys . . .
How often is your nearest superior willing to listen to your problems at work?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
How often do you get help and support from your nearest superior?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
How often does your nearest superior talk with you about how well you carry out your work?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Is there a good atmosphere between you and your colleagues?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Is there a good co-operation between the colleagues at work?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

Please tick the most appropriate answer.

	Never/ Hardly Ever . . .	Sel- dom . . .	Some- times . ..	Often . ..	Al- wa ys . ..
Do you feel part of a community at your place of work?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..

Which aspects OF YOUR JOB helped you to manage the demands of teaching?

Please tick the most appropriate answer.

	Never/ Hardly Ever . . .	Sel- dom . . .	Some- times . ..	Often . ..	Al- wa ys . ..
I've been turning to work or other activities to take my mind off things.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
I've been concentrating my efforts on doing something about the situation I'm in.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
I've been getting emotional support from others.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
I've been giving up trying to deal with it.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
I've been taking action to try to make the situation better.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
I've been saying things to let my unpleasant feelings escape.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
I've been getting help and advice from other people.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..

Please tick the most appropriate answer.

	Never/ Hardly Ever . . .	Sel- dom . . .	Some- times . . .	Often . . .	Al- wa ys . . .
I've been trying to see it in a different light, to make it seem more positive.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been trying to come up with a strategy about what to do.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been getting comfort and understanding from someone.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been giving up the attempt to cope	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been looking for something good in what is happening.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been making jokes about it.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been expressing my negative feelings.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been trying to find comfort in my religion or spiritual beliefs.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been trying to get advice or help from other people about what to do.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been thinking hard about what steps to take.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been praying or meditating.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I've been making fun of the situation.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

The following questions aim at your attitude towards the teaching profession and your school.

Please tick the most appropriate answer.

	To a very small	To a small extent . . .	Somew hat . . .	To a large extent . . .	To a ver y lar

	extent				ge ext ent ...
Do you enjoy telling others about your place of work?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Would you recommend a good friend to apply for a position at your workplace?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Do you feel that your place of work is of great importance to you?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Is your work meaningful?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Do you feel that the work you do is important?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Do you feel motivated and involved in your work?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Does your work require you to take the initiative?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Do you have the possibility of learning new things through your work?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Can you use your skills or expertise in your work?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..
Does your work give you the opportunity to develop your skills?	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5. ..

What are YOUR most important strengths which help you manage the demands of teaching? . . .

3. Your activities including professional development activities

As a teacher, you are continuously developing professionally (e.g., by reading, exchanging with colleagues, attending workshops, etc.). Please provide some information on your professional development activities.

I have engaged in the following:

	No ...	Yes ...	Who organised these activities? . . .		How many hours did you spend on this activity in the last 6 months? . . .
Reading material on my subject.	<input type="checkbox"/> 1.	<input type="checkbox"/> 2..	You . . . The school . . . Someone from outside the school.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Hours . . .
Reading material on classroom management. . . .	<input type="checkbox"/> 1.	<input type="checkbox"/> 2	You . . . The school . . . Someone from outside the school	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Hours . . .
Reading other material on (Please specify).	<input type="checkbox"/> 1.	<input type="checkbox"/> 2.	You . . . The school . . . Someone from outside the school	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Hours . . .
Participation in a network of teachers from my school.	<input type="checkbox"/> 1.	<input type="checkbox"/> 2.	You . . . The school . . . Someone from outside the school	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Hours . . .
Participation in a network of teachers including teachers from other schools.	<input type="checkbox"/> 1.	<input type="checkbox"/> 2.	You . . . The school . . . Someone from outside the school	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Hours . . .
Attending courses/workshops.	<input type="checkbox"/> 1.	<input type="checkbox"/> 2.	You . . . The school . . . Someone from outside the school	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Hours . . .
Enrolling in online workshops.	<input type="checkbox"/> 1.	<input type="checkbox"/> 2.	You . . . The school . . . Someone from outside the school	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	Hours . . .
Conducting observation visits to other schools.	<input type="checkbox"/> 1.	<input type="checkbox"/> 2.	You . . .	<input type="checkbox"/> 1	Hours . . .

			The school . . .	<input type="checkbox"/> ₂	
			Someone from outside the school	<input type="checkbox"/> ₃	
Attending a conference/seminar.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	You . . .	<input type="checkbox"/> ₁	Hours . . .
			The school . . .	<input type="checkbox"/> ₂	
			Someone from outside the school	<input type="checkbox"/> ₃	
Conducting individual or collaborative research	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	You . . .	<input type="checkbox"/> ₁	Hours . . .
			The school . . .	<input type="checkbox"/> ₂	
			Someone from outside the school	<input type="checkbox"/> ₃	
Engaging in mentoring and/or peer observation and coaching.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	You . . .	<input type="checkbox"/> ₁	Hours . . .
			The school . . .	<input type="checkbox"/> ₂	
			Someone from outside the school	<input type="checkbox"/> ₃	
Studying towards a degree at a tertiary education institution.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	You . . .	<input type="checkbox"/> ₁	Hours . . .
			The school . . .	<input type="checkbox"/> ₂	
			Someone from outside the school	<input type="checkbox"/> ₃	
Other	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	You . . .	<input type="checkbox"/> ₁	Hours . . .
.....			The school . . .	<input type="checkbox"/> ₂	
.....			Someone from outside the school	<input type="checkbox"/> ₃	
(please specify)					

Overall, how many professional development activities were you engaged in in the last 6 months?	Number of activities
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Please select the three most important professional development activities and provide us with some additional information on the nature of the activity.

<i>Professional Development Activity 1 . . .</i>	
How often did it take place in the last 6 months?	
What type of activity was it (workshop, course, etc.)?	
Why is it important to you?	

What was the content of the activity? . . .	

<i>Professional Development Activity 2 . . .</i>	
How often did it take place in the last 6 months?	
What type of activity was it (workshop, course, etc.)?	
Why is it important to you? . . .	
What was the content of the activity? . . .	

<i>Professional Development Activity 3 . . .</i>	
How often did it take place in the last 6 months?	
What type of activity was it (workshop, course, etc.)?	
Why is it important to you?	
What was the content of the activity? . . .	

4. Wellbeing and Work Ability

In this last part of the questionnaire, we would like to focus on your personal well-being and your overall health.

Regarding your work in general.

How pleased are you with:

	Not relevant . . .	Very Unsatisfied . . .	Unsatisfied . . .	Satisfied . . .	Very satisfied . . .
your work prospects?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
the physical working conditions?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
the way your abilities are used?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
your job as a whole, everything is taken into consideration?	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I have difficulty relaxing after school.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Even at home I often think of my problems at school.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Even on my vacations, I think about my problems at school.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I get irritated when others approach me.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I anger quickly.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I get irritated easily, although I don't want this to happen.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

Please tick the most appropriate answer.

	Never/ Hardly Ever . . .	Seldom . . .	Sometimes . . .	Often . . .	Always . . .
At my work, I feel bursting with energy.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
At my job, I feel strong and vigorous.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I get up in the morning, I feel like going to work.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I can continue working for very long periods at a time.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
At my job, I am very resilient, mentally.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

At my work, I always persevere, even when things do not go well.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I find the work that I do full of meaning and purpose.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I am enthusiastic about my job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
My job inspires me.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I am proud of the work that I do.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
To me, my job is challenging.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Time flies when I'm working.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
When I am working, I forget everything else around me.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I feel happy when I am working intensely.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I am immersed in my work.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I get carried away when I'm working.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
It is difficult to detach myself from my job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...

Please tick the most appropriate answer.

	Never/ Hardly Ever . .	Sel- dom . .	Some- times .	Often .	Al- ways .
I feel emotionally drained from my work	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I feel used up at the end of the workday.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I feel fatigued when I get up in the morning and have to face another day on the job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I feel frustrated by my job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
Working with people all day is really a strain for me.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I feel I'm positively influencing learner's lives through my work.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I can easily create a relaxed atmosphere with my learners.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I feel very energetic.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I deal very efficiently with the problems of my learners.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I have accomplished many worthwhile things in this job.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I feel learners blame me for some of their problems.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I worry that this job is hardening me emotionally.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...
I don't really care what happens to some learners.	<input type="checkbox"/> 1...	<input type="checkbox"/> 2...	<input type="checkbox"/> 3...	<input type="checkbox"/> 4...	<input type="checkbox"/> 5...

I have become more callous toward learners since I took this job. . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
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We are now focusing on your work ability. These questions can be quite personal and we kindly ask you to please consider every question. Of course, this information will be treated confidentially.

Current work ability compared to highest work ability ever: Assume that your work ability at its best has a value of 10 points. How many points would you give your current work ability?
(0 means that you currently cannot work at all)

<input type="checkbox"/> 0 . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .	<input type="checkbox"/> 6 . . .	<input type="checkbox"/> 7 . . .	<input type="checkbox"/> 8 . . .	<input type="checkbox"/> 9 . . .	<input type="checkbox"/> 10 . . .
completely unable to work . . .					work ability at its best . . .					

Illness within last year (12 months)

	None .	max. 9 days .	10-24 days .	25-99 days . .	100- 354 days
During the last 12 months: how many whole days have you been off work? . . .	<input type="checkbox"/> 5 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 1 . . .

Mental capacities

	Never .	Rather seldom	Some- times .	Rather often .	Ofte n/Al ways /Co ntin uous ly . .
Considering the last three months: Have you been able to enjoy your regular daily activities?	<input type="checkbox"/> 0 . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .
Considering the last three months: Have you been active and alert?	<input type="checkbox"/> 0 . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .
Considering the last three months: Have you felt yourself to be full of hope about the future?	<input type="checkbox"/> 0 . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .

Please tick the most appropriate answer.

	Strongly disagree . . .	Disagree .	Neither agree or disagree	Agree .	Strongly agree
I always find new and interesting aspects in my work. . . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
It happens more and more often that I talk about my work in a negative way.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Lately, I tend to think less about my work tasks and do them almost mechanically.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I find my work to be a positive challenge.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Over time, one can become disconnected from this type of work.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
Sometimes I feel sickened by my work.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
This is the only field of work that I can imagine myself doing. . .	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I feel more and more engaged in my work.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
There are days when I feel tired before I arrive in class or start working	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
After a class or after working, I tend to need more time than in the past in order to relax and feel better.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I can tolerate the pressure of my work very well.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
While working, I often feel emotionally drained.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
After a class or after working, I have enough energy for my leisure activities.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
After a class or after working, I usually feel worn out and weary.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
I can usually manage my workload well.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .
When I work, I usually feel energised.	<input type="checkbox"/> 1 . . .	<input type="checkbox"/> 2 . . .	<input type="checkbox"/> 3 . . .	<input type="checkbox"/> 4 . . .	<input type="checkbox"/> 5 . . .

5. Demographic information

Please note that all information is treated confidentially. Please provide us with some information on your personal and professional background and your school.

Are you? . . .	
Male . . .	<input type="checkbox"/> 1 . . .

For how long are you a teacher (without maternity leave or other leave)? . . .
for _____ years . . .

Female . . .	<input type="checkbox"/> 2...
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How old are you? . . .
_____ years . . .

Are you a Mathematics teacher	
Yes . . .	<input type="checkbox"/> 1...
No . . .	<input type="checkbox"/> 2...
Which district is your school in?	
Pinetown . . .	<input type="checkbox"/> 1...
Umlazi . . .	<input type="checkbox"/> 2...
Other	<input type="checkbox"/> 3...

What quintile does your school belong to . . .	
Quintile 1 . . .	<input type="checkbox"/> 1...
Quintile 2 . . .	<input type="checkbox"/> 2...
Quintile 3 . . .	<input type="checkbox"/> 3...
Quintile 4 . . .	<input type="checkbox"/> 4...
Quintile 5 . . .	<input type="checkbox"/> 5...

Which subjects were you trained in? Please list them below.

Which subjects are you teaching at the moment? Please list them below.	For how long are you teaching them?
	Years . . .
	Years . . .
	Years . . .
	Years . . .
	Years . . .

Please indicate your highest qualification	
Lower than Matric	<input type="checkbox"/> 1...
Matric	<input type="checkbox"/> 2...
Diploma	<input type="checkbox"/> 3...
First degree	<input type="checkbox"/> 4...
Postgraduate degree	<input type="checkbox"/> 5...
Please specify:	

How big is your school?
_____ number of learners
_____ number of teachers

Are you...	
...employed on a full-time basis? . . .	<input type="checkbox"/> 1...
...employed on a part-time basis . . .	<input type="checkbox"/> 2...

Are you . . .	
... a principal? . . .	<input type="checkbox"/> 1...
... a deputy principal . . .	<input type="checkbox"/> 2...

