The effect of staff morale during telecommuting in the health sector of a public institution in the Western Cape

by

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Date: 21 July 2022

Signed: Ruestland

DEDICATION

I dedicate this thesis to my partner, family and friends who unwaveringly supported me throughout this journey.

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ABSTRACT

The Western Cape (WC) public health sector Supply Chain Management staff (SCM), based in a unit in Cape Town, have traditionally carried out their work from supervised and controlled office spaces. With the sudden onset of Covid-19, traditional working arrangements changed drastically when staff started to work from home (WFH). Looking after the wellbeing and morale of staff working remotely was found to be challenging as face-to-face contact was minimised, and this contributed to lowered staff morale. The main research objectives of this study were to determine whether telecommuting had an impact on staff morale, to assess whether staff feel they could remain productive during telecommuting periods, as well as to predict and forecast whether telecommuting will be considered a viable working method. Thirty-four respondents formed part of this study through convenience and purposive sampling. The initial conceptual framework was based on the following constructs: staff wellbeing and morale, work-life balance, organisational support, social and professional isolation, productivity, stress, and job demands. Fisher's model of Conceptualizing and Measuring Wellbeing at Work, Danna and Griffin's Health and Wellbeing in the Workplace theory and Baruch and Nicholson's four factors of Teleworking framework provided context to the conceptual framework. The finding was that telecommuting mostly had a positive impact on staff wellbeing and morale. It was evident that staff went through an adapting phase when they initially started to WFH, but after adapting, they felt they could be more productive and that working from home increased their productivity. WFH in a hybrid approach was deemed a feasible option going forward. Through the Covid-19 pandemic, the DoH has acquired a more techsavvy workforce consisting of staff members who worked self-sufficiently and mostly isolated at home. This means that the organisation should relook the way staff can work going forward, as traditional methods of work will need to be modernised. It would also be good to retain the various efficiencies the organisation acquired during the WFH period. It is recommended that the organisation review the WFH working hours for different teams, consider more efficient communication sessions and options, reengineer existing weekly planning schedules, facilitate more virtual training sessions and retain Covid-19 WFH efficiencies. In addition, it is also recommended that a WFH Hybrid model be adapted for the organisation.

Keywords: Telecommuting, Supply Chain Management, Covid-19, public sector, staff wellbeing, professional and social isolation, hybrid

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LIST OF ACRONYMS

CPUT CAPE PENINSULA UNIVERSITY OF TECHNOLOGY

DOH DEPARTMENT OF HEALTH

EHWP EMPLOYEE HEALTH AND WELLNESS PROGRAMME

FREC FACULTY RESEARCH ETHICS COMMITTEE

H-D HYPOTHETICO-DEDUCTIVE

ICT INFORMATION COMMUNICATION TECHNOLOGY

ILO INTERNATIONAL LABOUR ORGANISATION

JD-R JOB DEMAND RESOURCES MODEL

MS MICROSOFT

OECD ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT

OHSA OCCUPATIONAL HEALTH AND SAFETY

PPE PERSONAL PROTECTIVE EQUIPMENT

SCM SUPPLY CHAIN MANAGEMENT

TPB THEORY OF PLANNED BEHAVIOUR
TRA THEORY OF REASONED ACTION

WC WESTERN CAPE

WCG WESTERN CAPE GOVERNMENT

WFH WORK FROM HOME

WHO WORLD HEALTH ORGANISATION

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CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction and background

The Western Cape (WC) public health sector administrative staff in a Supply Chain Management (SCM) unit in Cape Town, have traditionally carried out their work from supervised and controlled open-plan office spaces. With the sudden onset of the Covid-19 pandemic in the WC, traditional work arrangements changed drastically. A speech by the South African President, Cyril Ramaphosa, on 15 March 2020 (Government, South Africa, 2020) emphasised that there was a crucial need to limit contact between individuals to mitigate the spread of the Covid-19 infection. In another presidential speech on 23 March 2020 (Government, South Africa, 2020) a national lockdown was announced, and South African citizens were exhorted to limit contact with others. This included measures such as staying at home, avoiding public places, closing schools, and working from home.

The SCM administrative staff were seated in open plan offices with closely allocated seating arrangements, and due to this seating arrangement not being conducive to social distancing, staff were asked to work from home. It was predicted in literature that there will be an increase in telecommuting or home-based work (Niles, 1991; Kurland and Bailey, 2000; Allen, Golden and Shockley, 2015; Bick, Blandin and Mertens, 2020; Faulds and Raju, 2021; Galanti, Guidetti, Mazzei, Zappalà and Toscano, 2021) and this had an influence on individuals' working lives. Figure 1.1 illustrates the location of the SCM unit.



Figure 1.1: Location of the SCM unit under study

The staff worked in open plan offices, similar to the image in Figure 1.2.



Figure 1.2: Visualisation of an open plan office

Due to an open-plan office layout not complying with the minimum number of staff members permitted per floor, as well as an open-plan layout not been conducive to the required 1.5m space between desks, most staff members worked from home. It can thus be understood that Covid-19 has challenged the public health sector to manage their operations and workforce. At a time when there was a heightened and crucial need for colleagues and supervisors to offer support to each other, they had to "learn to do so from a distance" (Sarkis, Cohen, Dewick and Schröder, 2020:1). The next section will discuss the commencement of telecommuting in the context of this study.

1.2 Commencement of telecommuting

Adapting operations from the traditional office working arrangements to telecommuting was challenging. There was virtually no time to adequately prepare staff for the effects of such an organisational change, while navigating the spread and implications of Covid-19 in the WC public health facilities. When framed in a crucial health support service context, it must be understood that the SCM administrative staff contributes to the central function of supplying the frontline health staff with personal protective equipment (PPE), sources crucial services and products, and monitors the continuation of public patient related services in public health institutions in the WC. The duties of this SCM unit were thus seen as crucial to the optimal functioning of the WC Province public health institutions during the Covid-19 pandemic.

As informed by the reviewed literature (Sampaio, Sequeira and Teixeira, 2021; Sadang, 2020; McKinney, Swartz and McKinney, 2020; Jones-Bonofiglio and Nortjé, 2020; Roman, Mthembu and Hoosen, 2020), there is a considerable number of studies on the implications of Covid-19 on the working conditions and morale of clinical staff such as nursing workers, pharmacists, doctors, and frontline staff categories. However, there is limited evidence where research studies addressed the impact of a pandemic on SCM administrative staff in this context, especially where public health sector staff had to telecommute for the first time in their working career.

Navigating this adapted manner of operations, telecommuting also meant different means of interacting with colleagues, different means of maintaining supervisor contact, adapted working hours and different ways of supervising staff. Looking after the wellbeing and morale of the SCM staff was found to be challenging as staff worked from home, and face-to-face contact was minimised. During the telecommuting period it was observed that

telecommuting staff morale was lowered. Staff were losing colleagues and loved ones, had limited or no social interaction and it was challenging to address staff wellness and wellbeing through remote initiatives. The disquieting observation was made that staff could in some instances be disconnected due to the Covid-19 pandemic. This study takes an in-depth look at the factors which impacted on the adaptation of staff to telecommuting, their general work well-being and morale during telecommuting, as well as their perceived level of production during this period. During a time when the remote work rate is expected to increase, it would add considerable value to understand the influence this alternative working methodology could have on employee wellbeing (Gallus, 2022)

This research will contribute to previous literature (Como, Hambley and Domene, 2021; Gambhir, 2020; Montano and Acebes, 2020; Morikawa, 2020, Morikawa, 2021) by determining whether telecommuting had an impact on staff morale, to assess whether they felt they could remain productive during telecommuting periods, as well as to predict and forecast whether telecommuting would be considered a viable working method for the remainder of the pandemic and post pandemic.

Subsequently, beyond the pandemic, organisations and employees will need support to find appropriate work from home (WFH) plans. Human Resource practitioners can assist staff by "being aware of how the transition to remote work may be further complicated by home dynamics, Covid stress, overwork, and challenges collaborating" (Como et al., 2021:46). In the following section, the rationale for the study will be discussed.

1.3 Rationale for the study

In this SCM unit, administrative staff have learned how to work from home and staff experiences and perceptions could be used to revise and redesign wellness programmes so that it may be more accessible to remote staff. This research would also be beneficial to gauge whether staff are willing to work remotely or if they want to return to the office, or perhaps a hybrid approach may be considered depending on the findings.

This study will contribute to existing literature, and it will assist other SCM units who are required to also work remotely, and to have an improved understanding of the challenges

staff face while working from home. With the rapid introduction of telecommuting, it can be understood that any amendments to current work methodology and protocols in any Government institution would have to be executed on a piecemeal basis. Hence, the results of this study could be beneficial in introducing new policies or amend current outdated policies. A productive and well adapted SCM unit will be a crucial necessity in that it is instrumental in supplying the WC public health institutions with services and products during the remainder of Covid-19 and beyond.

This research is justified as the contribution of the administrative SCM unit support staff is often overlooked. Their roles, functions and responsibilities are behind the scenes and not regarded as frontline. Similarly, while clinical staff continued their services at their usual or similar place of work during Covid-19, the administrative SCM support staff had to adapt to relocation and a completely new working environment. The staff moving from a controlled working environment to a remote location, the integration of work-life balance once working from home, decreased social and professional contact, increased childcare responsibilities at home, the establishment of alternative communication methods than face to face, and ensuring a reliable and working ICT set up at home complicated and introduced many variables to this situation. The next section discusses the statement of the research problem.

1.4 Statement of the research problem

Public health sector administrative SCM staff in the SCM unit under study, telecommuted for the first time during the Covid-19 pandemic. Various factors impacted on their adaptation to telecommuting and remote work performance, and a possible decline in general staff well-being and morale was observed. Low staff morale could be deemed problematic as it may affect productivity and well-being. Similarly, social and professional isolation may have contributed to lowered staff morale, and possibly lowered levels of work quality and perceived production. The issue of working from home and the impact of Covid-19 have been addressed by authors in previous research with regards to clinical staff (Sampaio et al., 2021; Sadang, 2020; McKinney et al., 2020; Jones-Bonofiglio and Nortjé, 2020; Roman et al., 2020) but it does not specifically address the impact on administrative staff to adapt to telecommuting for the first time, especially support staff

who play a crucial part in supporting the frontline workers and health institutions in a pandemic context.

This research study specifically focused on the experiences, issues and challenges that affected the SCM unit's administrative staff while they adapted to a completely new mode of working. Similarly, this study strived to determine and explore the impact of telecommuting on staff wellbeing and morale. There has been number of research studies done relating to telecommuting in general (Caranto, Sergio and Oribiana, 2020; Abilash and Siju, 2021; Ajayi, 2020; Chang, Chien and Shen, 2021; Barbuto, Gilliland, Peebles, Rossi and Shrout, 2020) and therefore conclusions were drawn to problems that could be crucial in deciding whether an organisation should reconsider continuing telecommuting beyond Covid-19. The following section provides the research questions and objectives.

1.5 Research questions and objectives

1.5.1 Main research question

The main research question in this study was: How did administrative public health sector support staff in this SCM unit react, respond, and adapt to telecommuting, which was a completely new mode of working while still being expected to remain productive in their work domain? The next section provides the main research objective.

1.5.2 Main research objective

The main research objective was to determine whether telecommuting had an impact on staff morale, to assess whether staff felt they could remain productive during telecommuting periods, as well as to predict and forecast whether telecommuting would be considered a viable working method for the remainder of the pandemic and post pandemic.

The following section illustrates how the research questions, objectives and hypotheses were linked.

1.5.3 Linking research questions, objectives and hypotheses

The secondary research questions, secondary objectives and study hypotheses were linked together to form the basis of the problem statement, as displayed in Table 1.1.

Table 1.1: Links between the secondary research questions, objectives, and hypotheses

Column 1		Column 2		Column 3		
Secondary research		Linking objectives		Linking hypotheses		
questions						
R S Q 1	What impacted on staff morale and the integration of work-life balance for the duration of telecommuting?	OB J 1	To determine whether telecommuting had an impact on staff wellbeing or morale	HY P 1	If telecommuting requires the integration of work-life balance and increased social and professional isolation, then telecommuting staff morale may be affected	
R S Q 2	How does telecommuting impact productivity during telecommuting periods?	OB J 2	To assess whether staff feel they can remain productive during telecommuting periods in the pandemic	HY P 2	Telecommuting staff ability to stay productive may be affected by their ability or inability to rapidly react, respond, and adapt to a completely new mode of working	
R S Q 3	Can telecommuting for administrative support staff be a viable option for the future?	OB J3	To predict and forecast how staff feel about continuing to telecommute during the remainder of the pandemic and post pandemic	HY P3	If the concept of 'the office' in an organisational space will never be the same again because of telecommuting during a pandemic, then this may be regarded as the new norm of 'working of tomorrow'	

Table 1.1 displays the links between the secondary research questions, secondary objectives and hypotheses. Column one displays the secondary research questions, column two displays the secondary objectives, and in column three it is clear how the secondary research questions are linked to the three hypotheses.

1.6 Delineation

This study examined the experiences of telecommuting SCM unit staff in a public health sector of the WC. Moreover, it looked at the work-life balance and morale related issues experienced by the SCM unit, and it assessed how telecommuting affected work relationships and perceived productivity. Furthermore, this study also explored, forecasted, and predicted future telecommuting approaches to support the development of a more sustainable organisational approach to telecommuting.

1.7 Ethical considerations

Ethics is about the comprehension of what is right or wrong (Maree, 2007). A code of ethics can also be described as a norm that governs processes, societies, and institutions. To align to predetermined ethical standards, the researcher applied for ethical clearance at the Cape Peninsula University of Technology (CPUT) Faculty Research Ethics Committee (FREC) and ethics approval was granted on 14 September 2021 (attached as Appendix B).

The researcher ensured ethical consideration during field work by adhering to the CPUT Code of Ethics, and data was collected with the consent of respondents. Respondents' privacy and anonymity were maintained throughout the study, and respondents were informed of their right to withdraw from the study at any point. The next section contains an abridged literature review.

1.8 Abridged literature review

The researcher compiled a literature review to ensure the study was aligned with previous research studies, and that the relevant theoretical frameworks were applicable to the phenomenon under study. This section focuses on the preliminary literature gathered to create the context for this study. Chapter Two will provide a broad discussion on the theoretical frameworks for this study and Chapter Three will provide a structured literature review.

Various theories and models were considered for this study, namely the Theory of Planned Behaviour (TPB) (Ajzen, 1991), Schlossberg's transition theory (Schlossberg,

1984), Baruch and Nicholson's four factors of Teleworking framework (Baruch and Nicholson, 1997), Fisher's model of Conceptualizing and Measuring wellbeing at work (Fisher, 2014), Dana and Griffin's Health and Wellbeing in the workplace (Dana and Griffin, 1999), the World Health Organisation (WHO) Healthy Workplace Framework and Model (Burton and WHO, 2010) and the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1980). The theoretical and conceptual frameworks will be discussed in greater detail in Chapter Two of this study.

The 2019/2020 Annual Report for the WCG Department of Health (DoH) stated the population in the WC is at 6.6 million (WCG 2019/2020 Annual Report). According to Statistics South Africa (Stats SA 2019, published 2020) in the 2019 public household survey that was released in 2020, nationally, 72.5% of households indicated that their first preference was visiting public clinics, hospitals, or other public facilities. Furthermore, 26.8% indicated that they would first visit a private doctor, clinic, or hospital. The survey also showed that in the WC, only 24,1% of individuals are members of medical aid schemes (Stats SA 2019, published 2020). It can thus be understood that the SCM unit for the DoH, WC is strategically important as it facilitates the process flow of essential products and services to the end users, which in this context are the public health sector patients. Working in a SCM unit is often associated with high stress levels, high workload demands and short turnaround times due to supply and demand challenges.

A logical assumption would then be that a health pandemic such as Covid-19 would only exacerbate the workload on a SCM unit, as a pandemic causes increased patient numbers, and subsequently an increase in the need for services, products, and PPE. With the onset of the Covid-19 pandemic in South Africa, there was a global race for PPE and the SCM unit in the WC was under immense pressure when tasked to address the PPE needs in the WC as well as maintaining their normal daily work functions. SCM functions in this context can be described as a series of linked processes from the supplier to the patients (Reddy, Rao and Krishnanand, 2019).

SCM activities and processes entail the movement of goods and services between suppliers and consumers, and this meant staff had to work harder, for longer hours and in a more strategic manner, and all of this while still adapting to telecommuting. In the context of Covid-19, SCM challenges included escalating costs, managing global supplier shortages, escalating anxiety amongst end-users (patients), and coping with staff shortages. It can thus be understood that telecommuting for a SCM unit during a global epidemic presented various challenges and opportunities, as this study will show.

Evidence on the productivity level of teleworking staff appeared rather limited at this stage. Mandatory telecommuting was an unexpected and unprecedented situation during the Covid-19 pandemic, and research focusing on telecommuting for extended periods of time was also found to be limited (Jamal, Anwar, Khan and Saleem, 2021).

Telecommuting was historically thought of as temporary, voluntary, and in essence, practically unheard of for SCM officials employed in the public health sector. For this reason, it was significant to ascertain the role of telecommuting and the impact thereof on staff outcomes (Jamal et al., 2021). The telecommuting adoption is set to increase, and thus it will be crucial to understand the home-life and organisational factors or issues that could affect the SCM staff members' output, morale, and productivity (Sridhar and Bhattacharya, 2020). The research procedure is discussed in the following section.

1.9 Research procedure

On 8 June 2021, the researcher received signed consent to conduct the research from the Head of Corporate, DoH, WC Government. The consent was co-signed by the top management (see Appendix A). Following organisational consent, the researcher was granted ethics approval on 14 September 2021 from the CPUT FREC, and thereafter commenced with conducting the structured interviews on 29 November 2021. The content analysis of the structured interviews supported the final layout of the questionnaires, and the researcher started collecting questionnaire data through a comprehensive survey on 31 December 2021. The following section discusses the limitations of the research.

1.10 Limitations of the research

Limitations are shortcomings, circumstances or consequences that cannot be contained by the researcher. Surveys with time constraints were noted as challenging as respondents could struggle with time related constraints (Delva, Kirby, Knapper and Birtwhistle, 2002). Another shortcoming of a survey is that respondents may not feel encouraged to provide accurate or honest responses. Subsequently, the researcher relied on respondents' self-assessed feedback as well as researcher observations during the structured interviews. This study was undertaken only in a SCM unit in the DoH as SCM staff members at institutional levels were not prone to telecommuting as undertaken by this SCM unit. It would be useful to extend the study to other administrative departments such as People Management and Finance sections, to enable a more holistic view. Due to Covid-19 and protocols which advocate social distancing, the majority of this research was conducted virtually. One interview was conducted in person, and three interviews were conducted via a virtual method. Although the researcher was able to see the respondents during the virtual interviews, it was more personal to have in person sessions. The researcher also did not have control over responses received from respondents, and inaccurate responses could affect the reliability and validity of the research results. In the next section, the methodology used in this study is discussed.

1.11 Methodology

Methodology is defined as the characteristics of a research study (Khaldi, 2017). This encompasses the research design, data collection procedures, methods for data analysis and research paradigms. In this study, the researcher conducted structured interviews as part of the qualitative input. In addition, data was collected through questionnaires for quantitative and additional qualitative input. The sample size consisted of participants working in the SCM unit under study. It was envisaged to have a sample of up to 44 staff members, representative of 4 supervisors at Assistant Director level and higher with whom the researcher conducted in depth interviews, and 40 lower ranking staff members below Assistant Director level who will complete questionnaires. Section 1.12 provides details on the research instruments used in this study.

1.12 Research instruments

This study used a mixed methodology, during which qualitative and quantitative input was collected through structured interviews, questionnaires, and a comprehensive document and literature review. The next section provides an overview of the research instruments namely, interviews, questionnaires, and literature and document review.

1.12.1 Interviews

The use of interviews to collect qualitative data is relatively common in social research (Donalek, 2005). Structured in-depth "in-person" interviews were conducted with four supervisors in the SCM unit. Questions were directed to the four supervisors and the researcher recorded their responses.

1.12.2 Questionnaires

A survey was conducted using a questionnaire to answer the research questions. The surveys were administered to respondents from all salary levels within SCM, and to align to Covid-19 protocols, the questionnaire was distributed online via Google Forms. An initial questionnaire was developed, and the interview content informed and supported the final questionnaire.

1.12.3 Literature and document review

Several educational publications, relevant to this research, were reviewed to strengthen the researcher's understanding of the related constructs and theories. To align to Covid-19 protocols, desktop literary research was performed over the course of several months. In the next section, the paradigm is explained.

1.13 Paradigm

The researcher followed a pragmatic philosophy. Creswell and Creswell (2017) recognised pragmatic research philosophy as being mainly concerned with application and solutions, with researchers focusing on the research questions and the use of all approaches available to comprehend the problem at hand. This

paradigm also supported the inclusion of a range of qualitative and quantitative approaches best aligned with the questions and context. The next section provides a discussion on qualitative and quantitative research.

1.14 Qualitative and quantitative research

Some authors would argue that there is an interrelation between quantitative and qualitative methods, or that there exists interrelation between the methods (Creswell, 1999). According to Creswell, mixed methodology is the use of multiple but independent measures known as triangulation. He stated further that triangulation has four categories namely data triangulation, investigator triangulation, theory triangulation and methods triangulation. The data obtained for this study was analysed in qualitative and quantitative methods, therefore the research choice for this study was mixed methods. The mixed methodology approach is discussed in the next section.

1.15 Mixed methodology

The mixed methods research approach is more thorough in comparison to a single method approach, and it improves the validity and reliability of the data, and strengthens the research outputs (Abowitz and Toole, 2010).

An exploratory research design is a common mixed methods approach. The researcher understood the three steps in conducting an exploratory study as identifying the research problem, generating the hypothesis, and then conducting further research. Hypothesis creation is deemed to be of considerable value when there are a limited number of prior studies to provide clarity relating to the research problem, and where the research problem is not precisely resolved.

The next section discusses the research design.

1.16 Research design

The hypothetico-deductive (H-D) model was used in this study. During this study the researcher determined inceptive forecasts from the hypotheses, and these forecasts were tested to be a valid process through the H-D model. The H-D model combines "deductive reasoning, inductive reasoning, casual reasoning, abductive reasoning and defeasible reasoning" (Tariq, 2015).

1.17 Population

Population can be defined as the broader group of people to whom to generalise the outcome of a study and a sample is the subset of the population who will participate in the research study (Klopper, 2008). The set of individuals in whom the researcher was interested in for the purpose of the study, was regarded as the population (Gravetter and Forzano, 2006). The target group for this study was 44 administrative support staff in a SCM unit in the public health sector in the WC. The 44 staff members were representative of 4 supervisors of Assistant Director level and up, and 40 lower ranking staff members below Assistant Director level. In-depth interviews were conducted with the 4 supervisors at Assistant Director level and up and 40 lower ranking staff members below Assistant Director level completed the questionnaires. The sample population was chosen to be representative across the two subdirectorates within this SCM unit, and representative of both higher and lower ranking staff. They would have had exposure to working both from an office space and from home to enable them to provide rich and appropriate data for this study. The population of the SCM unit consists of 139 staff members. Sampling will be discussed in section 1.18.

1.18 Sampling

Non-probability convenience and purposive sampling techniques were chosen based on the convenience for the researcher (Acharya, Prakash, Saxena and Nigam, 2013). Convenience sampling was a preferred technique as it involved selecting respondents that are readily available and because of its cost effectiveness and purposive (or judgmental) sampling is a technique in which certain settings, participants or events are chosen with the purpose to provide crucial data that could

not be gathered by using other techniques (Taherdoost, 2016). Sampling was purposively conducted to include only staff members who have worked from home during the pandemic and from an office space before that, to provide relevant and rich data for this study. The participants were accessible through virtual communication methods and worked in the same section as the researcher. Section 1.19 unpacks the data analysis technique.

1.19 Data analysis

The qualitative content was analysed using a thematic method which is usually applied to a set of texts, such as interview transcripts. Thematic analysis supported the identification of patterns within the data which lead to a detailed understanding of the data. The content was coded, and themes identified. The quantitative questionnaire data was coded and analysed using Microsoft (MS) Excel. The choice of software was convenient and cost efficient. Using MS Excel to calculate descriptive and inferential statistics enabled the researcher to enter numerical values and data into the rows and columns of a spreadsheet whereafter pivot tables and graphs displayed the results of the quantitative content. The interview schedule will be discussed in the following section.

1.20 The interview schedule

The interview schedule incorporated a set of questions relevant to the objectives of this research. During the first phase of the interview, the researcher asked the respondents what their experiences were with their work teams while telecommuting during the pandemic and how staff morale could be affected. The second phase of the interview focused on social and professional isolation and perceived productivity.

During the final stage of the interview the researcher engaged with the respondents to determine their views on whether telecommuting would be a feasible option for the rest of the pandemic period and beyond. The researcher did not have a preference and accommodated in-person and virtual interviews, based on respondent preference.

1.21 Development of the questionnaire

The questionnaire consisted of three sections, linked to the study objectives, and a final section where additional input, relevant to the study, could be provided. The questionnaire was distributed via e-mail with a link to the Google Forms survey.

1.22 Pilot testing

Preceding the data collection, the researcher conducted a pilot test to ensure the validity and reliability, as well as general comprehension, of the questionnaire. The pilot testing assisted the researcher in ensuring that the questionnaire was user friendly and clear. The design of the questionnaire will be discussed further in Chapter Four, the Methodology. The next section discusses validity and reliability.

1.23 Validity and reliability

Clow and James (2014:267) mentioned that "validity and reliability address the issues of measurement and error". To ensure reliability and validity of the questions asked in this study, the researcher ensured that the interview and questionnaire questions were designed according to the required data; that the questions were understood by the respondents; and that the answers and data input were interpreted in the same context as communicated by the respondent.

The next section discusses the data capturing methods.

1.24 Data capturing

The researcher used Microsoft Excel to capture qualitative content, to be transfigured to statistical models. With regards to the quantitative data, it was captured, coded, and then themed. In the following section, a short summary of this chapter is provided.

1.25 Outline of the research study

This research consists of six chapters followed by references and appendices. The details of the research chapters were proposed as follows:

Chapter One: Background of the study

This chapter introduces the study, thesis and problem statement, research objectives and research questions, research methodology, literature review, limitations of the study, significance of the study, layout of the report and the summary.

Chapter Two: Models and theories

This chapter presents an introduction, an overview of the conceptual and theoretical context and a summary.

Chapter Three: Literature review

Chapter Three presents the literature with an introduction, literature discussion and a summary.

Chapter Four: Methodology

This chapter explains the methodology with an introduction, description of the research process and design, data collection, population and sampling, the research instrument, data analysis and a summary.

Chapter Five: Research results and findings

It presents the research results and findings with an introduction, a discussion of the results and findings, and a summary.

Chapter Six: Conclusion and future research

Chapter Six provides the conclusions of the study, the limitations of the study, recommendations, and areas of future research.

1.26 Summary of chapter

This chapter provided the background for the research study. The Western Cape public health sector was on the forefront during the Covid-19 pandemic. In this pandemic context,

administrative staff in a Supply Chain Management unit in Cape Town, who have traditionally carried out their work from supervised and controlled open-plan office spaces, were requested to work from home to mitigate the spread of Covid-19. The changed working circumstances brought about challenges, which included social and professional isolation, work/life wellbeing blurred borders, increased working hours and work/life stressors all of which will be discussed in the subsequent chapters. This study aims to determine whether telecommuting had an impact on staff wellbeing or morale, to assess whether staff feel they could remain productive during telecommuting periods in the pandemic and to predict and forecast how staff feel about continuing to telecommute during the remainder of the pandemic and post pandemic.

CHAPTER TWO MODELS AND THEORIES

2.1 Introduction

A conceptual framework is significant in a research study to expound the key variables and the relationships between the variables that needs to be studied. The initial conceptual framework for this research was conceptualised prior to reading other sources for this study and after compiling the literature review. The researcher used the initial conceptual framework as a guide during the research process to enable improved understanding of the phenomenon under study, to use as an analytical tool to make conceptual distinctions and to organise the variables within this study. A conceptual framework displays the researcher's initial conceptualisation of the relationships that exist between the variables during a study. In Figure 2.1, the perceived relationships between the dependent and independent variables are illustrated. These variables emanated from prior reading, the literature review the theories and models. These variables are the initial variables and include staff wellbeing and morale, productivity, the future of telecommuting in the organisation, social and professional isolation, job demands and stress and work-life balance.

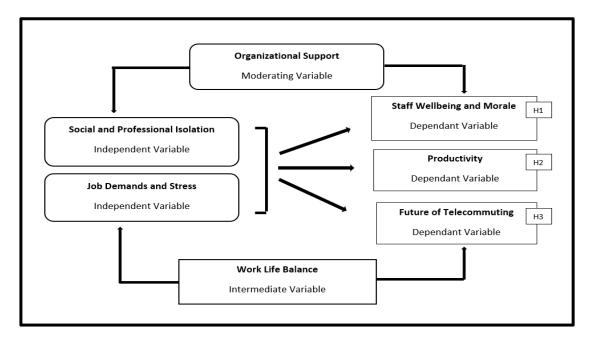


Figure 2.1: Initial Conceptual Overview

As seen in Figure 2.1, the variables were identified, and the researcher was able to formulate an initial conceptual overview. A final conceptual framework will be presented in Chapter Six. Each variable in the initial conceptual framework will be discussed further below.

2.2 Variables in the initial conceptual framework

2.2.1 Staff wellbeing and morale

Wellbeing could be defined as a prudential value, and it refers to what is inherently valuable to a particular individual. Wellbeing refers to what is fundamentally good for someone (Crisp, 2017). In a similar vein, Haybron (2011) noted that a constituent of wellbeing could be described as a state of complacency with your life. In the context of this study, wellbeing is understood as staff wellbeing and morale is understood as employee morale. It is presumed that staff wellbeing and morale could be affected by working from home, and that staff morale and wellbeing could in turn impact productivity.

Working from home in this context was an unexpected event and the researcher presumes that staff had to adapt to this new mode of working with its various challenges, which could also affect wellbeing and morale. In Rath and Harter's (2010) the theory of wellbeing, five essential elements were identified. The authors brought the focus to the relationship between living meaningfully and being happy and fulfilled in a career. There is also notable integration of some of these elements such as social, financial and career, thus suggesting that there is a relationship between well-being and a fulfilled career. In Fisher's Model of Conceptualizing and Measuring Wellbeing (2014), wellbeing at work is recognised as multidimensional. The next section will discuss work-life balance.

2.2.2 Work-life balance

Work-life balance in the context of working from home will presumably have an impact on how staff react, respond, and adapt to the new mode of working. The researcher presumes that challenges in work-life balance for telecommuters might be impacted by balancing work and personal responsibilities. The number of telecommuters is rising annually, and Raišienė, Rapuano, Varkulevičiūtė and Stachová (2020) predicted that this will double each year. There are scholars who are of the opinion that telecommuting could reduce stress and reduce work-life imbalance (Contreras, Baykal and Abid, 2020; Coenen and Kok, 2014), but Novianti and Roz (2020) found that teleworking had a considerable effect on workload, but not as considerable on employee work satisfaction, and that workers in the Indonesian public service were experienced more stress during telecommuting periods (Novianti and Roz, 2020).

In Schlossberg's transition theory, a transition is defined as any event or non-event that results in changed relationships, routines, assumptions, and roles. Schlossberg identified four sets of factors that impacted a person's ability to cope with a transition: situation, self, support, and strategies, which are also known as the 4 S's (Schlossberg, 1984). According to the model, the 4 S's can be summarised as follows:

- **Situation** refers to what precipitated the transition and considers the timing of the transition
- Self speaks to the factors that would be considered of importance, in relation to either
 the personal self (including demographic characteristics) or the psychological
 resources of the individual (including the development of self-ego and values).
- **Social support** refers to the individual's intimate relationships, family unit, community, and personal network of friends.
- Strategies refers to coping responses or resources the individual can access.

The next section provides a discussion on organisational support.

2.2.3 Organisational support

The Organisational Support Theory (Eisenberger, Huntington, Hutchison and Sowa, 1986), notes that organisational support is understood by employees as support from their workplace in caring for their individual welfare as well as appreciation for their individual contributions. Perceived organisational support can also be defined as the extent to which the employees believe and trust that their organisation is doing their best to ensure the success of the entire team. The researcher presumes that because telecommuting was

such a sudden organisational change, organisational support to staff members became crucial. However, it is presumed that the methods of offering organisational support to telecommuting staff will be vastly different in the virtual sphere. In the next section, social and professional isolation will be discussed.

2.2.4 Social and professional isolation

Telecommuting may lead to isolation, socially or professionally, as individuals are not in close physical proximity (Contreras et al., 2020). During telecommuting periods, the logical assumption would be that employees would have less social contact due to the Covid-19 pandemic and due to the subsequent social distancing measures, that were implemented to mitigate the spread of the virus. However, the impact of isolation on a professional level for telecommuting staff is an important factor to consider.

Workplace isolation involves isolation from co-workers and minimised face-to-face interplay between staff members that it could have a negative outcome on the interpersonal attachments between staff members (Bellmann and Hübler, 2020). As working from home shifted staff members' office space from organisational to home based, the researcher presumed that the telecommuting staff member also became professionally isolated from work colleagues and hence working relationships may have suffered. Social distancing was promulgated as a mitigating method to minimise the spread of Covid-19, which in turn could lead to social isolation. The researcher presumes that social and professional isolation may have impacted staff wellbeing and morale. In Dana and Griffin's model (1999), wellbeing in the workplace is established as an important factor. They name work relationships as an occupational stressor, which links to job related satisfaction, with psychological and behavioural consequences. The next section offers an overview on job demands.

2.2.5 Job demands

During the Covid-19 pandemic, the SCM unit continued to face increased job demands as they had to supply the front-line health care workers and patients at the WC health

institutions with products, services, and consumables. This includes the provision of PPE. When workstations shifted from the organisational space to home offices, the researcher was of the opinion that the staff had to cope with the challenges of an adjusted work-life balance, whilst their increased job demands did not cease during the Covid-19 pandemic. With the transition from the office to a remote work setting, additional work demand and constant virtual meetings followed suit. Wieck, Kunzmann and Scheibe (2021) noted that professions differ in the level of demand placed on employees. The Job Demand Resources (JD-R) model lists job demands as physical, psychological, social, or organisational aspects of the work, which requires sustained physiological and or sustained physical skills or effort (Bakker and Demerouti, 2007). The JD-R model is an occupational stress model that signifies that strain is a reaction to imbalance between the demands expected from the worker and the resources the worker must manage those demands with. In the context of this study, the resources will include mental agility, the ability to cope and the ability to adapt. In the next section, stress will be discussed.

2.2.6 Stress

When dealing with the potential challenges of ambiguous and stressful situations, similar in nature as during pandemics such as Covid-19, Ersen and Bilgiç (2018) pointed out that proactive coping was linked to positive work outcomes and improved work performance. In theory, a proactive coping ability may be described as a worker's individual resource that enables the ability to adapt and maintain productivity through periods that are challenging (Chang et al., 2021). The researcher presumes that staff members had increased stress levels while working from home as working from home presents its own unique challenges such as Information Communication Technology (ICT) issues, connectivity, and the shifting of team work to a virtual sphere. In addition, the researcher presumes that most of the staff members were probably affected personally by Covid-19 in that family members may have become infected and possibly suffered related Covid-The revised JD-R model (Demerouti, Bakker, Nachreiner and 19 complications. Schaufeli, 2001) lists burnout and work engagement as key factors that could impact employee wellbeing. Working remotely often leads to employees having no clear parameters between personal and work life, which may cause stress (Liu and Lo, 2018).

Occupational stress is also mentioned in the Health and Wellbeing in the Workplace model (Dana and Griffin, 1999), and home-work interface is one of the factors mentioned that links directly to occupational stress in Dana and Griffin's model. The following section provides an overview on productivity.

2.2.7 Productivity

Productivity is a crucial factor in any organisation and equally so in a public health service context. When SCM employees telecommuted, they were expected to be productive according to their usual assigned duties and responsibilities. Meetings, deadlines and staying productive while telecommuting were also important factors to consider (Singh, Kumar and Varghese, 2017). Thus, working from home could affect staff in a positive and negative sense (Richardson and Writer, 2017). A positive element is that staff can start their work schedule according to their convenience, but in a similar vein, working according to convenience could have an impact on productivity as convenience working could delay urgent work tasks.

Workplaces are usually designed to enhance productivity, but this could not be the case while staff telecommuted, and supervisors had no idea of the employee's set up at home or whether their personal life at home would allow them to remain productive. When working from home, there is little supervision and working hours also differ. Therefore, the researcher presumes that perceived productivity levels differ when working from home when compared to working from an organisational space. It is also presumed that the ability of telecommuting staff to stay productive may be affected by their ability or inability to rapidly react, respond, and adapt to a new mode of working. The TPB model (Ajzen, 1991) can be used to study a significant set of individual behaviour and it can be applied to a variety of behaviours in different contexts, including the public health sector. However, whilst this theory can study a widespread range of behaviours, emotional aspects are not fully considered by the model. The WHO (Burton and WHO, 2010) healthy workplace framework and model is based on the fact that the health, safety and wellbeing of employees are of great importance. This is also important for productivity and

sustainability of workplaces, which in turn will boost the national economy. Section 2.3 unpacks the theoretical frameworks and models explored in this study.

2.3 Theoretical frameworks

2.3.1 Introduction

A theory can be described as an organised set of logical principles presenting an explanation of a specific phenomenon by displaying and representing the relationship that exists between the phenomenon and others (Zikmund, Babin, Carr and Griffin, 2010). Similarly, a theoretical framework is a foundation of the research (Sekaran and Bougie, 2010). For this study, existing theory serves as the source of conceptualising the theoretical propositions of this study. In the following section, the explored models and theories will be discussed.

2.3.2 Models and theories explored

2.3.2.1 Theory of Planned Behaviour (TPB)

The TPB started as the TRA (Theory of Reasoned Action) in 1980 (Fishbein and Ajzen, 1980). TPB is an extension of an earlier theory, namely the theory of reasoned action. This theory is a generalised theory related to human behavior as observed in the field of social psychology. TPB can be utilized in studying a significant set of individual behaviours. TPB stipulates those behaviours are founded on an individual's intention regarding certain behaviour, which in turn can be a function of the individual's attitude toward this specific behaviour, subjective norm regarding that behavior and perception of control over that behaviour. The major strength of the TPB is that it can be widely applied to a variety of behaviours in different contexts, including a diverse area such as the public health sector. During this study, the TPB was studied in context of the relevant hypotheses. TPB has been used with great success in a multitude of studies during the last two decades. Figure 2.2 is a representation of how TPB is set out. This theory was

not found suitable as aspects relevant to ascertain emotional aspects, such as any type or form of fear, threats, anxiety, and moods are not fully considered by the model.

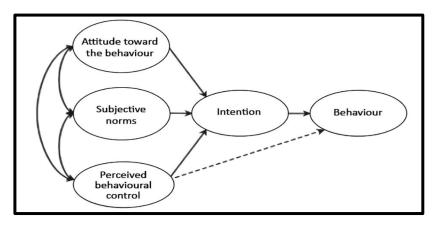


Figure 2.2: TPB (Ajzen, 1991)

2.3.2.2 Schlossberg's Transition Theory

In Schlossberg's transition theory, a transition is defined as any event, or non-event that results in changed relationships, routines, assumptions, and roles (Schlossberg, 1984). As this study will examine the experiences of staff adapting to a new work methodology, Schlossberg's transition theory will be considered in relevance to the position of the variables. Schlossberg identified four major sets of factors that impact on a person's ability to cope with a transition: situation, self, support, and strategies, which are also known as the 4 S's. The SCM staff had to adapt to a completely new method of working, and organisational support played a key role in their transition. In determining if work-life balance was instrumental in measuring improved morale and improved work well-being, the transition process as described by Schlossberg was assessed in this context.

This theory can include unanticipated events such as imposed telecommuting in a pandemic context. However, this theory is well and more suited to an educational context as it addresses transition over time. Figure 2.3 is a representation of Schlossberg's transition theory.

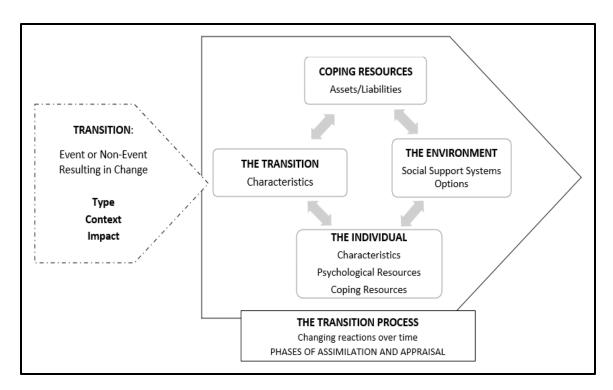


Figure 2.3: Schlossberg's transition theory (as adapted from Schlossberg, 1984)

2.3.2.3 Baruch and Nicholson's four factors of teleworking

Baruch and Nicholson's four factors of Teleworking framework (Baruch and Nicholson, 1997) which will include individual, organisational, job and home or family factors to explain the use of telecommuting. As far back as 1997, Baruch and Nicholson mentioned that there were four factors that impacted on telework namely the individual factor, job factors, organisational factors, and family/home factors. To demonstrate this theory, Figure 2.4 indicates how the four factors integrate with each other, thus indicating the stated factors are interlinked and integrated. It is understood that while one of the factors mentioned by Baruch and Nicholson (1997) may be an independent factor, it is most likely that these factors are integrated and collectively evident in the modern workplace. This theory is suitable for use as it recognises that individual, organisational, job and home or family factors are interlinked and integrated in the context of teleworking. The researcher found limited evidence of external output having an influence on the application of this model, though it was found suitable for inclusion in this study because of the inclusion of the four major elements required for teleworking namely the job, the individual, the organisation, and the home.

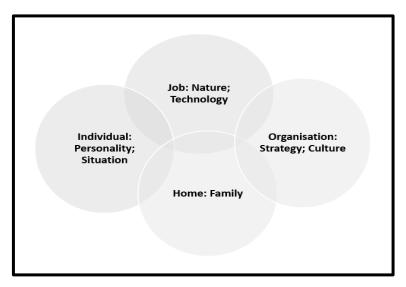


Figure 2.4: Baruch and Nicholson's four factors of Teleworking framework (Baruch and Nicholson, 1997)

2.3.2.4 Fisher's model of conceptualizing and measuring wellbeing

A variety of variables potentially falls under the umbrella of Fisher's model of Conceptualizing and measuring wellbeing at work (Fisher, 2014). Fisher lists some existing conceptualisations and definitions and discusses several approaches on how to measure these. He recommends means to broaden and deepen the conceptualisation and assessment of work wellbeing. This theory recognises that wellbeing at work is multidimensional, and it is therefore included as being suitable for this study. Figure 2.5 is an illustration of Fisher's model.

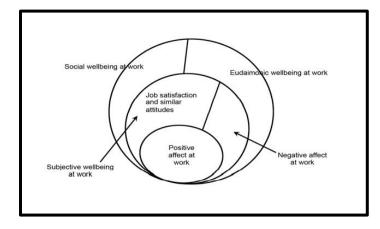


Figure 2.5: Fisher's model (Fisher, 2014)

2.3.2.5 Danna and Griffin's health and wellbeing in the workplace

Dana and Griffin (1999) integrated various literature relating to dealing and coping with wellbeing and health in the workplace. Their goal was to move this phenomenon towards the mainstream of organisational based research. This theory relates to dealing and coping with wellbeing and health in the workplace setting, and while employee health is a focus in this theory, wellbeing in the workplace is also established as an important factor. This theory is found suitable for this study as the content includes wellbeing in the workplace and it can be adapted to suit a remote work setting. Figure 2.6 is a representation of Dana and Griffin's Health and Wellbeing in the Workplace model.

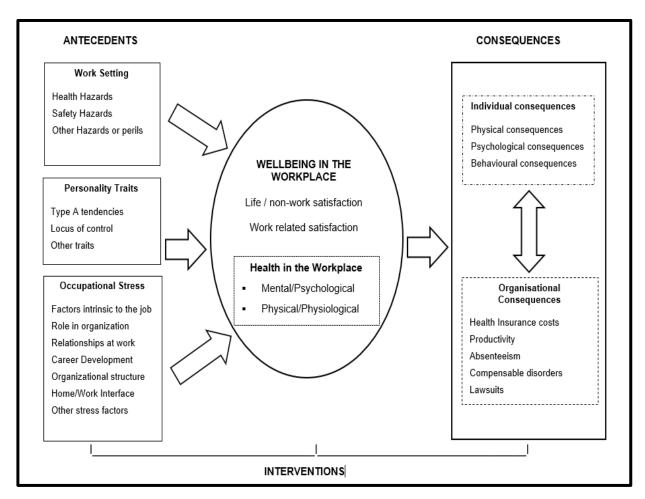


Figure 2.6: Health and Wellbeing in the Workplace model (as adapted from Danna and Griffin, 1999)

2.3.2.6 Burton and World Health Organisation Healthy Workplace framework

Burton and WHO (2010) developed a Health Workplace Framework and Model with the objective to provide guidance towards workplace health. It was written primarily for occupational health and safety officials, medical professionals and other stakeholders who wanted to make a marked difference in workplace health. This model also examined the available literature at length and then suggested a "flexible, evidence-based framework for healthy workplaces that can be applied by employers and workers" (Burton and WHO, 2010). The model's section about psychological workplace health was found to be applicable to some of the variables of this study and thus it was explored in that context. This model was not found to be applicable to this study as there is limited evidence of it being suitable to be adapted to a remote work setting. Figure 2.7 is an illustration of the Burton and WHO model.

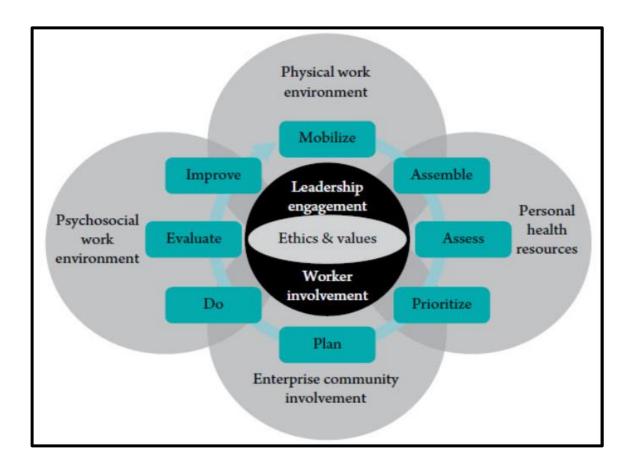


Figure 2.7: Burton and WHO Healthy and Workplace Model (Burton and WHO, 2010)

2.3.2.7 Theory of Reasoned Action (TRA)

There are three aspects embodied in this theory: behavioural intention, subjective norms, and attitude. TRA stipulates that an individual's beliefs may impact attitude, which in turn may contrive a behavioural intention. This intention can then be the cognitive capacity to accomplish a specific type of behaviour. The two focus areas that may impact on individual intention are subjective norms and attitudes. This model was not suitable for this study as it assumes that actions are because of decisions or choices. Figure 2.8 is a representation of the TRA model.

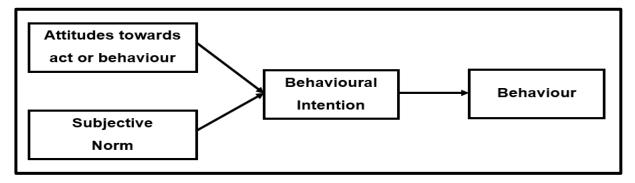


Figure 2.8: TRA Model (Fishbein and Ajzen, 1980)

2.3.2.8 Rath and Hater's well-being: the five essential elements

With the theory surrounding the Well-being: The Five Essential Elements, authors Rath and Harter (2010) provided an expanded view of which issues could over a period, contribute to wellbeing. In this theory, there is notable integration of some of these elements such as social, financial and career, thus suggesting that there is a relationship between well-being and a fulfilled career.

Table 2.1 lists the five essential elements of well-being as career, social, financial, physical and community. By examining this table, the authors brought the focus to the relationship between living meaningfully and being happy and fulfilled in a career. There is limited evidence of the psychological factor in wellbeing and wellness, and it will probably be difficult to align this theory to a pandemic or stress induced context. This theory is therefore not found suitable for this study.

Table 2.1: Rath and Harter's well-being: the five essential elements (as adapted from Rath and Harter, 2010)

The Five Ess	ential Elements of Well-being	
Career	People tend to undervalue how much their career impacts their well-being.	
	People who do well in career well-being have a belief in living meaningfully and doir what they love.	ng
	 Well-being in other areas decreases if career well-being is low. 	
	 Well-being can rebound faster after the death of a spouse than it can from a period unemployment. 	of
Social	The amount of time spent on social interaction drastically impacts life quality.	
	A few close, strong relationships help people become healthy and find happiness.	
Financial	 Having money is not a guarantee of happiness, although there is a general correlation 	on
	between higher gross domestic product and improved well-being.	
	 To improve well-being with money, spend on experiences rather than material 	al
	possessions.	
Physical	Physical fitness, diet and sleep are all important to overall well-being.	
	 Consistent exercise is far more important than strenuous or long-lasting workouts. 	
Community	 Safety and security are central to community well-being. 	
	 Parks and scenic outdoor atmospheres improve overall well-being. 	
	 Involvement in the community, through volunteer organisations or otherwise, improve well-being. 	es

2.3.2.9 Job Demands Resources model (JD-R)

The JD-R model can be used to forecast the effect of escalating work demands on the stress levels of employees. Furthermore, the JD-R model presupposes that heightened employee well-being and health originates from the positive and negative aspects of the work (Demerouti et al., 2001). In this model, the negative characteristics are called demands and the positive job aspects are called resources. The balance between demands and resources indicates the stress levels and well-being that the employees are experiencing. Some of the positive outcomes include improved absenteeism, increased productivity, and good working relationships. The negative outcomes include increased absenteeism and a lack of employee focus. Figure 2.9 illustrates the relationship between demands and resources, as well as the outcomes. This model is not supportive of demands outside the occupational and organisation arena that could impact work-wellbeing in the context of telecommuting staff and is thus not suitable for this study.

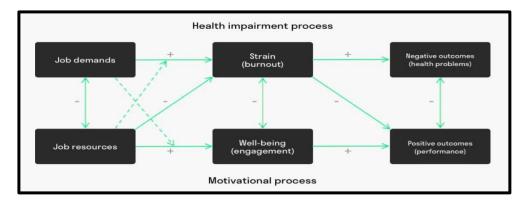


Figure 2.9: JD-R model (Bakker and Demerouti, 2007)

2.4 Comparison of theoretical context explored

Table 2.2 provides an overview and comparison of the theoretical context explored and its deemed suitability or non-suitability.

Table 2.2: Comparison of theoretical context explored

Model	Advantages	Disadvantages	Gap	Suitability
Theory of	Well supported	Better suited	Certain emotional	Not suitable
Planned	socio-	where an optional	aspects such as	
Behaviour (TPB)	psychological	choice is	fear, threats,	
	theory that	applicable	anxiety, and moods	
	predicts human		are not fully	
	behaviour		considered	
Schlossberg's	It includes	Reference is	It addresses	Not suitable
transition theory	unanticipated	made to the	transition over time	
	events	relationship with	and is better suited	
		the transition and	in educational	
		to the setting in	context	
		which the		
		transition takes		
		place		
Baruch and	It combines	Limited emphasis	Limited evidence	Suitable
Nicholson's four	individual,	on	found of external	
factors of	organisational, job	communication	factors having an	
teleworking	and home or	related issues	influence on the	
framework	family factors to		application of this	
	explain the use of		model	
	telecommuting			
Fisher's model of	It recognises that	It does not	It includes	Suitable
conceptualizing	wellbeing at work	include criteria for	wellbeing in the	
and measuring	is	an adjustment	workplace, and it	
wellbeing at work	multidimensional	phase or	can be adapted to	
		transition period	suit a remote work	

			setting	
Danna and	It relates to	Employee health	Mental health is	Suitable
Griffin's Health	dealing and	is a rather large	included in this	
and wellbeing in	coping with	focus area in this	model and the work	
the workplace	wellbeing and	study	setting can be	
	health in the		adapted to a	
	workplace setting		remote setting	
WHO healthy	It is the objective of	The focus	There is limited	Not Suitable
workplace	this model to	revolves around	evidence of being	
framework	provide guidance	health and safety	suitable to be	
	towards workplace	in the workplace,	adapted to a	
	health	with a lesser	remote work setting	
		focus on		
		wellbeing		
Theory of	It can predict a	Theory assumes	Does not	Not Suitable
Reasoned Action	wide range of	that actions are	specifically mention	
(TRA)	behaviours	because of	the beliefs that are	
		decisions or	operative for	
		choices	behaviour	
Rath and Harter's	There is the	Limited emphasis	It will be difficult to	Not Suitable
wellbeing: the five	suggestion that	on psychological	align this theory to	
essential elements	there is a	well-being and	a pandemic or	
of wellbeing	relationship	associated factors	stress induced	
	between well-		context	
	being and a			
	fulfilled career			
Job Demands	It incorporates an	It includes both	Its focal point is the	Not Suitable
Resources model	extensive range of	positive and	psychosocial work	
(JD-R)	working	negative	environment as	
	conditions	outcomes and	predecessor of	
		indicators of	motivational and	
		worker well-being	health related end	
			results	

2.5 Summary of chapter

This chapter discussed the theoretical frameworks validating that this research is grounded and informed by existing models and theories. Various relevant models and theories were discussed with the aim to link this study to existing literature. Contemplating various models and theories also provided the researcher with an opportunity to analyse the research problem to enable the researcher to reach suitable findings and make aligned recommendations. Chapter Three unpacks the Literature Review which is underpinned by Chapter Two's models and theories.

CHAPTER THREE LITERATURE REVIEW

3.1 Introduction

Due to the rapid spread of Covid-19, the administrative support staff in the SCM unit telecommuted for the first time during the Covid-19 pandemic and therefore the extent of the impact of telecommuting in this context has not been quantified or qualified on a previous occasion. Various factors such as the staff moving from a controlled working environment to a remote location, the integration of work-life balance, decreased social and professional contact, increased childcare responsibilities at home, the establishment of alternative communication methods, and ensuring a reliable and working ICT set up at home impacted adaption to telecommuting and remote work performance. It was observed that it further contributed to a possible decline in general staff well-being and morale. Low staff morale is problematic as it affects productivity and well-being, and social and professional isolation may contribute to lowered staff morale and possibly lowered level of work quality and production.

The administrative SCM unit support staff contribution is often overlooked. Their roles, functions and responsibilities are behind the scenes and not regarded as front line. Similarly, while clinical staff continued their services at their usual or similar place of work during Covid-19, the administrative SCM support staff had to adapt to relocation and a completely new working environment. What complicated this and introduced many variables to the situation, is that moving from a controlled working environment to remote includes the integration of work-life balance, decreased social and professional contact, and increased childcare responsibilities.

Based on reviewed literature, the researcher was able to develop the main research question and main research objective for this study. The main research objective of this study is to determine whether telecommuting had an impact on staff morale, to assess whether staff feel they can remain productive during telecommuting periods, as well as to predict and forecast whether telecommuting will be considered a viable working method for the remainder of the pandemic and post pandemic.

The main research objective supports the main research question which is: how did administrative public health sector support staff in the SCM unit react, respond, and adapt to telecommuting, which was a completely new mode of working while still being expected to remain productive in their work domain? As illustrated in Table 3.1, there is a relationship between the secondary research questions, the secondary objectives, and the resultant hypotheses. This forms the basis of this study and is supported by the literature review. As informed through the formulation of the literature review, the researcher was able to develop the questionnaire content, supported by the three secondary questions and objections, as shown in Table 3.1.

Table 3.1: Links between the secondary research questions, secondary objectives, hypotheses, and final questionnaire content

	COLUMN 1		COLUMN 2		COLUMN 3	COLUMN 4
						Final questionnaire
Sec	Secondary research		Linking secondary		king hypotheses	Questionnaire
que	estions	obj	ectives			Section A:
						Personal and general
R S Q 1	What impacted on staff morale and the integration of work-life balance for the duration of telecommuting?	O B J 1	To determine whether telecommuting had an impact on staff wellbeing or morale	H Y P 1	If telecommuting requires the integration of work-life balance and increased social and professional isolation, then telecommuting staff morale may be affected	Questionnaire Section B (H1): Staff morale and work- life balance while working from home
R S Q 2	How does telecommuting impact on productivity during telecommuting periods?	O B J 2	To assess whether staff feel they can remain productive during telecommuting periods in the pandemic	H Y P 2	Telecommuting staff ability to stay productive may be affected by their ability or inability to rapidly react, respond, and adapt to a completely new mode of working	Questionnaire Section C (H2): Remote working: Reacting and adapting (perceived productivity)

	Can		To predict and		If the concept of	Questionnaire
R	telecommuting for	0	forecast how staff	Н	'the office' in an	Section D (H3):
S	administrative	В	feel about	Υ	organisational	Remote working as a
Q	support staff be a	J	continuing to	Р	space will never be	viable option for the
3	viable option for	3	telecommute	3	the same again	future
	the future?		during the		because of	
			remainder of the		telecommuting	
			pandemic and		during a pandemic,	
			post pandemic		then this may be	
					regarded as the	
					new norm of	
					'working of	
					tomorrow'	

The following key themes were explored: the crucial role of SCM in the DoH, WC; telecommuting; productivity; factors that could affect telecommuting; telecommuting employee wellbeing; stress and anxiety; work-life balance; social and professional isolation; longer and adapted working hours and a new way of working during the pandemic and beyond. The following section provides a definition of SCM.

3.2 Defining Supply Chain Management (SCM)

Keith Oliver introduced the term of "supply chain management" in 1982 to the public domain during a Financial Times newspaper interview (Handfield and Nichols, 1999). Following that, for the first time, the WirtschaftsWoche in Germany, published results of a Supply Chain Management project that was implemented. The project was led by Wolfgang Partsch (Burkhardt, 1982). During the mid-1990's the term "supply chain management" gained traction rapidly in published literature.

There are various definitions that explains the concept of SCM. According to Cornell Engineering, SCM can be defined as managing the flow of goods and services (Cornell University, 2019). As SCM gained more attention in literature, different understandings and definitions were noted by authors and researchers. A more thorough explanation of the relevant SCM definitions is contained in Appendix E, which is a representation of the various historic definitions adapted from Felea and Albăstroiu (2013) and Mfengu (2019). In the next section, the various functions of SCM will be unpacked.

3.3 Functions of Supply Chain Management (SCM)

In a global context, SCM can be stated as involving the "design, planning, execution, control, and monitoring of supply chain activities with the objective to create net value, building a competitive infrastructure, leveraging worldwide logistics, synchronising supply with demand, and managing performance globally" (Supply chain management – SCM – APICS dictionary). SCM has since evolved to include a more extensive scope of functions. In 2016, National Treasury, South Africa performed a baseline SCM study for capacity building in SCM and in the preliminary report published in 2016, the main functions of a Public Sector SCM National department were listed as:

- Contract management
- Demand management
- Acquisition management
- Transversal contracting
- Logistics management
- Asset management
- Disposal management
- SCM risk management
- SCM performance management
- Goods and services procurement
- Clinical procurement
- Infrastructure procurement
- Facilities management
- Transport management
- Fleet management
- Property management
- Support services
- Travel, accommodation, and corporate accounts
- Research and development
- Moveable asset management
- Logistics, disposals, and asset management

The SCM unit under study resides in the Provincial DoH and currently performs relatively similar functions as those of the stated functions of a National Public Health SCM unit, however the functions of a modern SCM unit have evolved from the archaically noted functions in SCM namely managing the flow of goods and services to end users. The SCM unit under study consists of three Directorates namely SCM Sourcing, SCM Governance and the SCM warehouse, each with its own extensive services and functions. It should be noted that the SCM warehouse was a recent service acquisition for SCM (since December 2020), and although the warehouse dispatches goods, it does not fulfil any manufacturing activities. It should also be noted that the hospitals under the jurisdiction of the DoH WC have their own SCM sections, and services and duties listed below are not entirely inclusive or exclusive of functions performed in other SCM hospital departments. Table 3.2 offers a generic overview of the functions performed in the SCM unit under study.

Table 3.2: Generic overview of SCM unit functions in context of this research study

SC	M Sourcing	SC	M Governance	SC	M Warehouse
CI	inical Sourcing	Go	vernance	-	Procurement
- - - -	Contract management Demand management Acquisition management Transversal contracting SCM performance management Reporting	-	Training and development Policy and processes Head office procurement		Ordering and receiving of stock Help desk and reporting Demand planning/forecasting Picking Receiving Dispatching and direct Deliveries Systems Payments
G	Goods and Services		stems		•
- - - -	Contract management Demand management Acquisition management Transversal contracting SCM performance Management Reporting	- - - -	Transport/Fleet management Assets and Inventory Management LOGIS system functions E-Procurement Reporting System projects Help desk		
Inf	rastructure Sourcing Contract management Demand management Acquisition management				

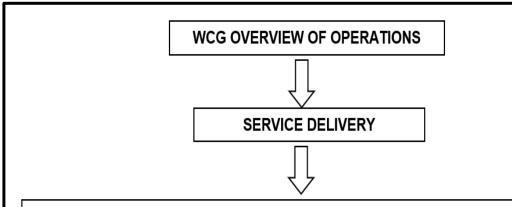
- -	Transversal contracting SCM risk management SCM performance management	
-	Departmental bid adjudication Committee functions	
-	Departmental tender Committee functions	
-	Demand management	

The following section provides a brief discussion on the framework and functions of the WC DoH.

3.4 Western Cape (WC) Department of Health (DoH)

The SCM unit in the context of this study operates under the ambit of the DoH, WC, and funding provided to the department is for services and products for the public health institutions end-users, the patients. The National Treasury report (2016) stated that Government is the biggest spender in South Africa and must promote good financial management to maximise delivery through the efficient and effected use of limited resources (National Treasury, 2016). Subsequently, it can be understood that in this context, efficient and well performing SCM units are of critical importance to achieve this objective.

According to the 2019/2020 DoH Annual Report for the DoH, WC (WCG 2019/2020 Annual Report), the population in the WC was estimated at 6.6 million, with a staggering 75.2% of the aforenoted population utilising and being dependent on public health services. Figure 3.1 provides an overview of operations for the WC DoH, for the 2019/2020 period, in terms of service delivery.



In 2019/2020 the Western Cape Provincial Health System saw:

- 14.3 million primary care contacts (exclusive of community and home-based care setting contacts)
- 112 718 baby deliveries
- 465 950 patients transported with emergency care services, of which 26.8 percent were priority 1
- 288 405 admissions across 33 district hospitals
- 129 539 admissions across 16 regional and specialised hospitals
- 140 002 admissions in central and/or tertiary hospitals
- 7 614 cataract operations performed
- 300 380 patients on anti-retroviral treatment
- 0.2 percent mother-to-child HIV transmission rate at 10 weeks

Figure 3.1: Overview of operations: Service Delivery (WCG DoH Annual Report, 2019/2020)

The ever-increasing number of patients seen in public health institutions in the WC DoH has placed major emphasis on financial governance. The WCG DoH Annual report 2019/2020 stated that the expenditure on goods and services in public health care institutions in the WC was a staggering amount of R7,6 billion, and the procurement of tangible assets at R1 billion. However, in terms of performance indicators, the WC DoH performed well as it achieved a clean audit in the 2019/20 period. The WC DoH also holds an excellent historic record for good audit outcomes. Figure 3.2 indicates the historic performance record of the WC DoH in terms of performance audit outcomes.

WCGH PERFORMANCE INDICATORS

PRESCRIBED SECTOR INDICATORS

INDICATOR: Audit opinion from the Auditor-General of South Africa

Actual Achievement 2016/2017	Actual Achievement 2017/2018	Actual Achievement 2018/2019	Planned Target 2019/2020	Actual Achieveme nt 2019/2020	Deviation
Result of audit: Unqualified	Result of audit: Unqualified	Result of audit: Unqualified	Result of audit: Unqualified	Result of audit: Clean	Over- Performance

Comment on Deviation:

Target achieved

Note: The Department set a target of achieving an "Unqualified" audit outcome, but managed to achieve a "Clean Audit", which is an even higher performance than anticipated. The over-performance is considered an advantage to the Department and reinforces good governance principles.

Figure 3.2: Performance indicators: Historic performance record (WCG DoH Annual Report, 2019/2020)

Good audit outcomes are indicative of efficient performance within a department. Figure 3.2 is an indicator that the SCM units in the DoH performs well. It can thus be understood that the SCM unit for the DoH WC is strategically important to the WC as it facilitates a Head Office function in the process flow of essential products and services to the end users, which in this context are the public health sector patients. Of importance is the note of overperformance in Figure 3.2, which is considered a definite advantage to the department and an indicator of good governance principles. The next section offers a discussion on the effect of Covid-19 on SCM operations.

3.5 The effect of Covid-19 on Supply Chain Management (SCM) operations

The Covid-19 pandemic can be described as one of the events that had the most impact on global economy. The pandemic also spread worldwide and paralysed business around the world. According to the International Monetary Fund (2020), the Covid-19 pandemic contributed towards the worst economic decline since the Great Depression in 1929 (International Monetary Fund, 2020; Craighead, Ketchen and Darby, 2020). The impact of the pandemic on SCM units was severe as it placed SCM units under severe pressure. There was a global race to obtain and confirm procurement of adequate PPE to cater for the needs of staff and patients, and to mitigate the spread of Covid-19 and there was massive increase in demand for PPE which affected supply, demand, and pricing. Covid-19 also brought to the forefront the critical importance of SCM (Craighead et al., 2020).

In every growing business or organisation, SCM will play a key role, irrespective of the size of the business or organisation. In today's unpredictable business environment, organisations are coping with massive challenges to meet customer needs. It can thus be stated that SCM plays a key role in the "global market by organising the activities from supplier to end customer effectively" (Reddy et al., 2019:40). Similarly, the WC South Africa SCM success is dependent on the "coordination and integration of all parties involved in SCM processes" (Mfengu, 2019:2). In the following section, telecommuting will be defined and further discussed.

3.6 Defining telecommuting

Reference is made to this manner of working in reviewed literature as work from home (WFH), working remotely, flexible working, telecommuting and telework. Telecommuting also facilitates the reorganisation and "facilitates a re-distribution of work tasks across dispersed workforces when work sites are inaccessible and/or unsafe" (Donnelly and Proctor-Thomson, 2015:48). According to Allied Marketing (2016), the concept of telecommuting was originally mentioned by Jack Niles when he coined the concept of telecommuting while working on a NASA communication system in 1972. Mokhtarian (1991:11) defined telecommuting as "working at home or at an alternate location and communicating with the usual place of work using electronic or other means, instead of

physically traveling to a more distant work site". This is in line with what Belzunegui-Eraso and Erro-Garcés (2020) proposed when they stated that telework could be facilitated at multiple locations using different ICT. To gain an improved understanding of the concept of telework, Table 3.3 will highlight the types of telework modalities, the frequency of technology used to achieve the specific modality and the location attached to each modality of telework. According to the International Labour Organization (ILO, 2017), there are three different modalities used for teleworking such as 1) regular homebased telework 2) high mobile telework and 3) occasional telework.

Table 3.3: Three different modalities used for teleworking (Eurofound and the International Labour Organization, 2017)

Modality	Use of Technology	Location
Regular home-based telework	Always or almost all the time	From home at least several times a month and in other locations less often than several times a month
High mobile telework	Always or almost all the time	At least several times a week in at least two locations other than the employer's premises or working daily in at least one other location
Occasional telework	Always or almost all the time	Less frequently and/or fewer locations than high mobile telework

From Table 3.3 it can be deducted that telework will most of the time be possible with the assistance of technology and that the location will not be the individual's dedicated organisational office space. In line with this information, Belzunegui-Eraso and Erro-Garcés (2020:2) proposed that telework "... can occur from multiple locations (home, office, and other places) using different technologies". Section 3.7 focuses on staff wellbeing and morale.

The following themes are discussed below and **relevant to hypothesis one** namely: If telecommuting requires the integration of work-life balance and increased social and professional isolation, then telecommuting staff morale may be affected.

3.7 Staff wellbeing and morale

The World Health Organization's mental health definition is a state of well-being in which every person becomes fully aware of his or her own capability, can handle the normal life stressors, be productive and fruitful, and can contribute to his or her community (WHO, 2020). Emotional wellbeing goes further than the view of just physical wellness to include more than just the physical body and regards employee emotional state as well as their outputs and ability to perform optimally as equally crucial elements (Anon, 2021). Employers are aware of this shift towards catering for more than just physical wellness of their staff. "Work is an essential ingredient in the recipe for human fulfilment and purpose.... this suggests that we have a professional, moral, and ethical responsibility to do what we can to minimise the damage our managerial behaviours may inflict" (Quelch and Knoop, 2018:vii). Subsequently, Rath and Harter (2010) averred that the career element was one of the five essential elements of well-being, and it stated that well-being in other areas decreased if career well-being was low. Because of the Covid-19 pandemic, the way we worked and lived was affected, and subsequently working from home became the new pace of work (Irawanto, Noviantia and Roz, 2021).

Arora and Khatri (2020) noted that planned training sessions in for example time management, work-life balance and stress management would be needed to maintain and improve worker emotional and psychological wellbeing. A Nuffield Health report from an independent study undertaken in 2019 during which 7000 participants were surveyed in collaboration with the University of Manhattan, suggested that telecommuting provided workers with the flexibility to juggle both home and work tasks. However, while it was linked to positive wellbeing, reviewed research is not conclusive on the impact of telework on stress levels or productivity. The Nuffield Health report stated that overall telecommuting was found to have a positive effect on wellbeing, and negative effects were found due to a result of idiosyncratic characteristics or other organisational factors such as appropriate ICT and resources to perform remote work (Franklin, 2019). In the next section, employee stress and anxiety will be discussed.

3.8 Stress and anxiety

Stress in the general population has escalated from 11.3% to 29,6% as a direct result the Covid-19 pandemic (Salari, Hosseinian-Far, Jalali, Vaisi-Raygani, Rasoulpoor, Mohammadi, Rasoulpoor and Khaledi-Paveh, 2020). It is also difficult to predict the duration of the Covid-19 pandemic in South Africa as there has been a first wave (March 2020 to November 2020) and a second wave (December 2020 to April 2021), and in addition the public health sector is currently in a third wave (from May 2021), and in preparation for a fourth wave of infections. Staff face and experience uncertainties in their daily lives, and equally important, also numerous work-related challenges while telecommuting (Crawford, MacCalman and Jackson, 2011). Referring to statistics collated for the Organisation for Economic Cooperation and Development Report (OECD,2020), telecommuting is affected by various factors that could cause work and productivity difficulties.

Considering the possibility of becoming sick, dying, losing income, and being isolated or quarantined, people around the world are experiencing increased levels of anxiety and depression (WHO, 2020). The term 'Covid stress' was described as part of what has been called Covid stress syndrome, which includes contamination and socio-economic concerns, along with xenophobia, trauma symptoms, and compulsive checking disorder (Montano and Acebes, 2020; Taylor, Landry, Paluszek, Fergus, McKay and Asmundson, 2020). An added advantage of telecommuting is that issues such as worsening traffic and the time spent in rush hour to get to work can be eliminated and reduced stress levels.

3.9 Work-life balance

Work-life balance can be described as maintaining a balance between an individual's personal life and work-life. Jyothi and Jyothi (2012) rightfully argued that personal life and work-life should ideally complement each other, but this situation changed considerably when work was moved into our homes, and thus created an unknown element into home lives. Similarly, it is believed that depending on the individuals' circumstances, working from home could be perceived as impacting positively or negatively on work-life balance.

However, while we could ponder the type or severity of such an impact, the fact remains that working circumstances changed and employees had to adapt.

More qualitative research on remote working is needed since there is a lack of agreement in the literature on whether remote work leads to higher levels of work-life wellness (Fedakova and Ištoňová, 2017). The understanding is currently that good work-life wellness contributes to improving the physical health, mental health, and productivity of remote workers (Como et al., 2021). Felstead and Henseke (2017) found that remote workers in the United Kingdom experienced work intensification, an inability to 'switch off', and greater work-home spill over than office employees. Nonetheless, the researchers also found that remote workers were more enthusiastic about their jobs, felt more loyal to their organisation, and experienced improved job satisfaction. During the Covid-19 pandemic, many remote workers are still experiencing the inability to switch off from work (Gambhir, 2020) and staff members face challenges with working from home as the boundary between family responsibility and working may become blurred (Powell, 2020). Subsequently, telecommuting staff may feel the pressure and that it is an expected norm to keep the appearance up to seem to be working at all hours (Powel, 2020). In a similar vein Molino, Ingusci, Signore, Manuti, Giancaspro, Russo, Zito and Cortese (2020) referred to staff mental fatigue as a factor that might be challenged by an 'always on" mode.

A telecommuting feature is that it is mainly performed at home, and the consequence is that the work demands in many instances exceeds normal and predetermined official hours which could present negative consequences for staff wellbeing. Productivity and telecommuting will be discussed in the following section.

The following themes are discussed below and **relevant to hypothesis two** namely: Telecommuting staff ability to stay productive may be affected by their ability or inability to rapidly react, respond, and adapt to a completely new mode of working.

3.10 Productivity and telecommuting

Telecommuting can be understood as a substitute to traditional working arrangements (Arora and Khatri, 2020) during which employees achieve their work responsibilities detached from their dedicated or assigned workplace. Gajendran and Harrison (2007) averred that telecommuting is not traditionally seen as a stressful arena, but there are various factors that contribute to employees reaching efficient levels of productivity. Limited evidence was however found of research that specifically targeted the productivity metric pertaining to white collar staff in the context of telecommuting. Munyiva and Wainaina (2018) mentioned the benefit of improved work-life balance and the freedom telecommuting offered staff. During a field experiment with call centre employees in China, evidence was found to show that teleworking enhanced total factor organisational productivity (Bloom, Liang, Roberts and Ying, 2015). It was found that the positive impact on productivity levels stemmed from improvements in employees' outputs and from the imposed reductions in organisational office space.

In contrast, Battiston, Blanes i Vidal and Kirchmaier (2017) mentioned that it is not clear how productivity in teams decreases with physical distance. Evidence was found that telecommuting could positively impact productivity outputs when the tasks assigned were of a creative nature, but that telecommuting would have a negative impact on the output when dull or ordinary tasks had to be performed (Dutcher, 2012). The following section focuses on job demands.

3.11 Job-demands - longer or adapted working hours

It was observed that staff in the public health sector worked longer and more hours daily when telecommuting when compared to their usual office-based schedule yet telework was also associated with decreased self-reported productivity by staff (Morikawa, 2020) during the Covid-19 pandemic. Telecommuting staff who were working longer hours and attempting to fulfil work and life needs in the same space, may have experienced enhanced stressors that could negatively impact on their general wellbeing. There is a need to study this phenomenon as it will highlight actions that may assist telecommuting staff to feel connected, appreciated, and balanced, and in turn this could boost and build organisational resilience. Furthermore, research found that staff felt telecommuting had improved their balance between life and work, although they also faced challenges related

to being constantly busy. While employees expressed that their work-life balance had improved while telecommuting, being constantly exposed to technology had impaired their ability to switch off during leisure hours (Grant, Wallace, Spurgeon, Tramontano and Charalampous, 2019; Sridhar and Bhattacharya, 2020). The next section provides a discussion on telecommuting as the new way of working during the pandemic and beyond.

The following themes are discussed and are **relevant to hypothesis three** namely: If the concept of 'the office' in an organisational space will never be the same again because of telecommuting during a pandemic, then this may be regarded as the new norm of 'working of tomorrow'.

3.12 Telecommuting as the new way of working

Evidence was found of numerous best practices (Barbuto et al., 2020) that could assist organisations in designing workable telecommuting initiatives for the remainder of the pandemic and beyond. Evidence found that successful initiatives consisted of scenarios 1) where consultation with staff took place and the latter were involved actively in the design fit of telecommuting initiatives, 2) where telecommuting is being considered as a team initiative and where teams working together telecommute according to similar rosters, and 3) where results of telecommute rosters and programs are actively monitored, and feedback are provided to the employees. In Nigeria research found that the number of workers who wanted to work remotely and the number who wanted to work from an organisational space, were in fact equal (Ajayi, 2020).

Ethical and effective listening (Neill and Bowen, 2021; Wong, Cheung and Chen, 2020) also seemed more difficult during telecommuting periods. As telecommuting staff are challenged with new barriers such as adapting to working from home, technology adaption, and family care concerns, efficient organisational communication remains crucial. Similarly, Wong, Cheung and Chen (2020) asked if effective listening might be compromised by the element of physical distancing.

Subsequently, supervisors and human resource officials may support workers by familiarising themselves with the consequences, barriers and challenges associated with

telecommuting, including work related stress and other problematic home dynamics. According to Como et al. (2021), as more research emerges on similar phenomena, it is likely to uncover additional strategies for supporting the development and mental health of telecommuters. It seems that a hybrid approach between telecommuting and working from the office, with the allocation of organisational 'hot-desks' may also be feasible option for the future. What is however clear at this stage is that a need exists for intervention to demystify the issues surrounding staff and telecommuting, and to provide the basic competence or understanding.

3.13 Social and professional isolation

The workplace is a central and crucial element in individuals' daily lives. Within the workplace context, the staff engages and builds relationships with supervisors, subordinates, and peers. These relations were deemed important facets in shaping workers' perception of what work encompasses (Collins, Hislop and Cartwright, 2016). Telecommuting staff work mainly from home, and therefore experience a loss when the face-to-face contact or employee relations is discontinued. For some workers, telecommuting may result in professional or social isolation which may have an adverse influence on work performance (Golden, Veiga and Dino, 2008) because staff may feel they do not have their colleagues or supervisor in close proximity for support or problem solving (Contreras et al., 2020). Professional isolation can also be linked to decreased opportunities for reward, the lack of personal/work development such as training initiatives, whereas social isolation may occur because staff miss their interactions with co-workers.

It would be worthwhile to delve deeper into the potential impact of staff support networks and the opportunities during which they are able to socially interact with colleagues. Workplace social support networks could also have a negative impact on staff psychologically (Cooper, Dewe and O'Driscoll, 2001). In contrast with these findings, Halford (2005) cited a qualitative study in which it was found that telecommuting did not adversely impact on workplace relationships because strong relationships that were developed prior to telecommuting, were effortlessly moved into the virtual sphere. From another angle, the introvert staff member may flourish during telecommuting as it will

propose an opportunity to avoid individuals. The following section focuses on the factors affecting telecommuting.

3.14 Factors affecting telecommuting

As far back as 1997, Baruch and Nicholson mentioned that there were four factors that impact on telework namely the individual factor, job factors, organisational factors, and family/home factors (Baruch and Nicholson, 1997). To demonstrate Baruch and Nicholson's four factors of Teleworking framework, Figure 3.3 indicates how the four factors integrate with each other, thus demonstrating the stated factors are interlinked and integrated.

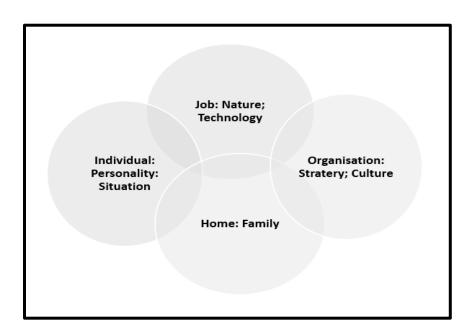


Figure 3.3: Baruch and Nicholson's four factors of Teleworking framework (as adapted from Baruch and Nicholson, 1997)

In today's modern working world, some of Baruch and Nicholson's (1997) views are still valid. It is understood that while one of the factors mentioned by Baruch and Nicholson (1997) may be an independent factor, it is most likely that these factors are integrated and collectively evident in the modern workplace. It is acknowledged that there are other factors that could affect working from home, such as load shedding and ICT requirements, but this will not be covered extensively in this study.

Apart from the WCG introducing flexible working practices, international private companies such as Google, Apple, Microsoft and Hitach also initiated mandatory work from home polices during the Covid-19 pandemic. However, these companies already had employees that worked by remote means. Prior to the Covid-19 pandemic, flexible working practices are not an issue that was discussed widely in the WCG DoH, however this has changed with the impact of the pandemic. Employee experiences of working from home and a more satisfactory work-life balance are issues brought to the table with Covid-19. When the WCG DoH commenced telecommuting, it was with the sole purpose to promote social distancing, to protect employees from becoming infected with Covid-19 and to mitigate the spread of Covid-19 where employees were in close daily contact with each other. However, various telecommuting efficiencies were identified while employees worked remotely. Telecommuting is now believed by certain management cadres to be an innovative and alternative method of working, which could improve employee efficiency and wellbeing. In the following section, organisational support will be discussed.

3.15 Organisational support

3.15.1 Employee Health and Wellness Programme (EHWP)

The DoH, WC Government caters for organisational employee health and wellness through the Employee Health and Wellness Programme (WCG DoH EHWP, 2021). EHWP is a dedicated person-centred quality care programme for employees. According to the WCG DOH Annual Report 2019/2020, the programme is "focussed on maintaining a work life balance which has multi-faceted benefits and is adapted to the changing work-place trends in South Africa and globally" (WCG DOH Annual Report 2019/2020). EHWP is a free service for all employees and can also be utilised for immediate household members of employees. The trend to cater for employee health and wellness has indeed increased when staff started to work remotely. The research will strive to assess whether employees deemed the current and available organisational support as sufficient. The EHWP program encompass the following: individual wellness (physical); individual wellness (psycho-social and psychiatric); organisational wellness and work-life balance; group therapy for specific occupations; occupational therapeutic services, and strategic leadership development.

While employees worked from home, they received e-mails through the corporate communications channel. The e-mails recognised that Covid-19 has placed all employees under immense pressure, with feelings of compassion, fatigue, stress, insomnia, anxiety, burnout, and depression which are becoming increasingly coming amongst staff. The e-mails further emphasised that employees recognise that they are performing a crucial role and that they are doing the best they can with the resources they have. Employees were also thanked for their hard work during the subsequent Covid-19 waves and told they were valued and appreciated.

Some e-mails also provided valuable information on dealing with emotional trauma and how to seek support for working through feelings of exhaustion, loss, or despair. Another e-mail that was sent to employees provided valuable information with regards to mental wellbeing and advice on how to connect and share emotions. In addition, there were emails sent to employees regarding working from home and caring for children, with helpful advice on how to balance screen time and creating a sustainable routine while working from home. The helpline numbers were provided in the e-mails and employees were encouraged to use this service.

Figures 3.4, 3.5 and 3.6 are examples of the supporting messages the WCG DoH distributed via e-mail.

A message to all employees: We see you. We value you. We care about you

We have been in this pandemic since March 2020 and we continue to fight this pandemic.

COVID-19 has placed everyone under immense pressure, feelings of compassion fatigue, burnout, stress, insomnia, anxiety and depression are becoming increasingly common amongst our employees. Many of you have lost colleagues and loved ones due to COVID-19.

It is important for all health care workers to realise the following: recognise that you are performing a crucial role and doing the best you can with the resources available. We thank you for all your hard work during the first and second wave. We value you and appreciate you.

The following are tips that you can use during this time to help you with your mental wellbeing:

1	Keep boundaries between work and your personal life.
2	Connect to nature whenever possible and keep doing physical activities
3	Find someone at work to connect with each day and share your emotions.
4	Increase your sense of control by maintaining a daily routine. If you catch yourself saying you are unable to practice self-care, pause, and choose a new mindset. Taking care of yourself means that you are better able to take care of others.
5	Find time to "Pause": stop to intentionally recharge your mental batteries.
6	Take breaks from watching, reading, or listening to the news and social media. Hearing about the pandemic can be mentally exhausting, especially since you are working with people directly affected by it.
7	If you are being treated for a mental health condition, continue with your treatment and talk to your provider if you experience new or worsening symptoms.
8	Practise breathing techniques. Diaphragmatic breathing can effectively calm and refresh your nervous system.





Figure 3.4: Example of a supportive message to employees (WCG DoH, 2021)

1	Practise self-care so that you are able to support those in your span of care.
2	Use genuine check-ins and encourage people to show vulnerability, express how they feel and who they are.
3	Connect more with employees, by using deep listening, asking questions, and to be empathetic in your dialogues.
4	Focus more on opportunities, less on problems.
5	Allow yourselves to admit that you will not always know if you are making the correct decision but ultimately you still have to make decisions.
6	Create intentional spaces for employees to "Pause", for example creating a space where employees can talk about emotional turmoil they are experiencing and having check-ins with all employees in your span of care. Allowing and creating opportunities in the workplace for employees to take intentional breaks where they can recharge physically and emotionally. Acknowledging and allowing employees to grieve loved ones.

Figure 3.5: Example of a supportive message to management (WCG DoH, 2021)

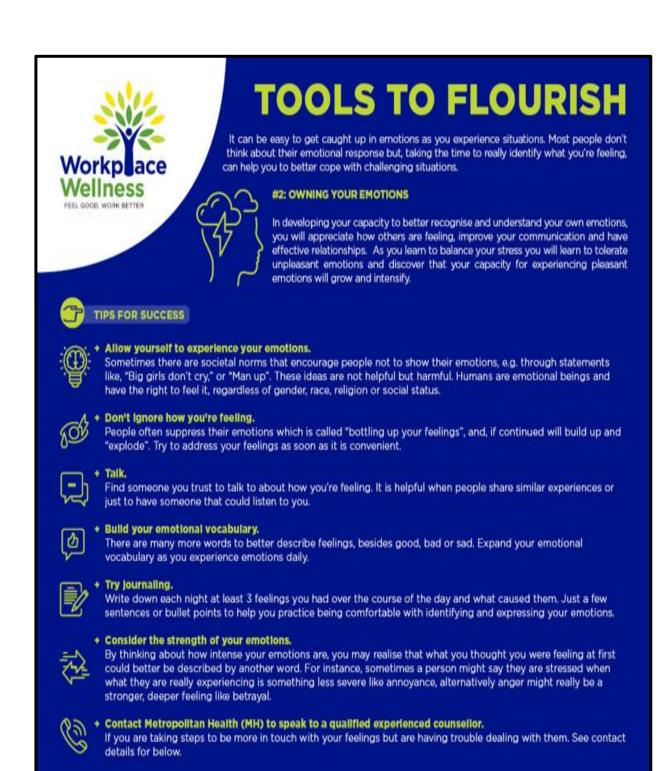


Figure 3.6: Example of a supportive message to employees relating to tips to flourish (WCG DoH, 2021)

3.15.2 Departmental managerial consultancy service

In addition, the DoH also offered a managerial consultancy service for managers to address workplace challenges. According to the WCG DoH Annual Report (2019/2020),

assistance was sought for the following issues: absenteeism, conflictual work relationships, disciplinary issues, performance management, general stress, substance abuse and work-life balance issues pertaining to subordinates. It should be noted that work-life balance issues increased considerably when employees started to work from their homes, (WCG DoH Annual Report, 2019/2020). The WCG DoH also partners with firms such as Metropolitan to offer expert support structures to employees, to enable a structured and well thought through road to employee wellness.

3.15.3 E-Care programme

The DoH also offers the e-Care programme which "enables employees to manage their well-being online and send employees a weekly e-mail with information on various health topics to promote physical and emotional wellbeing" (WCG DoH Annual Report 2019/2020:125). According to the WCG DoH Annual Report (2019/2020), 808 employees used the e-Care service. In addition to the support offered to employees from the DoH as mentioned above, employees also received support directly from the SCM unit during interdepartmental sessions facilitated with various ranks of staff.

3.15.4 Consultants

During the Covid-19 pandemic, the DoH also made use of outsourced consultants to host healing and grieving sessions. The DoH recognised that, during the Covid-19 pandemic, employees could be overwhelmed in terms of personal loss, the loss of colleagues and through witness distress in others. The facilitated sessions strived to assist staff to better process their experiences and in offering an opportunity for mourning, grieving and ultimately healing. Section 3.16 provides a summary of articles reviewed for this study.

3.16 Summary of reviewed articles

Table 3.4 provides extracts of articles reviewed for this study.

Table 3.4: Summary of reviewed articles

Articles	Author(s)	Key Findings
Work-family lockdown: Implications for a post- pandemic research agenda	Powel (2020)	The value of social support at individual, family, organisational, community and societal levels are highlighted. The implications for future research of an original event, the Covid-19 pandemic, is noted as it is still transpiring.
An exploration of work-life wellness and remote work during and beyond Covid-19	Como et al. (2021)	Work-life wellness of remote workers could be impacted by the lack of organisational support during the transition to remote work, combined with Covid-19 related stress. More research is needed to better support the new remote workforce, including testing adapted training programs.
Pandemics and supply chain management research: Toward a theoretical toolbox	Craighead et al. (2020)	The extensive scope of disruption, massive spill over of effects across countries and industries, and extreme shifts in demand and supply that occurred during the Covid-19 pandemic illustrate that pandemics are qualitatively different from typical disruptions. A fresh look at supply chain phenomena is required to assist supply chain managers to better prepare for the next pandemic.
A review on supply chain performance measurement systems	Reddy et al. (2019)	Continuous performance measurement is the key catchphrase for any kind of organisational success. Simulation techniques are more fitting than other performance techniques and approaches for supply chain performance measurement in a volatile context.
Teleworking in the context of the Covid-19 crisis	Belzunegui-Eraso and Erro-Garcés (2020)	The Covid-19 crisis demonstrates how telecommuting has been used by organisations to ensure their employees' safety and to provide continuity to economic activity. Safety factors are relevant in the study of telecommuting and should be considered in further research.
Compassionate management of mental health in the modern workplace	Quelch and Knoop (2018)	Work is a vital and indispensable element in the recipe for individual fulfilment, which also directly impacts our physical and mental health. Connected to this is the professional, moral, and ethical responsibility to do what we can to minimise the damage managerial behaviours may inflict.
Work from home: measuring	Irawanto et al.	Working from home, work-life balance, and

antinfantian batusan wall	(0004)	
satisfaction between work-	(2021)	work stress have a notable impact, directly
life balance and work stress		and indirectly, on work satisfaction. This
during the Covid-19		method of work as a new pace of work can
pandemic in Indonesia		sustain job satisfaction for workers in the
		context of this study.
		Organisations should take heed to pay more
		attention to this method of working.
Telecommuting and its	Arora and Khatri	Organisations around the globe are obligated
implications in the era of	(2020)	to telecommute amidst the Covid-19
Covid-19: Issues, challenges		pandemic, and numerous employees are
and opportunities		having difficulty with the idea of working from
		home for comprehensive stages of lockdown
		periods.
		Before 2020, this method of working was
		seen as an unsociable nightmare, however in
		_
		the current pandemic setting it is the
December 1	0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	prevailing trend of most organisations.
Prevalence of stress,	Salari et al. (2020)	Covid-19 not only impacts on physical health,
anxiety, depression among		but also results in psychological concerns.
the general population during		The spread of the new coronavirus can
the Covid-19 pandemic: a		impact the mental health of people in
systemic review and meta-		different communities.
analysis		The limitation that the analysis was
		conducted periodically is noted.
Development and initial	Taylor et al. (2020)	Research findings and clinical observations
validation of the Covid stress		suggest that during pandemics, many
scales		individuals reveal stress- or anxiety related
		responses that includes different types of
		fear, and there was evidence of the Covid
		Stress Syndrome.
Telecommuting: An empirical	Abilash and Siju	There is a good relationship between
study on job performance,	(2021)	employee commitment and job satisfaction
job satisfaction and	(2021)	during the adoption of telecommuting method
employees commitment		in an organisation.
during pandemic		Further research into the telecommuting
circumstances		employee's work environment would be key
Circumstances		
Wallbaing costs of	Molino et al. (2020)	to adopting to telecommuting methods.
Wellbeing costs of	Molino et al. (2020)	Notwithstanding the benefits for both
technology use during Covid-		employees and organisations, remote
19 remote working: An		working contain negative consequences,
investigation using the Italian		such as technostress.
translation of the		This study furnished a good tool for the
Technostress Creators Scale		investigation of technostress and provided
		indications for practice in the field of
		wellbeing for remote employees.
Work-life balance and	Munyiva and	The support of employee welfare wielded a
employee performance at	Wainaina (2018)	significant and positive impact on employee
the Kenya ports authority in		performance.
mombasa county, Kenya		There is a significant and positive correlation
		between flexible work programs and
	1	. ~

		employee work performance.
Covid-19, teleworking, and productivity	Morikawa (2020)	The share of firms in Japan implementing teleworking has been low but has increased suddenly with the Covid-19 pandemic. The rapid spreading of teleworking is not limited to Japan but is a global phenomenon.
		Improving productivity of home workers is crucial to mitigate the negative impact of the Covid-19 pandemic on the economy.

3.17 Summary of chapter

In this chapter the main variables from the initial conceptual and theoretical framework were systematically explored through the available literature. During the literature review, it was established that SCM units have various integrated functions and are crucial to the procuring of services and goods for the public health institution patients, of which 72.5% of the WC population prefers to visit in comparison with private health establishments (WCG DoH Annual Report 2019/2020). It was established that the DoH WC has an excellent performance track record in terms of audit outcomes, and that the efficiency of a well performing SCM unit is of crucial importance to the service rendering to the end user and to good governance audit outcomes. The literature review further focused on key constructs and themes linked to the aim of this research, namely, to determine whether telecommuting had an impact on staff morale, to assess whether staff feel they can remain productive during telecommuting periods, as well as to forecast if telecommuting will be considered a viable working method for the remainder of the pandemic and post pandemic. The next chapter will discuss the methodology employed in this study.

CHAPTER FOUR METHODOLOGY

4.1 Introduction

The research methodology will be discussed in this chapter. The methodology utilised for this research study is discussed in relation to the research objectives and research questions of this study and will include the population, sampling methods, ethical considerations, data collection instruments and data analysis techniques. To reach the objectives of the research (as stated in Chapter One), the research aims to determine the impact of telecommuting on staff morale, to assess whether staff felt they could remain productive during telecommuting periods, as well as to forecast if telecommuting will be considered a viable working method for the remainder of the pandemic and post-pandemic. Figure 4.1 illustrates how the research questions link to research objectives, as the focal points for this study.

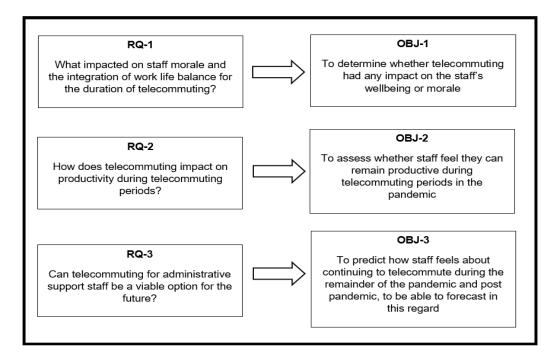


Figure 4.1: Illustration of the relevance between the research questions and objectives

Methodology in research is described as a structured method to determine a research problem through data collecting using various methods and providing a portrayal of the collected data (Murthy and Bhojanna, 2009) "Essentially, a research methodology is the

blueprint of a research study" (Murthy and Bhojanna, 2009:32). The research methodology and design chosen for this study will be discussed below.

4.2 Qualitative, quantitative and mixed research

Figure 4.2 presents the differences between quantitative, qualitative, and mixed research methods. A comparison was done to understand the differences between qualitative, quantitative, and mixed research methods to differentiate methods and to distinguish which method is deemed suitable for this study. From Figure 4.2 it is evident that both qualitative and quantitative research methods are equally significant when conducting a research study because it is of paramount importance to consider overall approaches (Collis and Hussey, 2009).

CHARACTERISTICS	QUANTITATIVE METHODS	MIXED METHODS	QUALITATIVE METHODS
DEGREE OF PREDETERMINED NATURE	PREDETERMINED	BOTH PREDETERMINED AND EMERGING METHODS	EMERGING METHODS
QUESTIONS	INSTRUMENT BASED	BOTH OPEN- AND CLOSED-ENDED	OPEN-ENDED
DATA TYPES	PERFORMANCE, ATTITUDE, OBSERVATIONAL, AND CENSUS	MULTIPLE FORMS OF DATA DRAWING ON ALL POSSIBILITIES	INTERVIEW, OBSERVATION, DOCUMENT, AND AUDIO-VISUAL
ANALYSIS	STATISTICAL ANALYSIS	STATISTICAL AND TEXT ANALYSIS	TEXT AND IMAGE ANALYSIS
INTERPRETATION	STATISTICAL INTERPRETATION	ACROSS DATABASES INTERPRETATION	THEMES, PATTERNS, INTERPRETATION

MAY EMPLOY
THESE STRATEGIES
OF ENQUIRY

SURVEYS,
EXPERIMENTS

SEQUENTIAL,
CONVERGENT,
EMBEDDED

PHENOMENOLOGY,
GROUNDED THEORY,
ETHNOGRAPHY,
CASE STUDIES,
NARRATIVE

Figure 4.2: Comparison of qualitative, quantitative, and mixed methods research (as adapted from Creswell and Creswell, 2017)

Based on the comparison in Figure 4.2, this research will be deemed a mixed methodology study as it will use a combination of different research tactics, which will include quantitative and qualitative, to gain an improved comprehension and to produce a thorough answer to the research questions. A part of this study's quantitative data set will be used to produce statistics on how the staff comprehend and feel toward future telecommuting working approaches, and this quantitative data will be read and interpreted in conjunction with the use of the qualitative data collected. The next section will discuss the mixed methods research methodology.

4.2.1 Mixed methods research methodology

A mixed methods research approach is a combination of quantitative and qualitative research methodologies and is particularly used in research studies where there is a prerequisite for a greater comprehension of the problem. In this study, a mixed methods methodology approach was used to gain a better understanding of connections and conflicts between quantitative and qualitative data. The following section will discuss the rationale for using mixed methods.

4.2.2 Rationale for using mixed methods

A mixed methods research design can provide respondents with the opportunity to have a strong voice in communicating their experiences during the research process (Shorten and Smith, 2017) and this contributes to increased scholarly interaction and augment

researcher experience. The mixed-method approach methodology consisted of structured interviews for the qualitative input, and questionnaires containing open-ended and Likert scale questions as the qualitative and quantitative inputs. The researcher gathered the quantitative data in phase two of the research plan (questionnaire phase), as preliminary data first needed to be collected during phase one (interview stage) to be able to answer pre-defined questions. Upon consideration, the researcher felt that for this study, the relevant qualitative and quantitative data collection would complement each other and provide rich data to enable the researcher to reach the objective of this study.

The researcher further applied an exploratory research approach, which is a common mixed methods approach. The three steps in conducting an exploratory study were followed namely, identifying the research problem, generating the hypothesis, and then conducting further research. Hypothesis creation was deemed to be of considerable value as there were a limited number of prior studies to provide clarity or clear insight relating to the issues telecommuting SCM public sector health staff could experience. The researcher's good base knowledge of the subject under study allowed for the formulation of meaningful hypotheses. Casula, Rangarajan and Shields (2021:1720) proposed "the working hypothesis as a flexible conceptual framework and a useful tool for doing exploratory studies". Furthermore, working hypothesis has the capacity to direct and to bring soundness across the research process steps (Casula et al., 2021). In the next section, the paradigm will be discussed.

4.3 Paradigm

The term paradigm was introduced in 1970 by Thomas Kuhn. The term paradigm is used in social research to refer to the basic set of beliefs that will guide the actions and define the researcher's view (Lincoln, Lynham and Guba, 2011). The next section will discuss the pragmatic paradigm.

4.3.1 The pragmatic paradigm

Kaushik and Walsh (2019:11) argued "...that pragmatism has the potential to offer an organising framework for social work research". A pragmatic model allows for a

diverse and multitude of perspectives, unlike more constructivist or positivists research models (Kaushik and Walsh, 2019). Antwi and Hamza (2015) argued that the world is comprehended by individuals through their own personal lenses. In a similar vein, "the researcher who acts in the pragmatic paradigm enjoys the freedom to choose the methods used to reach... objectives" (Revez and Borges, 2018:585).

This study followed a pragmatic approach. Pragmatism recognises that there are a variety of interpretative methods, and equally also a variety of ways to undertake research, and that no single position or way of thinking will be able to portray the entire picture. Therefore, pragmatism supports involving the method that appears best suited to the research phenomenon under study (Kaushik and Walsh, 2019). Subsequently, the researcher had the freedom to follow any of the procedures, techniques or methods associated with quantitative or qualitative research.

4.4 Research design

Research design is essentially a set of guidelines and instructions on how to get to a predetermined goal (Mouton, 1996). It essentially combines observation, experience, theory, and hypothesis statements. The choice of design is crucial for a research project as the rest of the research process would depend on it, and it could affect the research finding's reliability. As stated by Henning, Van Rensburg and Smit (2004) "methodology refers to the coherent group of methods that complement one another and have the goodness of fit to deliver data and findings that will reflect the research question and suit the research purpose". In the same vein, qualitative or quantitative research methods will be dependent on the main purpose of a study. In the following section, the deductive research approach will be explained.

4.5 Deductive research approach

The deductive research approach is often used in social, business, and scientific sciences. In deductive research observation must be repeated several times and performed for a substantial population, that shares similar characteristics, to replicate the results to the entire population (Dudovskiy, 2019). The aim of the deductive researcher is

to test known sequences and notions, from theory by using new empirical data (Bhattacherjee, 2012). The following section speaks about the inductive research approach.

4.6 Inductive research approach

An inductive research approach is associated with qualitative research studies. The aim of the inductive researcher is to "infer theoretical concepts and patterns from observed data" (Bhattacherjee, 2012:3. Therefore, inductive research is also referred to as 'theory building' research (Bhattacherjee, 2012). Figure 4.3 illustrates the position of the deductive and inductive research approaches in the research cycle (Bhattacherjee, 2012).

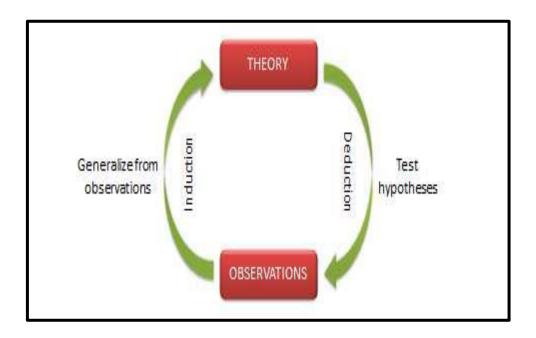


Figure 4.3: The research cycle (Bhattacherjee, 2012)

The following section discusses the H-D research approach.

4.7 The hypothetico-deductive (H-D) approach

The researcher followed a H-D approach in this study. The H-D approach was deemed appropriate for this research because it combined both the deductive and the inductive reasoning views. A single approach (either inductive or deductive) is restrictive in

reasoning to fully explore a phenomenon to yield complete information that could have leverage on decision making (Walliman, 2011).

4.8 Population and sampling

The population for this research was the SCM administrative staff working in the SCM unit under study. The researcher identified a pool of 60 respondents that qualified to participate in the study and whom have experience in working from home and from an office space. They were subsequently invited to participate in the study and the researcher followed up frequently in terms of their participation. Challenges in reaching a higher respondent rate included staff working off site with faulty ICT equipment, problematic data connections, load shedding schedules, staff not being easily reachable due to working from home and staff not being in proximity of each other. After numerous attempts to contact the staff who were invited to participate in the study, 34 respondents participated in the study.

The 34 participants were representative of four supervisors of Assistant Director level and up, and 30 lower ranking staff members below Assistant Director level. The aforesaid staff members had exposure to working both from an office space and from home. In depth interviews were then conducted with the four supervisors of Assistant Director level and up and 30 lower ranking staff members below Assistant Director level completed questionnaires. The sample population was representative across the two sub directorates within this SCM unit, as well as representative of both higher and lower ranking staff.

4.8.1 Types of non-probability sampling

The various types of non-probability sampling include the following:

- Quota sampling where respondents are equally presented depending on specific characteristics.
- Consecutive sampling in which all respondents are accessible, are part of the chosen sample.

- Snowball sampling in which respondents are identified, who in turn then nominate additional participants whom it is thought to meet research criteria and are usually suitable for small population sizes.
- Convenience sampling in which respondents are chosen due to convenience and ease of recruiting.
- Purposive sampling during which respondents are selected based on the research objectives and their characteristics.
- Judgemental sampling (also known as purposive sampling) where certain respondents are selected because the researcher believes that they are more suited for the study than the others.

In the following section convenience and purposive sampling will be discussed.

4.8.2 Convenience and purposive sampling

The researcher chose convenience and purposive sampling. Convenience sampling was chosen where members of the target population meet specific criteria such as availability, geographical proximity, or the willingness to participate in a research study (Punch, 2009). Convenience and purposive sampling techniques were chosen based on the convenience of the researcher (Acharya et al., 2013) and convenience sampling was about selecting respondents as they were often readily available (Taherdoost, 2016).

Convenience and purposive sampling were used in this study for the following reasons:

- The respondents chosen had to work in the SCM unit under study.
- The respondents chosen had to have been exposed to telecommuting, or a hybrid approach of telecommuting and office-based work, and thus will be able to provide rich data.
- The respondents had to be willing to participate and available to participate.
- The respondents had to adhere to geographical proximity as the study was conducted in Cape Town, Western Cape.
- The respondents had to have access to a work ICT device and data for the completion

of the survey.

4.8.3 Purposive sampling for interviews

Utilising purposive sampling, the researcher recruited four supervisors in the SCM unit, who agreed to participate in the study. Two supervisors were from the SCM Sourcing directorate and two supervisors from the SCM Governance directorate. The supervisors were of Assistant Director and higher ranking. The researcher intentionally chose these supervisors as they met the selection requirements.

4.9 Validity and reliability

Even though the results and quality of data are addressed in both qualitative and quantitative research designs, the validity and reliability will differ even if the quality of data and the results in both methods are assessed (Creswell and Clark, 2007). The research design for this research study was deemed appropriate for these reasons and the analysis of the results was performed in line with ethical standards and without bias. Zhang and Wildemuth (2009:7) maintain that dependability can be determined by checking the study process consistency, and "confirmability is determined by checking the internal coherence of the research product, which includes the data, findings, interpretations and recommendations".

Furthermore, the researcher used original data in the analysis of the research study results. The data collected during the interviews were transcribed, and care was taken not to omit any important information that could contribute to the study. Coding and thematic analysis will be used for the qualitative data analysis and Microsoft Excel will be used for the data transcription of quantitative and statistical results. The pilot study will be explained in the next section.

4.10 The pilot study

A pilot test is a pre-data collection survey that is conducted by using a small sample of the population to ensure that the questionnaire is user friendly, comprehensive, and free from

bias (Walliman, 2011). The researcher subsequently conducted a pilot test with 4 of the SCM staff members, and the results of the pilot test revealed where the researcher had to amend or adjust some of the questions for better comprehension. The pilot testing results were mainly to ensure user friendliness and a sound technical quality of the software platform, and the results were discarded and not used in any manner for this study. The pilot testing was conducted directly onto Google Forms, which is a free software online survey platform hosted by Google. The Google Forms platform was later used for the actual data collection, due to its accessibility, user-friendly interface, and cost effectiveness. The pilot tests enabled the researcher to establish an improved and more-user friendly questionnaire for data collection.

4.11 Data collection

Data was collected within a SCM unit at the DoH, WC. The researcher collected the data without the help of fieldwork assistants. The researcher conducted an in-depth document and literature review on the phenomenon under study and conducted four interviews. One of the interviews was in person and three were on MS Teams, to align to Covid-19 protocols and according to the individual preferences of the interviewees. The researcher arranged and conducted an information session via MS Teams, during which she informed and sensitised the two Directors namely Governance and Sourcing respectively, of the approved research and that data collection would take place in their respective directorates.

4.11.1 Interview process as phase one

- Following the information session with the two Directors, the four supervisors in the SCM unit were approached via MS Teams and e-mail.
- The four supervisors were informed about the research and that it was organisationally approved. They were also informed that information session was held with the Directors to sensitise them. The researcher explained that the data would be collected anonymously. They were informed that they could withdraw from the interview at any point and that they had the right to omit certain questions with which they felt uncomfortable.

- The researcher also provided a short background and introduction on the context and objectives of the study.
- Thereafter, the researcher confirmed the interview preferences, with due consideration of the Covid-19 regulations.
- It was established that one supervisor preferred to meet in person and the other three supervisors preferred to meet via MS Teams. The researcher then sent out interview appointments via Outlook and the interviewees accepted the appointments.
- The interviews were between 30 and 60 minutes.
- Before commencing with the interviews, the researcher displayed or showed the organisational consent and ethics approval to the interviewees.

4.11.2 Questionnaires as phase two

- During the interview process, the researcher asked in-depth questions which would support the final questionnaire to be distributed to respondents as phase two of the data collection process.
- 60 possible respondents were approached via MS Teams or other virtual methods, during which the research ethics were explained, and participation was requested.
- When respondents replied to the introductory e-mail to confirm participation, the link to the research questionnaire via Google Forms was sent to each respondent in a private e-mail.
- The researcher received a complimentary e-mail from Google Forms every time an additional survey was completed, and this assisted in keeping track of progress.
- There were some queries received from questionnaire respondents who struggled to access the link due to using an outdated browser, but the researcher was able to assist them, and they could thereafter complete the questionnaire successfully.

4.12 Research instruments

The primary sources of data were interviews, questionnaires, reviewed literature, and researcher observations. To attain qualitative and quantitative data input from participants, a questionnaire tool with open and closed questions was used. The

questionnaire tool included items from similar questionnaires as reviewed in existing research. The researcher also collected data from sources that already existed such as scholarly articles, journals, various internet sources, theses, statistics, and reports where relevant. The data gained from the interviews supported the finalisation of the survey questionnaire as it provided the researcher with an improved understanding of the phenomena under investigation.

4.12.1 Literature and document review

Several educational publications, relevant to this study were reviewed to strengthen the researcher's understanding of the related constructs and theories. To align to Covid-19 protocols, intensive desktop literary research was performed over the course of several months. The literature and documents reviewed included scholarly articles and journals, theses, statistical reports and South African Government related policy prescripts and circulars. In the next section, the research interviews will be discussed.

4.12.2 Interviews

Structured in-depth interviews were conducted virtually via MS Teams with four supervisors in the SCM unit and face to face with one supervisor. Questions were directed to the four respondents and the interviewer recorded their responses. Through the interview technique, the researcher had the opportunity to clarify issues by asking follow-up questions (Bhattacherjee, 2012). The interviewer used a list of compiled questions, however, some of the questions could be omitted based on responses received and the general flow of the conversation during the interviews. The interview questions focused on the respondents' experiences during telecommuting, as well as issues their subordinates experienced whilst telecommuting. Personal information was not requested during the interviews, and thus participants could be assured of confidentiality.

4.12.3 Questionnaires

The results of the interviews, combined with the results obtained from the literature and document review, supported the finalisation of a comprehensive questionnaire. The questionnaire layout was as follows:

- Section A of the questionnaire collected personal and general respondent data such as age and years of service. This section also established whether respondents had performed their work functions from home or from any other location besides the office, for any period during the Covid-19 pandemic. This section consisted of six questions.
- Section B addressed staff morale and work-life balance while working from home, and it consisted of thirteen questions to collect data on this theme.
- Section C consisted of eighteen questions to collect data relating to remote working:
 reacting and adapting (perceived productivity) whilst working from home.
- Section D consisted of eleven questions to collect data on whether telecommuting for administrative support staff could be seen as a viable option for the future.
- Section E in the questionnaire afforded respondents the opportunity to add additional information suggestions or opinions. This section consisted of one question.

4.13 Linking research questions, objectives, and hypotheses

Table 4.1 illustrates how the main research question, research sub-questions, objectives and hypotheses are linked.

Table 4.1: Relationship between the main research question, secondary research questions, secondary objectives, and hypotheses

MAIN RESEARCH QUESTION		
How did administrative public health support staff in the SCM unit react, respond, and adapt to imposed		
telecommuting, which was a completely new mode of working while still being expected to remain		
productive in their work domain?		
Research sub-questions Linking Objectives Linking Hypotheses		

R S Q 1	What impacted on staff morale and the integration of work-life balance for the duration of telecommuting?	O B J 1	To determine whether telecommuting had an impact on staff wellbeing or morale	H Y P 1	If telecommuting requires the integration of work-life balance and increased social and professional isolation, then telecommuting staff morale may be affected
R S Q 2	How does telecommuting impact on productivity during telecommuting periods?	O B J 2	To assess whether staff feel they can remain productive during telecommuting periods in the pandemic	H Y P 2	Telecommuting staff ability to stay productive may be affected by their ability or inability to rapidly react, respond, and adapt to a completely new mode of working
R S Q 3	Can telecommuting for administrative support staff be a viable option for the future?	O B J 3	To gauge how the staff feel about continuing to telecommute during the remainder of the pandemic and post-pandemic	H Y P 3	If the concept of 'the office' in an organisational space will never be the same again because of telecommuting during a pandemic, then this may be regarded as the new norm of 'working of tomorrow'

The following section will discuss the data coding and analysis.

4.14 Data coding and analysis

The researcher analysed the results of the interviews using thematic analysis. Thematic analysis is a method of decoding qualitative data, and it is applied to texts, such as interview data. The qualitative responses were analysed, coded, and themed. The researcher used Microsoft Excel to analyse quantitative survey question content. MS Excel was selected because of its convenience and cost-efficiency. MS Excel was used to allow descriptive and inferential statistics, which allowed the researcher to enter numerical values and data into the rows and columns of a spreadsheet whereafter pivot tables and graphs were utilised to display the results of the quantitative content.

4.15 Data capturing

During phase one of the data collection process, the researcher captured the four interviews with the use of MS Word. The data was then prepared for coding and thematic

analysis. During phase two of the data collection process, the researcher used Google Forms which automatically generated graphs and tables to understand and capture the qualitative data. The qualitative data generated during phase two was also captured with the use of MS Word, to be coded and analysed at a later stage. The data analysis technique will be discussed in the following section.

4.16 Data analysis technique

Data analysis relates to breaking up data or facts into different parts to enable an understanding of the information (Schiellerup, 2008), and this process enabled the researcher to have a broad view of the findings. By coding data, themes were identified and assigned to similar groups of data. The groups of data were then labelled and organised, and this enabled the researcher to see the relationships between the groups of data. The researcher used key words and information commonly used throughout the data collection process, to establish themes. The following section will contain the qualitative content analysis.

4.16.1 Qualitative content analysis

Thematic analysis is a method of analysing qualitative data. It is usually applied to a set of texts, such as interview transcripts. The thematic analysis supports the identification of patterns within the data which will lead to a detailed understanding of the data. The researcher found that thematic analysis was a valuable method for examining the interview response content. The qualitative responses were analysed using a thematic approach.

4.16.2 Quantitative content analysis

Quantitative data can only be meaningful if analysed and interpreted properly. The researcher used MS Excel to analyse quantitative content. MS Excel was selected because of its convenience and cost-efficiency. Using MS Excel to calculate descriptive and inferential statistics enabled the researcher to enter numerical values and data into the rows and columns of a spreadsheet, whereafter pivot tables and graphs were utilised

to display the results of the quantitative content. Inferential statistics is a statistical method that deduces from a small but representative sample the characteristics of a bigger population. It therefore allowed the researcher to make related assumptions about a wider group by using the selected sample group as a guideline. The delineation of this study will be discussed in the following section.

4.17 Delineation of the study

As opposed to doing a study about the entire administrative component in the public health sector, one component was selected to collect exact data. The scope of the research has thus been narrowed down to the SCM component, instead of the researcher applying a more holistic approach. A larger sample would probably have produced more in-depth information on staff morale while telecommuting, but it could have been problematic to include administrative staff from other sections as it would have made the sample too big, and the results would not be relevant to the functions of the SCM unit while telecommuting.

This study also did not include administrative SCM staff from outside the public health sector, and the reason for exclusion was that private organisations operate differently than the public sector and the inclusion of such data could possibly have affected the research outcomes. The study did not include clinical staff such as doctors, pharmacists, or nursing staff as it was felt they did not relocate from their workplace and remained working, although under increased pressure, in a similar environment during the Covid-19 pandemic. The study was undertaken strictly within the SCM component, Department of Health, Cape Town, Western Cape, South Africa.

4.18 Limitations of the study

The following limitations have been identified as events that could have an impact on this study. Due to the National state of pandemics in South Africa, the researcher had to implement Covid-19 rules. The researcher had to navigate various challenges in collecting respondent data which included staff working off site with faulty ICT equipment, problematic data connections, load shedding schedules, staff not being easily reachable due to working from home and staff not being in proximity of each other. This restricted

personal access to interviewee participants, who preferred to conduct interviews virtually, could also affect the interpretation of the respondents' data. The questionnaire was only available in English, which although understandable to all respondents, might have caused some interpretation issues for respondents whose home language was not English. Load shedding schedules might have had an impact on the completion of questionnaires and interviews. Some problems were anticipated with ICT (respondent access to ICT, limited data connections and outdated software (browsers). The researcher attempted to deal with these issues by informing all the respondents that they may contact the researcher at any time for support, clarification, and assistance. In this manner, the researcher was able to narrow down the scope of its impact on this study. The ethical considerations will be discussed in the next section.

4.19 Ethical considerations

Research ethics contributes to a set of principles for researchers who are conducting research without causing harm to any individual during the process (Israel and Hay, 2006). Ethical research is a broad term that includes informed consent (to provide respondents with the required information); anonymity and confidentiality (to protect the information sources and ensure data security); voluntary participation and comprehension (to ensure that respondents understand the content of the research conducted and does not feel forced to participate). Ethical principles in this study included honesty, objectivity, integrity, openness, respect, confidentiality, responsible publication and mentoring, social responsibility, non-discriminatory publication and to adhere to the human subject's protection (Resnik, 2015).

The researcher ensured ethical conduct during this study to ensure survey results were accurate, true, ethical, and original. Respondents and data were treated ethically. Respondents were informed that they could withdraw from participating at any time during this study.

The researcher abided by the Cape Peninsula University of Technology's (CPUT) guiding principles for Research Ethics and the Code of Ethics for Research on Human participants as required by the Health and Wellness Sciences Research Ethics Committee. The

researcher obtained ethical clearance from the CPUT Ethical Committee and obtained a written consent form from the organisation where the data was collected. Respondents communicated their willingness to participate via electronic medium, and the researcher recorded it as such.

4.20 Summary of chapter

This chapter discussed the research methodology used in this study. It mentioned that themes and variables were identified during a literature review, after which questions were developed. Furthermore, it also showed the relationships between the research questions, research objectives and resultant hypotheses. The following chapter will discuss the research results and findings.

CHAPTER FIVE RESEARCH RESULTS AND FINDINGS

5.1 Introduction

In this chapter the researcher discusses the research results and key findings that became apparent from the research conducted. The aim of this study was to determine the impact telecommuting had on staff morale, to assess whether staff felt they could remain productive during telecommuting periods, as well as to forecast if telecommuting will be considered a viable working method for the remainder of the pandemic and post-pandemic. The researcher analysed the collected data without altering the essence of the responses. The next section will provide an overview of the respondents' descriptive data.

5.2 Descriptive data

The descriptive data is inclusive of 34 survey and interview respondents.

5.2.1 Respondent gender

The respondents' gender classification is illustrated in Figure 5.1.

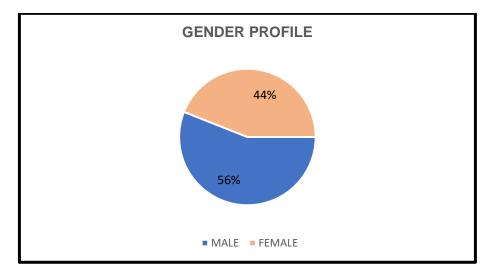


Figure 5.1: Respondent gender profile

Nineteen (56%) of the respondents were male and 15 (44%) were female, which indicates that the majority group of respondents were male. There is a sufficient distribution between male and female participation in this study to allow for balanced interpretation.

5.2.2 Respondent age profile

The respondents' age categories are indicated in Figure 5.2.

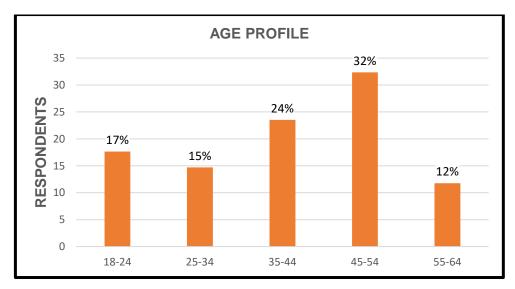


Figure 5.2: Respondent age profile

Figure 5.2 illustrates the respondents' age classifications, and the percentage of respondents applicable to certain predetermined age categories. Predetermined age category classifications were used for ease of reporting. Results indicated that 17% of the respondents were between 18-24 years, 15% of the respondents were between 25-34 years, 24% of respondents were between 35-44 years, 32% of respondents were between 45-54 years, and 12% of the respondents indicated their age as between 55-64 years. The results indicated that the biggest age group is between 45-54 years old, which constituted of 32%. The fact that the respondents are representative of all the age categories, from youngest to oldest, provided rich data results from both a young and older perspective. Next, the respondents' years of service in a Health Department will be discussed.

5.2.3 Respondent years of service

Figure 5.3 illustrates the respondent's years of service in the Health Department and the orange areas indicate the percentage applicable to each category of years in service.

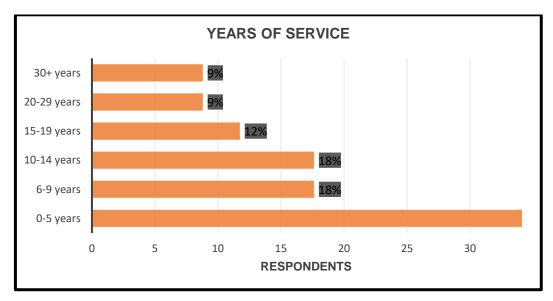


Figure 5.3: Respondent's years of service

The respondents' years of service in a health environment was determined by using predetermined categories for ease of data reporting. Figure 5.3 illustrates the respondents' replies. Results indicated that 34% of the respondents indicated a period of 0-5 years, 18% indicated a period of 6-9 years, 18% indicated a period of 10-14 years, 12% indicated a period of 15-19 years, 9% indicated a period of 20-29 years, and 9% indicated a period of 30+ years. These results are indicative that the different categories of staff had varied levels of years' service in a Health department, which provided for contrasting perspectives in respondent opinions. The respondents' level of education will be explained in section 5.2.4.

5.2.4 Respondent level of education

The respondent level of education is illustrated in Figure 5.4 and the orange areas indicate the percentage applicable to each category of education.

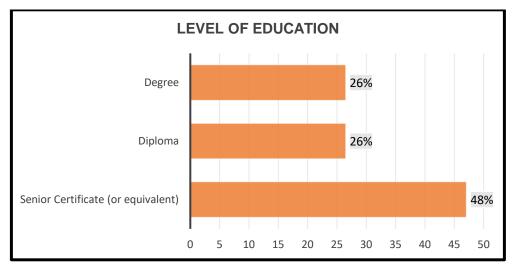


Figure 5.4: Respondent level of education

To gauge the level of respondent education, they were asked to select their appropriate educational status from a predetermined group of options. Results indicated that 48% of respondents had a senior certificate, 26% of respondents had a diploma, and 26% of respondents indicated they had a degree. None of the respondents indicated their education status as either a master's degree or a doctorate degree. These results indicated that there is a balance between the respondents' different levels of educational status, which would provide rich data from varied educational backgrounds. The following section provides details on the respondents' current work setting.

5.2.5 Indicator of respondent current work setting

One of the participation prerequisites for this study was that respondents have exposure to working from an organisational space and from home, to be able to provide a well-informed opinion. It was however the researcher's aim to ascertain percentage wise how many respondents currently followed a hybrid approach, how many worked exclusively from home and how many had returned to the office full time in the interim. Figure 5.5 indicates the current work setting of the respondents. It is important to note that the current work setting as illustrated below is applicable to the period in which the survey data was being collected, namely January and February 2022. It is understood that since then, and because of various factors with regards to the Covid-19 continuing pandemic, the results below may be relative to this study.

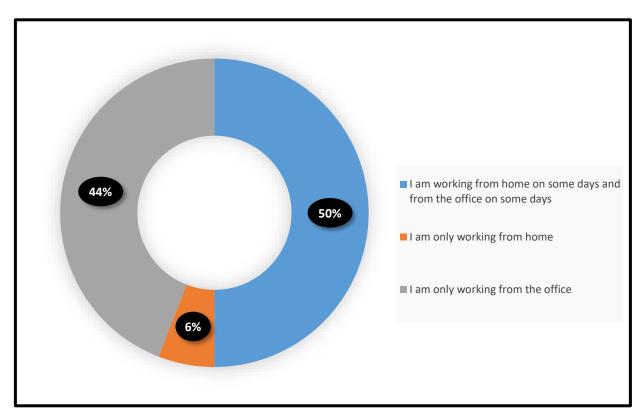


Figure 5.5: Respondent current working arrangements

Two (6%) indicated they only work from home (WFH) currently, 15 (44%) indicated they are working only from the office, and 17 (50%) indicated they are following a hybrid approach in working some days from the office and some days from home. With the prerequisite that all respondents have previously only worked from an organisational office space. Section 5.3 presents the data and an interpretation of the responses received.

5.3 Data presentation and interpretation

The researcher will analyse and interpret the interview and survey data according to the three objectives of this research study namely: to determine whether telecommuting had an impact on staff wellbeing or morale, to assess whether staff feel they can remain productive during telecommuting periods in the pandemic, and to predict or forecast how staff feel about continuing to telecommute during the remainder of the pandemic and post pandemic. Firstly, the researcher will discuss the responses and findings from the interview data.

5.4 Interview data: phase one

Respondents were thus numbered from respondent 1 to 4, and names or any identifying data were omitted. Each respondent answered nine questions. The researcher ensured that the meaning and essence of the comments were correctly captured.

The interview data is summarised and presented in Table 5.1. The section below presents the questions, responses, interpretation, and analysis.

5.4.1 Question 1: Interpretation and analysis

Table 5.1: Interview questions, responses, and findings

QUESTIONS	RESPONSES AND FINDINGS				
1. What do you	Respondent 1				
think impacted on	The fact that they feel safe within their own controlled environment and saving				
staff morale while	on transport costs.				
they were working	Respondent 2				
from home during	Morale is affected by the pandemic – there is a state of paranoia as staff worry				
the pandemic?	about their health and the health of their families. Staff see working between				
	other staff members as a health risk. Working from home picks up staff morale				
	as the staff think the department cares enough to trust them to allow them to				
	work from home.				
	Respondent 3				
	Staff do not see each other when working remotely. There are staff that go				
	through difficult times and staff do not see each other daily to support each				
	other. It is difficult to interpret staff feelings and support each other virtually. At				
	the office staff see when the other is down or has negative body language and				
	virtually, we are not able to see body language.				
	Respondent 4				
	The fact that staff are 24/7 exposed to the same environment (at home) and that				
	is not healthy for your emotional health.				

The researcher omitted the wording positively or negatively from the above research question to allow respondents to interpret the concept of staff morale as they experienced and understood it. The concept of staff morale and the influencing factors were then interpreted by the respondents primarily as either health or wellbeing related. The issue of feeling protected against contracting Covid-19 while working from home is thus associated with positive wellbeing, as expressed by two

respondents. Management trust to allow remote work was also mentioned as a positive outcome of WFH. Two respondents mentioned the negative output of WFH, namely that WFH decreases effective communication, and that professional isolation could play a role in staff not offering the support to each other in time of need. Decreased emotional health was also associated with WFH. This finding is in keeping with a finding by Sarkis et al. (2020:1) who stated that at a time when there existed a heightened and crucial need for staff to offer support to each other, they had to "learn to do so from a distance".

5.4.2 Question 2: Interpretation and analysis

2. Do you think the staff in your unit had issues with the integration of worklife balance while working from home?

Respondent 1

I think initially a lot of people were not able to separate work life and home life and often worked longer hours. Either start earlier in the morning than their official work time or working into late hours of the night to get things done.

Respondent 2

Some staff set up an office in their home and some are struggling. It depends if staff has a family as those responsibilities may cause issues for staff to work successfully from home.

Respondent 3

Yes, home responsibilities have to be relooked. Family members are happy I started to work from home but cannot understand how the working from home is that I cannot give them attention all the time. It will necessitate an adjusted mind set.

Respondent 4

Yes, when staff get home from a normal workday, the workday is finished. But when working from home, it is difficult separating work and home life. When working from home, you don't slack down after office hours, and it affects your family and home life balance. It also has an impact on your physical health as you sit the whole day (back problems etc.).

The two main findings from the responses were that staff worked longer hours from home and that home responsibilities impact on work-life balance. Integrating work and home responsibilities was crucial to allow effective WFH, and adjusted mindsets were necessary, not only for staff and supervisors, but for the family members of WFH staff. As indicated in question 1, a health-related issue is raised by respondent 4. The respondent expressed that back problems are caused by prolonged sitting. Sitting for the entire day is thus associated with less physical movement and working longer hours than at the office, and this is consistent with the view of respondent 1 who mentioned that staff often

work into the late hours to get things done. Planned training sessions in for example time management, work-life balance and stress management would be needed to maintain and improve worker emotional and psychological wellbeing (Arora and Khatri, 2020).

5.4.3 Question 3: Interpretation and analysis

3. Do you think Respondent 1 social and Yes, positive wellness and morale as staff definitely feel safer working from home especially when there is so much uncertainty around Covid-19 and how professional isolation had a role you would react if your contracted it. Prolonged isolation from family and friends unfortunately has the opposite effect as connecting on a personal level is almost to play in staff wellbeing and non-existent. morale, while Respondent 2 working from People are frightened to socialise socially, but some are not. In general, staff's home? morale decreases worldwide. When staff members' family members or friends get sick, staff's morale dip. Professional isolation contributes to this fright. Respondent 3 Yes, staff misses each other. Staff feel better after seeing each other. Respondent 4 Yes, staff need to socialise and have contact with their colleagues. A meeting in person is more effective and personal than a virtual meeting. The personal touch is not there when you work remotely, and it affects your wellbeing detrimentally.

The researcher probed the respondents regarding whether social and professional isolation during the Covid-19 pandemic could have had a detrimental effect on the staff working from home. All four respondents agreed that isolation, both professionally and socially, had a negative effect on the staff. Whilst staff felt safer and more protected from Covid-19 while working from home, the isolation from their work colleagues had a detrimental effect on wellbeing. The SCM team, having previously worked in an open plan set-up, had a close working relationship and friendships were formed amongst the staff. It was acknowledged that staff missed seeing each other and that the personal touch in connecting with colleagues were severely impacted by virtual communication only. This is in keeping with the argument of the researcher that social and professional isolation had a considerable impact on staff wellbeing. Consistent with the argument, recent

research performed in a pandemic context in Finland proved that increase in WFH was linked to physical isolation (Van Zoonen and Sivunen, 2021).

5.4.4 Question 4: Interpretation and analysis

4. Do you feel that working from home affects staff ability to stay optimally productive?

Respondent 1

Unfortunately, everyone is different, and some people work extremely well from home and have better increased outputs, however the office-lazy staff just become lazier.

Respondent 2

Yes, there are too many distractions at home.

Respondent 3

No, staff save a lot of time by not travelling to and from work. This cut out a lot of stress. Staff adjusts their working hours and working hours become more flexible. Cell phones also are not so busy because we conduct business virtually. All that time makes me feel more relaxed, to apply my mind more and makes me more efficient.

Respondent 4

Yes, 60% of staff struggle to get back in routine if they come back to the office. Staff know that they don't have to be involved in such a complete level when they work from home, they can get away by saying they are having network issues. Working from home compromise work ethics and effects productivity negatively.

Respondents had contrasting views when telecommuting staff productivity levels were discussed. Two respondents felt WFH affected productivity negatively, while the other two respondents felt the efficiencies related to WFH such as no travelling time, feeling safe at home, and feeling relaxed, all contributed to greater productivity levels. Respondent 1 indicated that productivity outputs for WFH staff was different from one individual to the other, but that the staff that were prone to be lazy at the office, are now just lazier at home. Individually differing productivity outputs are then consistent with the fact that some staff has increased WFH productivity levels. Respondent 4 mentioned that working from home compromises work ethic and affects productivity negatively.

5.4.5 Question 5: Interpretation and analysis

5. What type of issues in your opinion does staff have relating to staying productive while working from home?

Respondent 1

To get everyone set up with computers, data, etc. but now that this has all been resolved staff can easily work from home and engage with other staff members. Another issue I believe is a bit more difficult is that some staff may take advantage of being at home and then run personal errands during working hours.

Respondent 2

Yes. You must have the correct setup at home. Computer, access to internal systems, an adequate spot to work from, no distractions. Staff cannot reach each other but they are sending WhatsApp's. There must a communication protocol. You try via WhatsApp, MS Teams chat, Facebook messages, emails, and Telegram. There are too many ways of communicating while working from home, so there must be a standard manner of communication. There must be a standard policy of communication as staff are kept responsible because you are responding to social media messages – is this right?

Respondent 3

Time management, discipline and work ethics are important. You need a good, allocated working space. Load shedding and internet connectivity also have an impact.

Respondent 4

Load shedding, work life balance, external factors such as increased childcare responsibilities due to schools and creches not being open every day.

Factors affecting the ability to stay productive included distractions at home and struggling to keep to a routine at home. The issues staff experience in staying productive included adequate ICT being available, load shedding schedules, work-life balance and external factors such as increased childcare responsibilities due to schools and creches not being open every day. The issue of communication protocols was also raised by one respondent, as well as the need for a communication WFH policy. Ethical and effective listening (Neill and Bowen, 2021; Wong, Cheung and Chen, 2020) seems more difficult during telecommuting, but improving communication and the subsequent increased productivity of home workers is crucial to mitigate the negative impact of the Covid-19 pandemic on the economy (Morikawa, 2020).

5.4.6 Question 6: Interpretation and analysis

6. This being a new way of working in terms of productivity, do you think staff is exposed to a lot more stress because of Covid-19 sourcing/reporting etc.?

Respondent 1

Certain staff are definitely affected more than others when it comes to procuring Covid related goods and services. Several services (security, cleaning, waste) have a huge impact to ensure these services are available at short notice. Reporting in terms of compliance with the relevant SCM prescripts is also a challenge as we were expected to ensure the services as soon as possible, but still adhere to all governance issues.

Respondent 2

Yes, we must now do things immediately, systems must work 100% and the people are working more and have more pressure. We cannot and are not allowed to make mistakes during Covid as everything is urgent and mistakes might lead to inadequate services to the end-users – this cannot happen during Covid.

Respondent 3

Yes, the money spent during covid 19 is more for more services. So Covid-19 has an impact, creates more stress and places more stress on staff. During Covid-19 the public services need to work better, and this costs money and manpower to put in place.

Respondent 4

The first stress that came with Covid is the stress regarding the uncertainty of catching the disease. Then also, the work outside your career as during Covid there are other and added responsibilities added to staff's normal work. Staff have to cope with being open to change to cope with change, some of the older colleagues suffer a lot due to being used to traditional working methods. A lot of staff joined the service due to added Covid work, and there is a lot of work and less time for training new staff. The lack of training impacts in turn the quality of the work. PM must roll out more virtual training during Covid.

The respondents had similar views when asked if staff were exposed to more work and related stress brought about by the Covid-19 pandemic. One respondent mentioned that several services (security, cleaning, waste etc.) had a huge role to play and staff had to ensure these services were available at short notice. Reporting in terms of compliance with the relevant SCM prescripts was also a challenge as staff were expected to ensure the services as soon as possible, but still to adhere to all SCM governance prescripts. Respondents agreed that besides increased work responsibility due to the pandemic, the

older colleagues suffered a lot due to being used to traditional working methods. There was also a considerable intake of temporary staff to assist with working towards catering for Covid-19 in the Western Cape, however there was less time for training subordinates. The lack of training and the possibility that the Human Resources department could have rolled out more virtual training sessions, were also mentioned. Como et al. (2021) mentioned that work-life wellness of remote workers could be impacted by the lack of organisational support during the transition to remote work, combined with Covid-19 related stress. Similarly, the authors also mentioned that more research is needed to better support the new remote workforce, including testing adapted training programs (Como et al., 2021).

5.4.7 Question 7: Interpretation and analysis

7. Do you think working from home for SCM staff is a viable option for the future?

Respondent 1

Yes, definitely as long as staff are capacitated with the necessary tools (data, computer/laptop) they can easily work remotely. Another important issue will be that managers will need to focus more on key outputs per staff member to ensure deadlines and targets/projects are managed and are completed timeously.

Respondent 2

The nature of our work can facilitate telecommuting, but there are some functions that you cannot do from home. From the head of the department and chief director are very strategic levels, so for those levels it is possible to work from home. But the coal face support staff may not be a feasible option for continuing to work from home.

Respondent 3

Yes, it is an option. But a person is not made to be alone, and the staff miss the contract with each other. A hybrid approach where there is some contact at least and not none will work better. Virtual checking in and social media groups are important tools for keeping in touch.

Respondent 4

Yes, it can work. It saves a lot of money for the WCG in terms of paying for accommodation for the staff when staff work from home. There must be policies in place for instance Occupational Health and Safety (OHSA) – with regards to injuries at home? Will it be covered – policies must come into line with the new way of working.

In line with one of the objectives of this study, the researcher had to forecast whether WFH would be a viable option for the future, for the remainder of the pandemic and beyond. Three of the four respondents agreed that WFH was an option for the future, however respondents felt that there were conditions to achieve WFH successfully such as having the necessary ICT, the monitoring of outputs, and virtual check-in sessions. One respondent mentioned that coal face staff should work from the office exclusively, but that managerial staff were more strategic in nature and could WFH with more ease than the staff on ground level. Isolation was brought up again and it was mentioned that there should be an attempt by staff to remain in contact with each other. The interesting issue of Occupational Health and Safety (OHSA), and how OHSA apply to staff WFH, was also highlighted.

A survey was performed by Alexander, De Smet, Langstaff and Ravid (2021) into what staff are saying about future remote work. The outcome was that staff felt they have not been informed adequately about management's plans for working arrangements post-Covid-19. This was named as a source of anxiety amongst staff, as inadequate remote work planning and the non-communication of detailed guidelines leave staff feeling anxious (Alexander et al., 2021).

5.4.8 Question 8: Interpretation and analysis

8. The concept of 'the office' in an organisational space will never be the same again because of the pandemic. Do you think working from home is the new norm of 'working of tomorrow'?

Respondent 1

It should become a new norm as the cost to company is drastically reduced (premises) and I believe that staff's working hours go beyond their normal times. Most staff find themselves working earlier in the morning or until much later at night to ensure tasks are completed.

Respondent 2

I feel that we as support staff must be in the "trenches" with the support staff that looks after the end users. It seems as if the department is looking towards a hybrid approach with regards to working from home, but we will need adequate and well aligned remote work policies that address the challenges and issues surrounding telecommuting.

Respondent 3

Yes, it saves a lot of money for example transport, parking, paper and resources.

Respondent 4

A possible hybrid approach can work that will not isolate the staff such a lot from each other. Hot desks can also work for when staff comes in. This will save money for the employees – such as travelling money, parking, petrol – but it comes at a price to the organisation when staff might not be productive as they can be.

Respondents felt that WFH could be the new norm of 'working of tomorrow', but caution should be taken with staff working beyond office hours. Savings in terms of increased meeting efficiencies (less catering expenditure), less printing (saving of paper), less time spent travelling to and from meetings, transport to and from work as well as the cost of accommodation for staff, were highlighted. Respondent 4 said a hybrid approach could work; but it could come as a price to the organisation as staff might not be as productive as they can be. Respondent 1 mentioned staff working longer hours. Longer WFH hours also mean being constantly exposed to technology and this could impair staff ability to switch off during leisure hours (Grant et al., 2019; Sridhar and Bhattacharya, 2020).

5.4.9 Question 9: Interpretation and analysis

9. What are your	Respondent 1		
challenges with	ICT issues. Another issue I believe is a bit more difficult is that some staff may take		
working from	advantage of being at home and then run personal errands during working hours.		
home – it can be	Respondent 2		
your challenges	Network connectivity, equipment, and external distractions.		
or challenges	Respondent 3		
your staff may	Policies need to be more inclusive towards working from home issues. Staff can		
experience.	save money on parking and travelling.		
	Respondent 4		
	ICT, load shedding, family responsibilities, and isolation from your work colleagues.		

Finally, the researcher requested input on challenges staff may experience with working from home. Issues such as ICT, policies needed that could be more inclusive towards WFH and isolation from work colleagues were mentioned as having an

impact on staff. Load shedding was also mentioned, as this had a vast impact on teams that had to stay connected to each other virtually while working from home. Respondent 2 mentioned external distractions but did not elaborate. However, this is interpreted as non-work-related issues such as personal issues that could be a challenge when working from home. This is in keeping with respondent 1 who replied that some staff may run personal errands during official hours when working from home. With the inception of working from home, staff may not have been able to divide their time well (Tejero, Seva and Fadrilan-Camacho, 2021) as they still had to adapt to working from home, parenting, and changed routines and time schedules.

In a study performed whereby a total of 503 employees from 46 institutions participated in a questionnaire, Tejero et al. (2021) found that social support significantly impacted on staff work-life balance. It was also found that social support was one of the factors that was key to increasing the productivity levels of telecommuting staff. External issues such as load shedding schedules is beyond the control of WFH staff, however well-functioning ICT equipment and laptops with a battery life up to 2.5 hours will enable WFH staff to continue with non-network related activities during load shedding times. In the following section, the survey results and findings will be discussed.

5.5 Survey data: Phase two

Following the interview phase (phase one), the interview data was used to finalise the questionnaire for the survey phase (phase two) of this study. The survey consisted of 49 questions. The researcher ensured that the meaning and essence of the comments were correctly captured. The section below will present and discuss the findings from the survey data. This will include both the qualitative and quantitative data input.

Prior to discussing the findings, the researcher illustrates that there is a relationship between the survey question content categories and the research objectives. The survey questionnaire was divided into five categories. Figure 5.6 illustrates the relationship between the survey question categories, and the research questions and

objectives for this study. Findings with be addressed in relation to the objectives of this study namely 1) to determine whether telecommuting had an impact on staff wellbeing or morale, 2) to assess whether staff feel they can remain productive during telecommuting periods in the pandemic, and 3) to predict how staff feel about continuing to telecommute during the remainder of the pandemic and post pandemic.

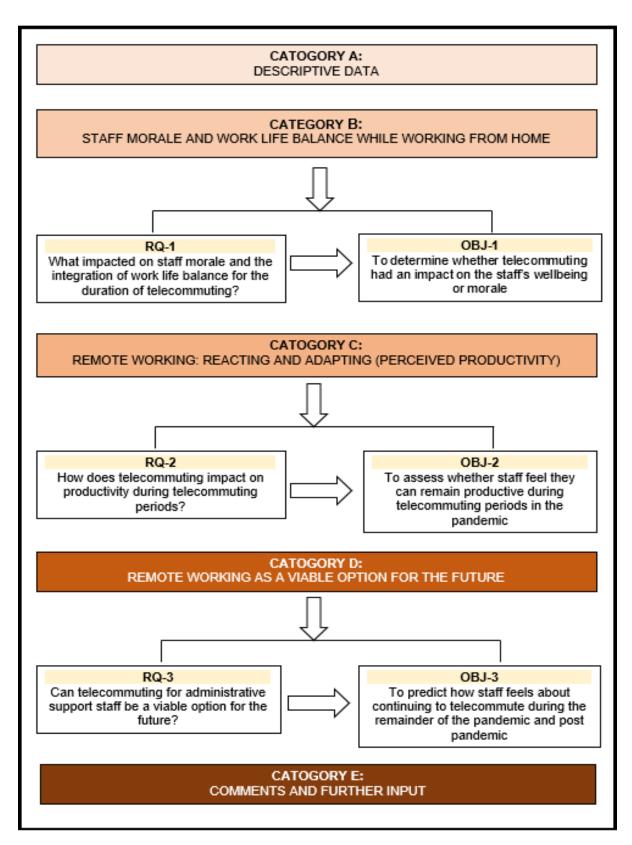


Figure 5.6: The relationship between the survey question categories, research questions and objectives

The next section provides a discussion on the survey findings for objective one of this study.

5.5.1 Staff morale and work-life balance while working from home

In line with objective one of this study namely to determine whether telecommuting had an impact on staff wellbeing or morale, the researcher formulated questions to provide input to this objective. Respondents were given a Likert scale option question to determine to what extent WFH impacted on their wellbeing in a positive manner, to what extent WFH impacted on their wellbeing in a negative manner and whether WFH allowed a balance between work and personal life. Table 5.2 illustrates the findings for the three questions.

Table 5.2: Issues influencing staff morale and work-life balance

Working from home	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Impacted on my personal and work wellbeing, as well as my general morale in a POSITIVE manner	33%	37%	17%	10%	3%
Impacted on my personal and work wellbeing, as well as my general morale in a NEGATIVE manner, and	0%	17%	17%	33%	33%
allowed a balance between work and personal life	37%	43%	0%	17%	3%

In Table 5.2 a combined percentage of 33% and 37% equalling 70% of the respondents felt that WFH impacted them in a positive manner. The neutral group scored 17% and the group that disagreed and strongly disagreed had a combined score of only 13%. When asked whether WFH impacted them in a negative manner, a group of only 17% agreed and 0% strongly agreed. Similarly, when asked whether WFH allowed a balance between work and personal life, a group of 80% agreed. Thus, this finding would equate to WFH mostly having a positive impact on staff and it allowed a good balance between work and personal life. To work from home will assist staff with allowing a balance between their personal life and work-life

(Mardianah and Hidayat, 2020). In a case study performed by Hutajula (2021) in which 713 respondents participated, the finding of note was that staff experience improved work motivation with the WFH approach, and this could in turn improve work related outputs.

To further understand how respondents felt about WFH, they were asked to indicate the most positive and most negative issues of working in this manner. The results are from highest to lowest score: 33%: cost savings due to WFH; 23%: being less anxious of contracting Covid-19 at work; 23%: improved wellbeing and morale; 10%: more flexible working hours; 7%: improved family relationships and 4% chose the other option. The answers received for other included to finish more tasks and to work peacefully and without disturbances. WFH excludes commuting for work purposes, resulting in saving time and money on transport expenses (Hutajulu, 2021), and thus WFH with result in the saving of time and optimisation of the staff time spent on working (Gunawan, Kusnawan and Hernawan, 2021). During this study, although respondents acknowledged that there were home responsibilities while they WFH, it was not seen as a hindrance to their duties or their outputs. When asked about the most negative issue of WFH, respondents provide their views as indicated in Table 5.3. The highest scoring value was 'feeling isolated' at 30%, followed by 'decreased organisational communication' at 33% and 'longer and different working hours' at 25%. Inadequate communication practices can negatively affect employee mental wellness in the workplace (Yu, Park and Hyun, 2021). These findings are in keeping with the data collected during the interview phase of this study where respondents 1 to 4 indicated that communication issues were at the core of the problems encountered when staff WFH.

Table 5.3: The most negative issue of working from home

Value	Percentage
Decreased organisational communication	33%
Feeling isolated (social and professional isolation)	30%
Longer and different working hours	25%
Increased home responsibilities	3%

Stress and anxiety	3%
Lack of management's respects for original office working hours	3%
Decreased wellbeing and morale	3%

The respondents were asked to share their understanding of work stress. Most of the respondents mentioned that it is stressful when having to execute most of the tasks as urgent. Understandably Covid-19 brought about more expectations in the SCM space, but respondents felt that tight deadlines and high work output expectations were stressful. While it is understood that the pandemic induced working circumstances necessitated an increased workload, it has been noted in studies that supervisors tend to increase the workload when staff work from home (Kazekami, 2020). Communication is a theme that has had several mentions so far in this chapter, but respondents made it clear that inadequate communication and different WFH working schedules might compromise work accuracy and expected deadlines, more so when increased stakeholder engagement are required to understand added tasks. Communication is different while WFH and direct communication is replaced with a virtual method which has limitations (Akbar, Nurliawati, Muchtar and Ramdhani, 2021) which requires the sender and receiver in the communication process to adapt to this new method. The various additional reporting requirements within the SCM and then Covid-19 pandemic governance framework also placed an added burden on staff.

The researcher wanted to have a greater understanding of how the Covid-19 pandemic and WFH affected the wok life and work relationships of the respondents. Some of the responses were duplicated, and below is a summary of responses.

Respondent 6: One becomes more insular and although one is obliged to be more self-reliant in taking actions and decisions, one misses the esprit de corps and collegiality that occasionally brings a different perspective or solution to problematic work situations.

Respondent 8: It is very difficult to build relationships at work because majority of the staff works from home. It hinders effective communication.

Respondent 10: I worked more, and from time to time felt left out as you are not near

colleagues.

From the responses above, the themes of professional isolation and longer working hours are clear. Some of the respondents said they experienced WFH positively and it did not affect their work relationships. This is in keeping with the fact that it is possible for some staff members to continue their work relationships from the personal sphere into the virtual sphere. Methods used by colleagues to maintain work and personal related friendships changed however in the context of the Covid-19 pandemic (Hu and Subramony, 2022) and technology replaced personal contact when physical proximity became limited (Pew Research Centre, 2021).

Respondent 21: Working from home makes one feel isolated and missing the interaction with colleagues and became anguish and stressed.

Respondent 23: The beginning of the pandemic was extremely hectic, as it was an unexpected event therefore, we were not prepared for it so communication wise with colleagues was affected which led to delayed tasks and non-availability of officials, things started to get better when time went by. Work life wise I am able to adapt to the new way of living and working from home, and to learn to make sure of online platforms like teams to communicate with my colleagues.

The response from respondent 23 is in keeping with hypothesis one of this study, namely that staff had to adapt to a new mode of working. To gauge how respondents coped with various issues such as professional isolation, transferring their working relationships into the virtual sphere, whether they had sufficient organisation support for their mental health, and whether they felt their personal life will be affected while working from home. Figure 5.7 illustrates the results for these questions. The blue, orange, and grey areas in the figure below represent the "yes", "no" and "I am not sure" fields and the percentage of votes are indicated in these fields at the top. From the results it was evident that 77% of respondents were able to transfer their personal relationships to the virtual sphere and 60% of respondents do not feel their personal life will be affected by WFH.

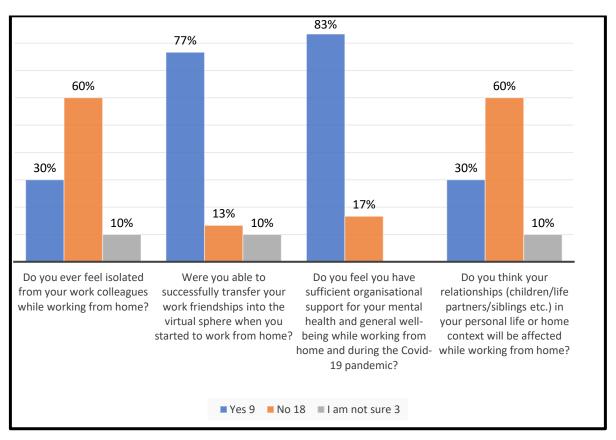


Figure 5.7: Work relationships and personal relationships

A finding of note is that 83% of respondents felt that they had sufficient organisational support for their mental health and general well-being, both for WFH and throughout the consequences of the Covid-19 pandemic. This is indicative of good management styles, leadership, and organisational support within the jurisdiction of the Western Cape Health public service. This finding is in keeping with the findings by Schreier, Udomkit and Matt (2022) who reported on a study in Switzerland into the respect, trust and mandatory work from home policy. The study found that the mandatory WFH policy did not have a negative impact on the trust, respect and mutual work-related obligations that exist between the employees and supervisors. The study further found that frequent communication was of crucial importance to maintain a significant level of trust between the parties (Schreier et al., 2022). Of significance is that respondents had exposure to WFH and currently 50% of the respondents still WFH following a hybrid approach (as indicated in Figure 5.5: Respondent current working arrangements). To be able to deliver organisational support for good mental health virtually, is no small feat. It should further be noted that this survey was circulated for

completion during January and February 2022, a time in SCM where staff worked mostly from home. Another interesting observation is that staff mentioned professional and social isolation several times in the survey in qualitative questions, and this is in keeping with hypothesis one that addresses increased social and professional isolation influencing the morale of telecommuting staff. However, when answering a quantitative Likert scale question about social and professional isolation, 60% of the respondents indicated they do not feel socially or professionally isolated. Section 5.5.2 provides a discussion on the survey findings for objective two of this study.

5.5.2 Remote working: reacting and adapting (perceived productivity)

In this section in the survey, the researcher aimed to establish input related to objective two of this study namely to assess if staff had to adapt to WFH, how they reacted and how they perceived their productivity levels (see Figure 5.6 for the relationship between the objective and this survey category). Subsequently, the researcher formulated questions to provide input to this objective. Related data results are illustrated in Table 5.4.

Table 5.4: Reacting and adapting

Questions	Yes	No
Initially working from home felt like a completely new way of working and I had to adapt to it?	83%	17%
Working from home increased my productivity.	67%	33%
I work DIFFERENT hours while working from home than at the office.	77%	23%
I work LONGER hours while working from home than at the office.	87%	13%

Hypothesis two of this study mentioned adapting to a new mode of working, and it is clear from the results in Table 5.4 that 83% of staff confirmed that they had to adapt to WFH. To confirm that staff had experienced an adapting phase, they were given a statement to rate with predetermined Likert scale options. For the question relating to adapting to working from home, results confirmed that 17 (57%) strongly agreed, eight (27%) agreed, four (13%) voted neutral, nil (0%) voted disagreed and only one (3%)

strongly disagreed. The finding that staff went through an adapting phase when they initially started to WFH, but after adapting, they felt they could perform their duties adequately, is noted. In keeping with the longer WFH hours mentioned in this study, staff confirmed that their typical WFH day is longer than a typical office workday, as the results in Figure 5.8 illustrates. Most of the staff voted that their WFH day is 30% longer than an office day at work, however 7% of the respondents indicated their workday being 50% or more longer. Telecommuting staff may feel the pressure and that it is an expected norm to keep the appearance up to seem to be working at all hours (Powel, 2020). "The 'always on' working practice, encouraged by remote working, challenges employees in terms of mental and physical fatigue" (Molino et al., 2020:14). A telecommuting feature is that it is mainly performed at home, and the consequence is that the work demands in many instances exceeds normal and predetermined official hours which could present negative consequences for staff wellbeing. The finding of relevance applicable here is that 95% of this sample group of respondents affirmed that a WFH day is longer than an office workday, which would make the finding consistent with other qualitative respondent data that indicated their WFH workday is longer.

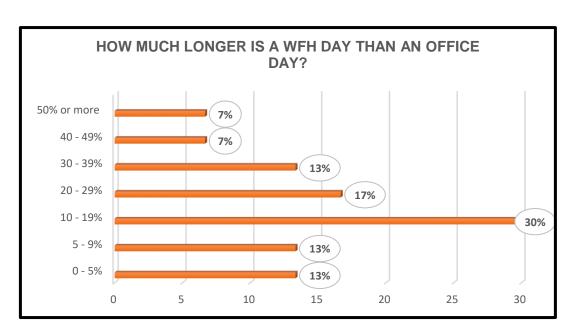


Figure 5.8: Indicator of how much longer a WFH day is than a typical office workday

Similarly, when asked about whether they agree that WFH flexible hours is an important factor to them, they responded as follows. Collectively 16 respondents

either strongly agreed (13%) and agreed (40%), six (20%) responded neutral, and collectively eight respondents either disagreed (17%) or strongly disagreed (10%). The finding would be that the majority (53%) of respondents agreed that flexible WFH hours is an important factor to them. The next section will discuss the survey findings for objective one of this study. A study performed in Japan into WFH productivity found that the WFH productivity was approximately 60% to 70% when compared with productivity levels at the business premises (Morikawa, 2021). During this study, 95% of the staff felt their workday was longer, however it must be understood that it will be challenging to measure employee productivity at home. The next section unpacks the survey findings for objective three of this study.

5.5.3 Remote working as a viable option for the future

In line with objective three of this study, namely, to predict and forecast how staff feel about the possibility of continuing to WFH during the remainder of the pandemic and post pandemic (see Figure 5.6 for the relationship between the objective and this survey category), the researcher formulated questions to provide input to this objective. Firstly, the researcher wanted to establish how the respondents felt about returning to the office and the working strategy for the remainder of the Covid-19 pandemic and beyond. Table 5.5 displays the relevant results. The finding is that 90% of the respondents are willing to follow a hybrid approach in working from the office on some days and working from home on some days. Only 3% of respondents indicated their willingness to work from the office only. Morikawa (2021) noted that organisations should make it their agenda to find the optimal combination of office and WFH work modes, and that the human resource department plays a crucial role in the selection of the applicable work modes for staff who are performing suitable tasks for the WFH work mode.

Table 5.5: Choice of work setting

Questions	Percentage
I am willing to follow a hybrid approach	90%
I am willing to work from the office only	3%
I am willing to WFH only	7%

Work setting choice also impacts how support must be given to teams and managers. Working from home may mean different types of support and different strategies to enable sufficient support. Subsequently, the researcher asked the respondents how managers or supervisors can support the wellbeing of employees who WFH. For this question, respondents were given the opportunity to choose multiple answers. More virtual touch base sessions and increased virtual communication with managers/supervisors received the highest score of 21 counts, the second highest score of 15 counts was allocated to keeping social media for work related purposes to working hours, 14 counts went to the third highest scoring issue that management should be more available to connect, and 10 counts went to staff preference to having more face-to-face interactions with management.

A noteworthy finding is the highest scoring two categories namely that 21 out of 30 respondents felt they needed more virtual communication and 10 of 30 respondents indicated they would like to have face to face interactions. Using social media for work related purposes became prevalent during the WFH era, and the theme of the misutilisation of social media outside working hours surfaced several times during this study. In an organisation, staff need to be supported by management, but similarly management need to support staff. Hutajulu (2021) rightfully noted that the WFH debate is always linked to electronic methods of communication. Electronic mediums of communication include virtual meeting mediums, social media platforms and e-mail, but the aforesaid electronic communication methodology cannot compare to in person communication. Electronic communication methods together with telecommuting could also lead to feelings of isolation (Hutajulu, 2021).

The researcher attempted to ascertain how WFH staff felt about supporting their managers. As demonstrated in Table 5.6 the need for better communication and more frequent contact sessions are strongly highlighted and was mentioned previously in this study.

Table 5.6: Manners in which employees can support their managers during WFH

Respondent 6	By being prepared, prompt in responding to requests, reliable, accountable, diligent,
	honest, and thorough in the performance of their duties and responsibilities.
Respondent 8	To be available when needed and always complete tasks.
Respondent 9	By maintaining an open line of communication, voicing concerns.
Respondent 10	Communicate with them on a regular basis, inform them of any challenges and be
	open.
Respondent 12	Be on call for urgent issues that may occur, that are reasonable.
Respondent 14	Be available when needed.
Respondent 15	Don't delay on requests and normal duties.
Respondent 16	By doing what is asked from them within the timeframes given.
Respondent 17	Assist where they can.
Respondent 18	Getting the work done with no conflict.
Respondent 19	Encouragement and communication.
Respondent 22	By being available DURING working hours for work related matters (answer your
	phone/teams/messages).
Respondent 24	Checking in every morning if there are urgent things.
Respondent 25	By giving feedback on weekly outputs.
Respondent 26	Weekly catch-up sessions.
Respondent 28	Constant communication and always be available during working hours.
Respondent 29	Assisting after hours if needs be and communicate.

To further forecast whether a continued WFH strategy will be feasible, the researcher asked the respondents to state manners in which they though SCM could improve WFH successfully going forward. The results are summarised in Table 5.7.

Table 5.7: Improving SCM WFH arrangements

Respondent 5	Assist staff who would like to WFH but do not have the necessary IT support (laptop, data card package). Motivate staff to consider their study at home as their "office" and treat the workday as they would have at the office - including being responsive when required and being available.
Respondent 7	Trust and responsibility to perform go hand in hand.
Respondent 8	Have policies in place that applies to everyone.
Respondent 9	More supervisor employee interactions to address challenges.
Respondent 12	Continue with communication platforms for staff to voice their opinions.

Respondent 13	Working schedule implementation.
Respondent 14	I personally think that SCM cannot WFH especially in the environment I am in.
Respondent 15	Hardware need be up to date, and software updates need to be made easier to do
	from home.
Respondent 16	The same logic should apply as if were in the office. There are days/periods when
	you are not as busy, due to organisational requirements (or lack thereof) and
	employees should not feel the need to demonstrate that they were actively engaging
	in work during that time. We all know what is required of us and should be trusted in
	this regard.
Respondent 20	WFH is currently working well.
Respondent 21	Have teams touch base meetings more regularly/at least once a day in the morning
	for 10 minutes.
Respondent 26	Personally, I want to be in the office. I do not like working from home and three to four
	days in the office will be perfect for me.
Respondent 27	Firstly, better communication from top management and from staff down. Look at the
	data needs and software required so that employees can fully complete tasks.
Respondent 28	Provide data - Wifi, airtime, laptops, proper chairs and desks for working from home.
Respondent 33	Recommend rotational working from home as this will also address the isolation
	feeling.

An important finding is the theme for more WFH policies, more communication and WFH rotation to be implemented. Respondent 20 stated that WFH is currently working well, and in contrast respondent 14 stated that he did not think SCM could WFH. Respondent 26 stated that he prefers working from the office in a hybrid approach. It is clear from the findings above that WFH is perceived differently by different individuals.

The hybrid approach, or as some respondents called it 'rotation', were mentioned several times in this study. It is in keeping with the finding that social and professional isolation may be minimised if staff WFH in a rotational (hybrid) approach. In a study performed by Schreier et al. (2022) in Switzerland, there was a clear preference of the application of a mixed model consisting of office word and WFH. This is in keeping with the findings of this study. Supervisors and employees would both benefit from a mixed work model, while Dubey and Tripathi (2020) mentioned that when the pandemic began staff were looking forward to working exclusively from home. From the results of the study that Schreier et al. (2022) performed, it was evident that staff were looking

forward to going back to the office, even just for a few days in a work week. The following section unpacks the additional findings from the data collected.

5.5.4 Additional findings

By analysing the data, the following additional findings were found. The findings are communication while working from home, the need for more organisational and human resource policies and the relationship between a hybrid approach and staff isolation.

5.5.4.1 Communication while working from home

Communication while working from home is a prevalent finding in the results of this research.

Respondent 2: Staff could not reach each other but they are sending WhatsApp's. There must be a communication protocol. You try via WhatsApp. MS teams chat, Facebook messages, emails, telegram. There are too many ways of communicating while working from home, so there must be a standard manner of communication. There must be a standard policy of communication as staff are kept responsible because you are responding to social media messages – is this right?

Decreased organisational communication was also mentioned as one of the most negative issues of WFH.

Respondent 8: It is very difficult to build relationships at work because majority of the staff work from home. It hinders effective communication.

Respondent 23: The beginning of the pandemic was extremely hectic, as it was an unexpected event therefore we were not prepared for it so communication wise with colleagues was affected which lead to delayed tasks and non-availability of officials, things started to get better when time went by, work life wise I am able to adapt to the new way of living and working from home, and to learn to make sure of online platforms like teams

When respondents were asked how they could support their managers, open, clear and more communication was mentioned several times. In the same vein, 56% of respondents felt that communication response time for work-related queries or questions was the greatest barrier that hampered effective communication during WFH.

5.5.4.2 The need for more organisational and Human Resource Policies

When respondents were asked if there were any departmental policies that govern WFH, 18 (60%) said they were not sure, eight (27%) said "yes" and four (13%) said "no". The researcher ascertained that there were various circulars that addressed WFH policy, but it was not deemed sufficient to address the various issues around WFH in a holistic manner. Efficient organisation communication about Covid-19 and post-pandemic working arrangements may boost employee wellbeing, but more detailed WFH related approaches and policies see a higher level of wellbeing and makes employees feel more included (Alexander et al., 2021). Respondents indicated that improved remote working policies will improve overall organisational wellbeing. The efficiency of WFH policies cannot be separated from the crucial function of the monitoring of outputs by supervisors (Mardianah and Hidayat, 2020). The monitoring and evaluation of staff should be an ongoing process, irrespective whether the staff member works from home or at the office. To ascertain where the possible gaps are in organisational circulars and policies addressing remote work, respondents were asked to provide input. Table 5.8 represents the relevant data.

Table 5.8: Issues to be addressed in organisational policies for WFH

Respondent 5	Staff availability, and methods to contact staff.
Respondent 7	Learn from the private sector as it has been implemented well there.
Respondent 8	Working hours/working schedules.
Respondent 9	Standardisation and fairness with working schedules for all.
Respondent 10	Qualification criteria (who can WFH), and WFH time management protocols.

Respondent 11	Staff that's able to work effectively from home to do so and be available to come in
	office any time (during office hours)
Respondent 12	Officials should be able to claim more than R300 for their monthly data.
Respondent 13	Consistent workplan submissions for WFM staff.
Respondent 15	An App to track WFH activity and the hours worked in a day.
Respondent 16	Flexible working hours need to be considered.
Respondent 17	Flexible working hours, but still being able to get hold of someone and them
	assisting you when in need.
Respondent 20	Clearly indicate that even while working from home, your work hours still apply.
	Meetings are scheduled during lunch break and often after normal working hours
	without any regard for the staff members' working hours.
Respondent 21	That there is room for improvement as we go along and face certain challenges.
Respondent 23	The issue of overtime remuneration especially if the supervisor gave you the extra
	tasks to do urgently, so the supervisor is aware of the extra hours put in.
Respondent 25	Working on a rotational basis.
Respondent 26	Working hours.
Respondent 28	More awareness around the policies. Not many people know what the policy says.
Respondent 30	Better communication and staff appreciation.
Respondent 31	A concrete outline of the expectation whilst working from home.
Respondent 32	Clear cut guidelines regarding WFH.

Each staff member has predetermined working hours, and they are contacted outside working hours. The results indicate that organisational policies should address specific issues such as communication methods for WFH staff, as well as working hours for the same. Using social media for work related purposes became prevalent during the WFH era, and the theme of the misutilisation of social media outside working hours surfaced several times during this study. Staff members are being contacted and expected to be available outside working hours, just because they are in the WFH team. Birimoglu Okuyan and Begen (2022), noted that it was important to develop and institute best practices on working from home to facilitate improved productivity as well as a good level of mental and physical health.

5.5.4.3 The relationship between a hybrid approach and staff isolation

During the interview and survey phase of this study, the theme of social and

professional isolation was highlighted.

Respondent 1: Prolonged isolation from family and friends unfortunately had the opposite effect as connecting on a personal level was almost non-existent for a long time.

When the researcher probed the respondents regarding whether social and professional isolation during the Covid-19 pandemic could have had a detrimental effect on the staff working from home, both interview and survey respondents agreed that isolation, both professionally and socially, had a negative effect on them.

Feeling isolated scored the second highest with a score of 30% when staff were asked what the most negative issue was during WFH (refer to Table 5.3 - the highest score was 33% in lieu of decreased organisation communication).

Respondent 33: I recommend rotational working from home as this will also address the isolation feeling.

Since this research was conducted, more staff members have returned to work full time as the Covid-19 pandemic subsided. However, it should be noted that the research found that staff perceived professional isolation measured by how many times they are in personal contact with their colleagues.

5.5.4.4 Work settings for the remainder of the Covid-19 pandemic and beyond

It was evident that most staff preferred a hybrid approach, which means some days working at the office and some days at home. Table 5.5 lists the choices of work settings, and 90% of respondents preferred a hybrid approach, 7% said they are willing to WFH only and 3% mentioned they would be willing to work from the office only. The DoH, WC accommodated staff with comorbidities and mentioned that the staff will receive preference when deciding who must return to work.

Respondent 9: As the working arrangements have been adjusted to accommodate social distancing, we need to adjust to the norm as the pandemic progresses/regresses. Many organisations have adopted hybrid strategies to adjust to the current circumstances. These strategies should be considered within components to avoid challenges such as productivity as these are issues that are not easily maintained working remotely.

Respondent 28: Working from home has been fantastic. I am much more productive and working remotely has introduced me to new technologies and I have adapted more efficient ways of performing a lot of my tasks. Top management must realise that they are benefiting by many employees being allowed to WFH, as they are no longer printing as much, using as much electricity or water, etc.

Respondent 33: Covid has broadened our sights in a negative, but more so in a positive way. Working from home is one of the positives. Let's build on the positive and let us make it work for us and our country.

5.6 Summary of findings and chapter

For ease of reporting, the summary of findings will be presented in a table format, with a list of the research objectives, the research questions, and the findings for each of them.

Table 5.9: Summarised findings linked to research questions and research objectives

Research questions		Res	earch objectives	Summarised findings
R	What impacted	0	To determine	Telecommuting mostly had a positive impact on staff
S	on staff morale	В	whether	wellbeing and morale and it allowed for a good
Q	and the	J	telecommuting	balance between respondents' work and personal
1	integration of	1	had an impact on	lives. A finding of note was that 83% of respondents
	work-life balance		staff wellbeing or	felt that they had sufficient organisational support for
	for the duration of		morale	their mental health and general well-being, both for
	telecommuting?			WFH and throughout the consequences of the Covid-
				19 pandemic.

R S Q 2	How does telecommuting impact on productivity during telecommuting periods?	O B J 2	To assess whether staff feel they can remain productive during telecommuting periods in the pandemic	It was evident that staff went through an adapting phase when they initially started to WFH, but after adapting, they felt they could perform their duties better and be more productive. Staff confirmed that a typical WFH day is on average 30% longer than a typical office workday. This finding is consistent with the finding that 95% of this sample group of respondents affirmed that a WFH day is longer than an office workday. The finding of note is that it depends on the individual's work output and how effectively the individuals could communicate with each other and their supervisor regarding their duties. There was evidence found however that the overall level of productivity may be affected.
R S Q 3	Can telecommuting for administrative support staff be a viable option for the future?	O B J 3	To predict and forecast how staff feel about continuing to telecommute during the remainder of the pandemic and post pandemic	It was found that WFH is deemed a feasible option going forward. 90% of the respondents are willing to follow a hybrid approach in working from the office on some days and working from home on some days. Communication while working from home is a prevalent finding in the results of this study. It is mentioned in different settings, however WFH affected communication, both upwards to management, lateral with team members and downwards to staff.

The final chapter is the concluding chapter for this research. It will contain an overview of the study, relevance of the study, recommendations, and future research insights.

CHAPTER SIX CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This study aimed to determine whether telecommuting had an impact on staff morale, to assess whether staff felt they could remain productive during telecommuting periods, and to predict whether telecommuting could be considered a viable working method. To achieve the above purpose three research questions and three research objectives were developed. This enabled the researcher to further formulate the questions for the interviews to support the survey questions, and the questions were aligned to the phenomena under study. The researcher achieved the stated research objectives, and the research findings were discussed in detail in Chapter Five. The purpose of this chapter is thus to summarise this study. It will consist of the following topics: a review of previous chapters, a restatement of the research questions and objectives, the summarised results, concluding remarks including hypothesis outcomes, limitations encountered during this study, recommendations for future research, and finally stating how this study could contribute to the existing body of knowledge. To recap, the relationships between the three research questions, the three research objectives and the research hypotheses are restated in Figure 6.1.

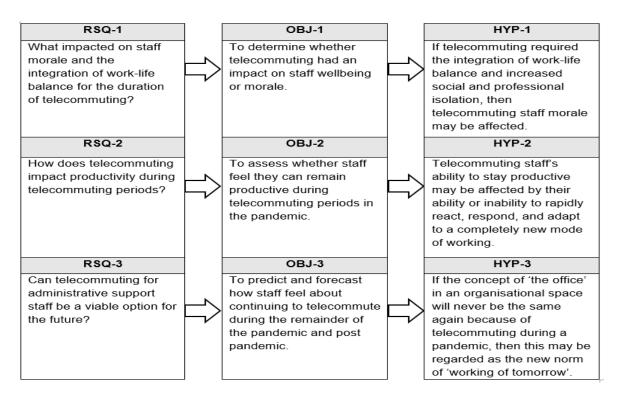


Figure 6.1: Restating: Relationship between the research questions, objectives, and hypotheses

During the data collection phases, input to the study was obtained from respondents working in an SCM Department, DoH, WC. The following section provides a review of the previous chapters.

6.2 Review of previous chapters

The study consists of six chapters described as follows:

• Chapter One presented an introduction to the study by offering a detailed narrative of how the Covid-19 pandemic affected staff traditional working methods and how staff in this specific SCM unit commenced to WFH. It further discussed other related factors that could impact well-being and morale. It stated the significance of the research, outlined the problem statement, noted the three research questions and objectives, discussed the ethical considerations, and provided an abridged literature review. The chapter outlined the research methodology, research instruments, and research design.

- Chapter Two presented and discussed the theories and models explored during the literature review and introduced an initial conceptual framework as a guide during the research process. Models and theories disseminated included the TPB, Schlossberg's transition theory, Baruch and Nicholson's four factors of Teleworking framework, Fisher's model of conceptualising and measuring wellbeing, Health and Wellbeing in the workplace by Dana and Griffin, the WHO Healthy Workplace Framework, TRA, Rath and Harter's Five Essential Elements of wellbeing, and the JD-R model.
- Chapter Three presented an extensive literature review. It focused on the different variables namely the effect of Covid-19 on operations, staff wellbeing and morale, work-life balance, the productivity of telecommuting staff and the way forward for DoH WC work settings. It also provided an overview of SCM, the functions of SCM and how the Covid-19 pandemic impact on SCM operations.
- Chapter Four discussed the methodology in a detailed narrative and described the research design which included sampling, data collection tools and methods, the data analysis approach, and ethical considerations. In this chapter the relevance between the research questions and research objectives was illustrated, and the researcher's phased in approach to data collection was explained.
- Chapter Five provided a detailed analysis of the results of findings. The respondents' descriptive data was presented, followed by detailed results and an interpretation of the results. The results and findings included a summary of findings and how the research objectives were met.
- Chapter Six linked the results and findings to the objectives of the study. This chapter presented a review of previous chapters, a restatement of the research questions and objectives, the summarised results, concluding remarks, limitations encountered, recommendations for future research, and finally suggestions on how the study could contribute to the existing body of knowledge.

In the following section, the research questions, objectives and hypotheses will be restated.

6.3 Research questions and objectives restated

The research questions were:

- 1. What impacted on staff morale and the integration of work-life balance for the duration of telecommuting?
- 2. How does telecommuting impact on productivity during telecommuting periods?
- 3. Can telecommuting for administrative support staff be a viable option for the future?

The study was based on the following objectives:

- 1. To determine whether telecommuting had an impact on staff wellbeing or morale.
- 2. To assess whether staff feel they can remain productive during telecommuting periods in the pandemic.
- 3. To predict how staff feel about continuing to telecommute during the remainder of the pandemic and post pandemic.

The study was based on the following hypotheses:

- 1. If telecommuting requires the integration of work-life balance and increased social and professional isolation, then telecommuting staff morale may be affected.
- 2. Telecommuting staff ability to stay productive may be affected by their ability or inability to rapidly react, respond, and adapt to a completely new mode of working.
- 3. If the concept of 'the office' in an organisational space will never be the same again because of telecommuting during a pandemic, then this may be regarded as the new norm of 'working of tomorrow'.

Having restated the research questions, research objectives and research hypotheses, the next section will discuss the research results. The research questions were answered, and subsequently the research objectives were met. In the following

section, the research results will be discussed.

6.4 Results

This section summarises and discusses the research results in relation to the objectives of the study.

6.4.1 Research objective one

The first research objective was to determine whether telecommuting had an impact on the wellbeing or morale of staff. It was found that telecommuting mostly had a positive impact on staff wellbeing and morale, and it allowed for a balance between respondents' work and personal lives. A finding of note was the high score of more than 80% of respondents who felt that they had sufficient organisational support for their mental health and general well-being, both for WFH and throughout the Covid-19 pandemic. This is indicative of good management styles and organisational support within the SCM unit under study. This finding is also consistent with various mental health and wellbeing initiatives the WC DoH has implemented for the staff, as explained in Chapter Three of this study. Another factor influenced staff wellbeing when they worked from home was that they felt safe and more protected against contracting Covid-19 in a work setting. In addition, the feelings of needing to prove an online status was deemed stressful.

6.4.2 Research objective two

The second research objective was to assess whether staff feel they can remain productive during telecommuting periods in the pandemic. It was evident that staff went through an adapting phase when they initially started to WFH, but after adapting, they felt they could perform their duties. It was found that a typical WFH day is perceived to be on average 30% longer than a typical office workday. This finding is consistent with the finding that 95% of this sample group of respondents affirmed that a WFH day is longer than an office workday. There were various views on staff

productivity from home, but a significant finding is that it depends on the individual work output and how effectively the individuals could communicate with each other and their supervisor regarding their duties. Some of the respondents felt strongly about the misuse of social media for work related purposes after hours, outside normal working hours.

The question on why WFH staff felt the need to prove that they are online and working continuously, is a question that will need to be answered to facilitate a workable solution. When working from home, the typical 9-5 schedule is perhaps a pipedream, but the good news is that optimal productivity does not necessarily equal eight or nine straight hours of work. Perhaps balancing out screen time is not such a farfetched idea and could work in a setup where there is understanding, clear expectations and trust. Whether it be the reinforcement and reintroduction of official working hours for staff working from home, or perhaps the organisation adapting a different approach to measure outputs, it is clear from the findings that staff feel the need to prove their online status while working from home, which in turn creates a stressful environment. In an organisational office setting, being on duty in the office and swiping your access card at the turnstile would be in most cases seen as adequate proof that the staff were working, but the scenario changes considerably when staff work from home.

6.4.3 Research objective three

The third research objective was to predict how staff feel about continuing to telecommute during the remainder of the pandemic and post pandemic, and to be able to forecast in this regard. It was found that WFH is deemed a feasible option going forward. It was evident that 90% of the respondents are willing to follow a hybrid approach in working from the office on some days and working from home on some days. The study further found that respondents felt WFH will be more effective if there could be more virtual communication and face to face interactions. It was evident that for WFH to be successful, the WC DoH must adapt a holistic approach when developing WFH policies.

Other relevant findings which emanated from this study will be discussed in the following section.

6.5 Communication

Communication while working from home is a prevalent finding in the results of this research study. It is mentioned in different settings, however WFH affected communication, both upwards to management, lateral with team members and downwards to staff. Decreased organisational communication was also mentioned as one of the most negative issues of WFH. When respondents were asked how they could support their managers, open, clear and more communication were mentioned several times. Similarly, most respondents felt that communication response time for work-related queries or questions was the greatest barrier that hampered effective communication during WFH.

6.6 The need for more organisational and Human Resource Policies

Respondents expressed uncertainty with regards to the fact that there were any departmental policies that govern WFH. The current circulars that addressed WFH policy were not deemed sufficient to address the various issues around WFH in a holistic manner. Efficient organisation communication about Covid-19 and post-pandemic working arrangements may boost employee wellbeing, but more detailed WFH related approaches and policies see a higher level of wellbeing and makes employees feel more included (Alexander et al., 2021).

It was also felt that improved remote working policies will enhance overall organisational wellbeing. The efficiency of WFH policies cannot be separated from the crucial function of the monitoring of outputs by supervisors, and the monitoring and evaluation of staff should be an ongoing process irrespective whether the staff member works from home or at the office.

6.7 The relationship between a WFH approach and staff isolation

A significant theme was social and professional isolation. Both interview and survey respondents agreed that isolation, both professionally and socially, had a negative effect on them. Feeling isolated scored the second highest with a score of 30% when staff were asked what the most negative issue was during WFH. Respondents felt that rotational hybrid working practices will address isolation. There is thus a definite relationship between WFH and staff isolation.

6.8 Work settings for the remainder of the Covid-19 pandemic and beyond

It was evident that most staff preferred a hybrid approach. Respondents felt that working arrangements have been adjusted to accommodate social distancing thus far and it was also evident that they felt hybrid strategies should be considered within components to avoid challenges. In the following section, the researcher provides a summary of the findings. Staff were keen to follow a WFH hybrid model approach, although clear and streamlined WFH and communication policies are needed to provide in-depth guidance. Moreover, public and non-public entities should take heed to address the human aspect of WFH.

Spending a month at home is vastly different than spending a month at the office, especially when staff is used to socialising with colleagues. It takes a considerable amount of time to find the correct structure, the communication tools, and the work strategies to effectively telecommute. The conclusions will be discussed in the next section.

6.9 Conclusions

Based on the research findings in Chapter Five, the research questions were answered, and the research objectives were met. Based on the research results and findings, as discussed in chapter five, table 6.1 will report on the outcome of the 3 research hypotheses used in this study.

Table 6.1: Hypotheses reporting

Hypothesis 1:

If telecommuting requires the integration of work-life balance and increased social and professional isolation, then telecommuting staff morale may be affected.

Summarised research findings:

Telecommuting mostly had a positive impact on staff wellbeing and morale and it allowed for a good balance between respondents' work and personal lives. A finding of note was that 83% of respondents felt that they had sufficient organisational support for their mental health and general well-being, both for WFH and throughout the consequences of the Covid-19 pandemic. Although there was evidence of social and professional isolation, evidence would suggest that staff members were able to adapt and mostly continue their work-related relationships in the virtual sphere.

Outcome: Based on the findings above, research hypothesis 1 is not supported.

Hypothesis 2:

Telecommuting staff ability to stay productive may be affected by their ability or inability to rapidly react, respond, and adapt to a completely new mode of working.

Summarised research findings:

It was evident that staff went through an adapting phase when they initially started to WFH, but after adapting, they felt they could perform their duties better and be more productive. Staff confirmed that a typical WFH day is on average 30% longer than a typical office workday. This finding is consistent with the finding that 95% of this sample group of respondents affirmed that a WFH day is longer than an office workday. The finding of note is that it depends on the individual's work output and how effectively the individuals could communicate with each other and their supervisor regarding their duties. There was evidence found however that the overall level of productivity may be affected.

Outcome: Based on the findings above, research hypothesis 2 is supported.

Hypothesis 3:

If the concept of 'the office' in an organisational space will never be the same again because of telecommuting during a pandemic, then this may be regarded as the new norm of 'working of tomorrow'.

Summarised research findings:

It was found that WFH is deemed a feasible option going forward. 90% of the respondents are willing to follow a hybrid approach in working from the office on some days and working from home on some days. Communication while working from home is a prevalent finding in the results of this study. It is mentioned in different settings, however WFH affected communication, both upwards to management, lateral with team members and downwards to staff.

Outcome: Based on the findings above, research hypothesis 3 is supported.

With the commencement of this study, the researcher depicted an initial conceptual framework based on variables identified through observation and through dissemination of existing literature. The initial conceptual framework was illustrated in Chapter Two of this study. In the initial conceptual framework, the researcher identified organisational support as the moderating variable, which impacted on social and professional isolation as well as job demands and stress. The aforesaid two independent variables had an impact on staff wellbeing and morale, productivity, and the future of telecommuting in the organisation. The researcher assumed that all the aforesaid impacted on work-life balance.

Figure 6.2 is an illustration of the initial conceptual framework as indicated in Chapter Two of this study.

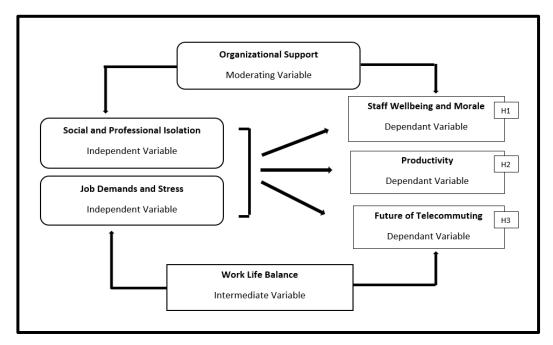


Figure 6.2: Restating: initial conceptual framework

The WC DoH has organisationally and departmentally committed to support staff wellbeing and mental health during the difficult times while staff was reeling to adapt to new working methods, worried about their own health and losing colleagues and loved ones to Covid-19. At one stage, schools were closed full time and then schools and aftercare facilities opened again part time, and this placed additional stress on employees. In a corporate communication distributed on 08 of October 2021 by WCG DoH EHWP to all the staff in the DoH WC, the focus was placed on caring for children while working from home. The communication mentioned that the department acknowledged the difficulty of working from home and caring for children, and it gave helpful tips to manage young children at home. The communication asked staff to be kind to themselves and to their children, as the children are experiencing similar upheavals in the pandemic context. It further asked the staff to be more patient and understanding towards their children as the path forward is navigated. It also stated that these pandemic-induced circumstances were unchartered territory for all, and there was no right or wrong way to approach issues or get through it. This is only one example of the many supportive communications that were circulated to the DoH WC staff members.

In the SCM space under study, the work continued as usual during the pandemic as it should. Patient services in the WC public health institutions continued, PPE was provided,

hurdles were navigated successfully and together the team navigated unchartered territory. The staff members rolled up their sleeves and worked together, and as one respondent stated, "it is a learning journey, and we learn together as we go on".

To date there has been a decrease in Covid-19 cases, and subsequently more staff returned to work full time. However, it is noted that the focus of WFH has shifted from mitigating the spread of the disease amongst staff members to shifting the focus to the efficiencies WFH brought about such as saving of resources and the agility and inclusiveness of virtual meeting platforms. WFH taught the department to make better use of technology and on-line meeting platforms such as MS Teams. In the past, a provincial forum could only have a minimal number of attendees as it involved getting staff from the rural areas to and from the meeting venue, as well as paying for travelling expenses and catering expenses. Currently, a provincial forum can be hosted virtually with a hugely increased number of attendees with no travelling or catering costs involved, and although a personal touch is probably lost with virtual meetings, it is important to note that it is more efficient to have broader and inclusive meeting platforms. Increased meeting participation creates operational efficiencies for the department in that the messages travel downwards towards the lower ranking staff that would normally not attend meetings. The next section presents the final framework for the study.

6.10 Final conceptual framework

In the context of the initial conceptual framework as displayed in Figure 6.2, the researcher drafted a final framework as informed by the findings of this study. It should be noted that the final framework was informed by the researcher's interpretation of the findings, and that it might differ if interpreted by another party. The researcher found that increased organisational communication was a crucial element that coexisted with the perceived level of organisational care and commitment towards the staff. An assumption from the findings of this research was that mental health was supported during WFH periods, and this is linked to staff wellbeing and morale, work-life balance and increased productivity levels. Holistic WFH policies and improved communication protocols will inform the future of telecommuting, with the preferred

method a hybrid model.

The researcher found the existence of an inter-relationship between work well-being and good mental health and is of the opinion it would be difficult for the one to co-exist without the other. A significant question that needs to be asked is 'what strategies did the organisation implement during the Covid-19 pandemic to enable staff to feel mentally supported'. The study showed that where possible institutional wise, the organisation gave staff the opportunity to work from home, during a time when they were uncertain and scared of what was happening around them. This perhaps proves that listening to staff voice and humanity from an organisation can go a far way to assist staff during the pandemic. Figure 6.3 illustrates how the researcher interpreted the final framework for this study.

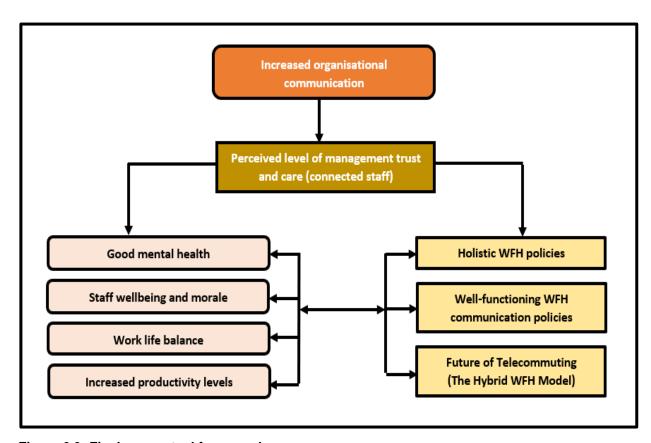


Figure 6.3: Final conceptual framework

6.11 Wellness incorporated into the name of the Department

At the end of March 2022, a name change was announced for the Department of Health,

and it will forthwith be called the Department of Health and Wellness, an apt name in the researcher's opinion to fit an organisation that cares for the health and wellness of the end-users, the employees and improved mental health for the staff and their families. During the Covid-19 pandemic the SCM component management subsequently noted the Covid-19 learnings of the pandemic, and issues such as trust building, staff wellbeing and OHS were identified as focus areas for continuous improvement. Subsequently, throughout the organisation, Covid-19 learnings will teach us how to do things better going forward. The following section will discuss the limitations and recommendations.

6.12 External factors: extended framework

Baruch and Nicholson's four factors of Teleworking framework (Baruch and Nicholson, 1997) was one of the frameworks that contributed towards the conceptual framework for this study. Four years after the publishing of the article, Baruch (2001) further stated that since all the factors in the framework were essential, it would be "unlikely that teleworking would reach a very high level of application in the foreseeable future" (Baruch, 2001). It further mentions that this is dependent on strong external inputs, for example an energy or transportation crisis that would cause no alternative than to have staff work remotely. A pandemic context was at this stage in 2001 not in the foreseeable future, and teleworking and its implications came strongly under the spotlight with the forced relocation of millions of office workers globally with the onset of the Covid-19 pandemic in 2020. The model proposed by Baruch and Nicholson (1997) can thus be complimented with an additional factor that played a monumental role in the global resurfacing and popularity of teleworking, namely external factors. Figure 6.4 presents this extended model.

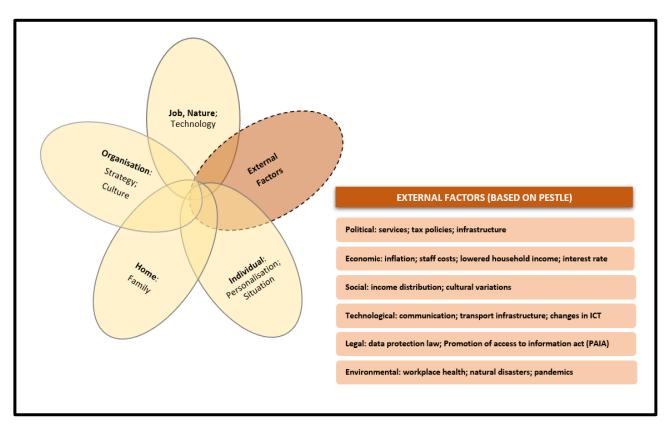


Figure 6.4: Extension of Baruch and Nicholson's four factors of Teleworking framework (source: author's own elaboration)

In Figure 6.4 the researcher added external factors as an additional element to the existing framework of Baruch and Nicholson's four factors of Teleworking framework. Telework, its implications and considerations has evolved considerably since the 2000s. The researcher used the PESTLE framework to further elaborate on the external factors that could have an impact on telework such as:

- Political: services; tax policies; infrastructure
- Economic: inflation; staff costs; lowered household income; interest rate
- Social: income distribution; cultural variations
- Technological: communication; transport infrastructure; changes in ICT
- Legal: data protection law; Promotion of access to information Act (PAIA)
- Environmental: workplace health; natural disasters; pandemics

Through observation, the researcher is of the opinion that currently and moving forward in the field of remote work, external factors need to be taken into

consideration and its integration need to be considered in addition to the factors mentioned by Baruch and Nicholson (1997). For instance, due to the economic situation in South Africa, there are businesses that gave up their office leases and staff are now working from home. Thus, working from home was outside the control of the staff in this instance. In turn environmental factors may also influence remote work when workplace health needed to be considered and there had to be a mandatory 1.5m social distance between individuals, of which open plan offices were not conducive. This was also outside the control of the staff. With regards to political factors, the National State of Disaster was outside the control of the staff and had an influence on remote working policies. Technological and legal external factors such as changes in ICT, staff performing work through WFH data networks, and the subsequent data protection policies should also be considered in a WFH setting. Further specific research into the implications and effects of each of the above external factors would be worthwhile in the context of a continued WFH approach.

6.13 Limitations

The section below will discuss the limitations, including the shortcomings or consequences, that were beyond the control of the researcher while conducting this study.

6.13.1 Sample size

This study was conducted only in a SCM department in the WC DoH, with a sample size of thirty-four participants. A larger sample size was intended, but the researcher had to navigate various challenges in collecting respondent data which included staff working off site with faulty ICT equipment, problematic data connections, load shedding schedules, staff not being easily reachable due to working from home and staff not being in proximity of each other. Despite frequent following up on intended participation and various attempts to reach out to potential respondents, the researcher was only able to obtain a sample size of thirty-four. Although most of the staff at Head Office level worked from home, the views, and opinions of the SCM component may not be the view of the staff of the other corporate services components. While this study explored the wellbeing and morale of staff, and how they adapted to WFH arrangements, there might be additional

insights to be gained if the study included other components such as finance and human resources.

6.13.2 Load shedding

Interrupted power supply during load shedding impacted negatively on communication. While it is a fact that adequate ICT in the form of a charged laptop with a reservoir power supply of three hours at least should allow WFH staff to continue with their duties, the interruption of network availability hampers effective communication. Similarly, interrupted power supply affected the researcher, as access to online research databases was limited during load shedding. Where it was possible to create a hotspot on a cellular device and access the internet during loadshedding, nothing can be done when cellular reception towers are not functional. This impacted on keeping to the predetermined time schedule for this study. Loadshedding also affected the respondents who participated in virtual interviews or had to complete the survey on Google Forms which both necessitated a power supply and access to a data network. It is recommended that the possibility of load shedding, and how it could impact a research study, is considered in the research planning and plotting of milestones stages.

6.13.3 Other ICT challenges - Respondents using outdated software

Additional ICT challenges were experienced, but it is not believed to have had a meaningful limitation on this study. Participants used different software operating browsers, and the link to the research survey tool did not work efficiently on older versions of browsers. This would then result in participants experiencing issues with accessing the questionnaire. However, when this happened, the affected respondents would contact the researcher and they would be guided to copy and paste the link into another browser. To ascertain which software respondents were using and how updated the software versions were, were outside the control of the researcher because contact with the respondents were primarily virtual. A future recommendation would be to speak to the respondents beforehand to attempt to ascertain which browsers or software versions they are using, and to alert them to the fact that they could possibly experience issues. Five of the 34

respondents experienced issues with accessing the questionnaire, and the researcher assisted them remotely via e-mail and MS Teams to facilitate a solution to the problem.

6.13.4 Restricted schedule

The researcher is studying part-time and working full time. It can thus be understood that the researcher had to perform proper planning before undertaking the study. The researcher had to utilise study leave and her own annual leave to spend time finalising the research thesis, as afterhours and working on weekends were not always adequate to reach predetermined milestones.

6.13.5 The personal touch

Due to Covid-19 and protocols which advocated social distancing, face to face interactions with respondents were not always feasible and virtual interaction were the primary method of communication chosen by respondents. One interview was conducted in person, and three interviews were conducted via a virtual method, and this was according to respondent preference. Although the researcher was able to see the respondents during the virtual interviews, it would have been more personal to have face-to-face sessions. The effects of Covid-19 and subsequent social distancing protocols were beyond the control and scope of the researcher and the researcher had to respect the views of the respondents to allow virtual contact. While it would have been preferred to have face-to-face completion of interviews and surveys, the researcher does not believe that the virtual methods could not have been severely limiting to the research outcomes. Despite the lack of personal touch, the researcher achieved the objectives of this study. The recommendations for this study are provided in section 6.13.

6.14 Recommendations

This section offers recommendations as informed by the findings of this study.

6.14.1 Longer working hours and differing work schedules

The researcher assumed that staff members initially struggled to adapt to remote working, and the findings affirmed this assumption. Various issues in terms of work-life balance were raised in the findings, but in general it seems that staff members adapted well. The issue of longer working hours and staff struggling to balance home and work life because of this, need to be addressed. With the inception of service in the public sector, the human resources department requests staff members to complete a compulsory working hours choice sheet. There are various options to choose from, but the staff members' choice would then be accepted as the official working hours going forward. Staff members are however allowed to apply in writing to their immediate supervisors to change the hours, however, it is strongly recommended that remote staff be asked to complete an interim WFH hours indication.

It is also recommended that supervisors review the WFH working hours. Differing working schedules for teams may lead to frustration in waiting for replies on queries. The completion of a WFH working hours choice form will also mitigate the issue of being contacted outside official hours, minimising teams experiencing communication delays, and the supervisor and staff member could both reaffirm that these WFH interim hours are the expected official hours. Similar working schedules for WFH teams could improve communication and in turn speed up possible work-related delays. Reaffirming historic work hour choices will re-align teams who need to work together on the same schedule or projects. This will also be beneficial for supervisors who need to monitor outputs for the staff members who work remunerated overtime from home.

6.14.2 Professional isolation

Based on the findings that highlighted the existence and negative impact of professional isolation, the recommendation is to have more communication sessions. It is crucial that staff feel they are connected to their relevant departments and to the organisation, as this forms part of their unique inherent organisational identity. Management can either facilitate more communication virtually or face to face, with the preference being virtually as learned from the findings. It seems that some staff members could successfully transfer their work relationships into the virtual sphere, while others struggled. The SCM

component has since March 2022 reintroduced team building sessions per subdirectorate, but with the difference that it was held in smaller groups than before the Covid-19 pandemic which is reassuring to staff members who still fear contracting Covid-19 in a work setting.

6.14.3 Stress and anxiety

The findings proved that Covid-19 brought about more work-related expectations in the SCM space, including tight deadlines and higher work outputs due to services and products needed to fight the spread of Covid-19 in the WC. As most of the respondents mentioned that it was very stressful when having to execute most of the tasks as urgent, it is recommended that supervisors review and re-engineer existing weekly planning schedules. It would be a good idea to involve more of the lower ranking staff members in planning sessions. It would also be feasible to review the additional reporting requirements within the SCM space which were exacerbated by the Covid-19 pandemic governance framework and the purchasing of PPE. This places an added burden on staff. Due to the Covid-19 pandemic subsiding, revision of the Covid-19 governance reporting requirements is recommended.

6.14.4 Communication

Inadequate communication was mentioned several times in the findings. This included the lack of communication and different WFH staff working schedules which might compromise work accuracy and expected deadlines. It is recommended that communication needs per directorate are determined. Inherent communication needs differ from directorate to directorate, and each area's needs are unique. The recommendations made in the above-mentioned paragraph addressing "longer working hours and differing schedules" might also assist to alleviate some of the communication issues.

6.14.5 Increased organisational virtual training sessions

Findings indicated that increased work responsibilities due to the pandemic, and the intake of temporary staff to assist with working towards catering for the Covid-19 needs in the Western Cape, made less time available to adequately train subordinates. In-service training and on-the-spot training remain crucial to familiarise new employees with the work setting and work expectations. It is thus recommended that the training department be encouraged to introduce more virtual training sessions. Face-to-face training is more costly, and most times would involve catering and travelling expenditure. Staff members became more confident with utilising ICT during the WFH period, and staff will be able to navigate virtual training while WFH and at an organisational office space.

6.14.6 The hybrid model

It is recommended that management, based on the outputs of each team or each staff member individually, review the way they have worked. Further to the mitigation of the spread of Covid-19, a WFH approach will be hugely beneficial in terms of acquiring a variety of work-related efficiencies. Staff save money on travelling to and from work and on costly parking. In addition, the department saves paper as staff work digitally, the department and staff save time as they can just switch from one meeting to another and do not have to travel to various destinations, and the department also saves on catering expenses. A WFH hybrid model will facilitate a good balance in terms of how efficient the staff can work as an organisation going forward, while also retaining some of the Covid-19 organisational efficiencies.

6.14.7 Holistically inclusive WFH policies

The findings indicated that improved or more holistic remote working policies will improve overall organisational wellbeing. It is recommended that the following issues be covered in policies, which were clear from the findings:

- working hours and working schedules,
- working on a rotational basis (rotation hybrid),
- clear directives on overtime payment for staff following a WFH approach (the

measuring of outputs),

- · communication guidelines with regards to WFH,
- the use of social media for work-related purposes and the apparent misutilisation of social media outside working hours, and
- the introduction of more virtual training sessions.

The above issues were mentioned as critical issues to be addressed, however, it is not certain whether some issues could be addressed departmentally or should be addressed organisationally on a bigger platform. Section 6.14 explains the relevance of this study.

6.15 Relevance of the research study

One of the primary objectives of the research is to build knowledge. In that context, this study could be instrumental to facilitate learning. Learning will enable management in the public sector, as well as management in non-public sector entities, to have an improved understanding of challenges that lower ranks of staff encounter while telecommuting. Increased understanding on staff morale and the integration of balance for the duration of telecommuting will be beneficial to making decisions going forward.

Similarly, various aspects of WFH productivity were disseminated during this study and will assist management in understanding which challenges staff face in staying optimally productive at home. This study offers an improved understanding on the value of continued WFH practises. The next section unpacks recommendations for future research.

6.16 Recommendations for future research

The researcher highly recommends further research should be conducted based on the findings and interpretation of this study. This study provided insight into the issues that affect staff wellbeing and identified issues staff encountered while telecommuting. The study also found that working from home in a hybrid model was an option to explore for the future, and that staff indicated they would be willing to do so. There is however a gap

in the existing body of knowledge with regards to how other South African public service entities coped with working from home, as telecommuting was not traditionally a working methodology that the public service would favour. Recommendations for future research would include taking a deeper look into how the public service could make telecommuting work well as it will be beneficial in terms of various acquired Covid-19 WFH work-related efficiencies for the Government. It is recommended that the research be undertaken considering the following themes.

6.16.1 Virtual meeting efficiency compared to in-person meeting

In line with remote work, the primary meeting structure during the Covid-19 pandemic was virtual. During virtual meetings, it is not compulsory to switch on video mode which would then display an image of the meeting attendee. In line with the findings of this study that communication issues were experienced with WFH mode, it would be recommended to conduct further research into communication modes used in the WFH mode. It would also be beneficial for the organisation to ascertain whether staff felt that virtual meetings compromise the quality of the meeting or perhaps whether the richness of the data portrayed during in-person meetings fades with virtual meetings. This would contribute to further ascertaining which communication behaviour would be feasible for telecommuting staff.

6.16.2 Functional pandemic and disaster planning

A further recommendation for future research would be to ascertain whether the public service has a good and functional pandemic, disaster management or contingency plan, specifically with regards to the continuation of core administrative functions which will allow for the uninterrupted continuation of human resources, finance and SCM functions in an emergency. If the DoH WC will consider further WFH strategies and should the Covid-19 pandemic not totally subside, further research in terms of how Occupational Health and Safety policies apply to staff who WFH would be beneficial. Staff working from home are regarded as being on duty, it is important to consider how OHSA policies would apply to staff working from home when they injure themselves at home, and whether this

too would be regarded as an injury on duty.

6.16.3 Retaining WFH related efficiencies for the organisation

A further research study focusing specifically on the efficiencies WFH initiatives brought about, in terms of saving resources, staff accommodation, catering and travelling expenses to name just a few, would be beneficial. Perhaps future research will identify ways in which the DoH WC can retain some of the efficiencies, for example, printing minimally. A further recommendation for future research is to establish how the DoH WC institutional and hospital staff that could not work from home, were affected by staff that worked from home.

6.16.4 Leadership styles

WFH Leadership style would also be a further area of research. Streamlining WFH supervision would assist in determining whether relational or task-driven leadership would be best suited to supervise staff. The method in which telecommuting staff perceive communication is different for staff that work in a traditional brick and mortar setting. Relational leadership and communication consist of more conversational cues, which is understandably different with WFH staff. It is then understood that WFH staff can be categorised as task-orientated leadership style as communication between supervisors and staff are less when they WFH.

These future research recommendations will be beneficial to understanding the phenomenon of working from home, a method of working that the DoH WC tried for the first time for the administrative Head Office staff, through trial and error, and somehow made it work. It must also be mentioned that the DoH WC received a clean auditor-general report for the 2021/22 period, which proves that while a certain segment worked from home, it did not impact the positive auditing outcome. The following section explains how this study can contribute to the existing body of knowledge.

6.17 Contribution to the existing body of knowledge

This study contributes new insights into how public sector entities could navigate WFH operations. Since the WFH method was not generally practised before Covid-19, there is currently a limited understanding of how it affects staff, particularly public sector staff in South Africa. Traditionally, administrative staff worked strictly from organisational spaces, and the pandemic context exacerbated the need to speedily adjust to work under stressful pandemic-induced circumstances from home.

This study could make a meaningful contribution to knowledge building of the DoH, WC human resource department where organisational communication such as circulars are compiled. A clear finding was that staff felt that more holistic WFH policies or circulars were needed. It is not clear yet whether issues such as working hours, working schedules, and communication protocols while WFH and WFH Occupational Health and Safety should be addressed departmentally or perhaps organisationally. This is an issue for further exploration. This does however not negate the fact that the aforesaid issues are crucial to improve WFH governance and strategies for staff going forward. This study thus seeks to contribute to more effective and streamlined policies and circulars on the various WFH issues in the public sector.

In addition, the researcher was able to contribute to the existing body of knowledge by extending the four factors of Teleworking framework (Baruch and Nicholson, 1997) to include external factors (as illustrated in section 6.12 and Figure 6.4). The researcher extended the model with an additional factor that played a significant role in the global resurfacing and popularity of teleworking. The researcher used the PESTLE framework to further elaborate on the external factors that could have an impact on telework such as:

- Political: services; tax policies; infrastructure
- Economic: inflation; staff costs; lowered household income; interest rate
- Social: income distribution; cultural variations
- Technological: communication; transport infrastructure; changes in ICT
- Legal: data protection law; Promotion of access to information Act (PAIA)
- Environmental: workplace health; natural disasters; pandemics

Through observation, the researcher is of the opinion that currently and moving forward in the field of remote work, the above external factors need to be taken into consideration and its integration need to be considered in addition to the factors mentioned by Baruch and Nicholson (1997).

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LIST OF APPENDICES

Appendix A Application and approval to conduct research

Appendix B Ethics certificate

Appendix C Data collection consent for an interview

Appendix D Data collection consent for a survey

Appendix E Historic Definitions of Supply Chain Management

Appendix F Declaration of editing

Appendix G Turnitin Originality Report

APPENDIX A: APPLICATION AND APPROVAL TO CONDUCT RESEARCH

Rentia van Heerden c/o Cape Peninsula University of Technology (CPUT)

Date: 04 June 2021

The Head Supply Chain Management/People Management Department of Health

For Attention: Esmereldah Isaacs

REQUEST FOR PERMISSION TO GATHER DATA ON RESEARCH THESIS FOR MASTER OF BUSINESS & INFO ADMINISTRATION (MBIA) WITH THE TOPIC: "THE EFFECT OF STAFF MORAL DURING TELECOMMUTING IN THE HEALTH SECTOR OF A PUBLIC INSTITUTION"

I am an accepted and registered MBIA student at CPUT. I am conducting a thesis-based research study on "The effect of staff moral during telecommuting in the Health sector of a public institution" in fulfillment of my Master's degree. I would like to conduct surveys, in the form of on-line questionnaires, with staff members from within the Supply Chain Management section at Head Office. The questionnaires will aim to establish what the effects of telecommuting were on staff members, what their individual experiences were and how it affected their morale.

I would be greatly appreciated it if you would grant me permission to conduct the study in the said section. I trust that the results of this study would aid management to have an improved understanding of telecommuting and how it affects staff members. The data sample size is envisaged to be between 40 and 50. I will abide by the Cape Peninsula University of Technology's guiding principles for Research Ethics and the Code of Ethics for Research on Human participants as required by the Health and Wellness Sciences Research Ethics Committee. The results will be made available to the Department, and please note that the report will NOT indicate that data was collected at the Head Office component.

It is hoped that this research could contribute to previous literature by (a) providing new insights that influences the continuation of telecommuting during the remainder of the Covid-19 pandemic and beyond; (b) adding factors that influences staff wellbeing while telecommuting; and (c) being instrumental in the development of remote work policies and the adaption of organisational plans. Participating staff members will be requested to complete an agreement (see Annexure "A"). I also attach a *draft* sample questionnaire so that you may see what type of questions the staff members will answer (see Annexure "B"). If you do not support any of the questions, I will gladly alter/exclude it.

Yours faithfully

Rentia van Heerden MBIA Researcher/Student

04_JUNE_2021

REQUEST FOR PERMISSION TO GATHER DATA ON RESEARCH THESIS FOR MASTER OF BUSINESS & INFO ADMINISTRATION (MBIA) WITH THE TOPIC: "THE EFFECT OF STAFF MORAL DURING TELECOMMUTING IN THE HEALTH SECTOR OF A PUBLIC INSTITUTION"

Supported/N et Support ed	Comment:
MRS ES ISAACS CHIEF DIRECTOR: SUPPLY CHAIN MANAGEMENT DATE: 04.06.2021	
Supported/Not Supported	Comment:
-AM	
MRS B ARRIES	
CHIEF DIRECTOR: PEOPLE MANAGEMENT DATE: 07 June 2021	
Noted	Comment:
MR S KAYE	
CHIEF FINANCIAL OFFICER/HEAD OF CORPORATE	
DATE: 8 June 2021	

APPENDIX B: ETHICS CERTIFICATE



P.O. Box 1906 | Bellville 7535 Symphony Road Bellville 7535 South Africa Tel: +27 21 4603291

Email: fbmsethics@cput.ac.za

Office of the Chairperson Research Ethics Committee FACULTY: BUSINESS AND MANAGEMENT SCIENCES

The Faculty's Research Ethics Committee (FREC) on 14 September 2021, ethics APPROVAL was granted to Rentia van Heeden (219399670) for a research activity for Master of Business and Information Administration at Cape Peninsula University of Technology.

Title of dissertation / thesis / project:	The effect of staff morale during telecommuting in the health sector of a public institution in the Western Cape
	Lead Supervisor (s): Prof V Naicker

Decision: APPROVED

Signed: Chairperson: Research Ethics Committee

Date

The proposed research may now commence with the provisions that:

- The researcher(s) will ensure that the research project adheres to the values and principles expressed in the CPUT Policy on Research Ethics.
- Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study requires that the researcher stops the study and immediately informs the chairperson of the relevant Faculty Ethics Committee.
- 3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
- Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing accompanied by a progress report.
- 5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, notably compliance with the Bill of Rights as provided for in the Constitution of the Republic of South Africa, 1996 (the Constitution) and where applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003 and/or other legislations that is relevant.
- Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
- No field work activities may continue after two (2) years for Masters and Doctorate research project from the date of issue of the Ethics Certificate. Submission of a completed research ethics progress report (REC 6) will constitute an application for renewal of Ethics Research Committee approval.

Clearance Certificate No | 2021_FBMSREC 055

APPENDIX C: DATA COLLECTION CONSENT FOR AN INTERVIEW

LETTER TO PARTICIPANT FOR DATA COLLECTION DURING AN INTERVIEW FOR A RESEARCH STUDY WITH THE TOPIC

"The effect of staff morale during telecommuting in the health sector of a public institution in the Western Cape".

Research conducted by student: Rentia van Heerden (219399670)

At the Cape Peninsula University of Technology
In fulfilment of a master's degree in MBIA

Dear Participant

I kindly request your participation to avail yourself to answer questions in an interview for this research study.

I am a student at the Cape Peninsula University of Technology in Cape Town, and in the fulfilment of my Master of Business and Information Administration degree, I am undertaking research into "The effect of staff morale during telecommuting in the health sector of a public institution in the Western Cape". This research aims to investigate how the administrative staff reacted, responded, and adapted to telecommuting; what factors may have impacted on staff wellbeing during telecommuting; and whether telecommuting could be a viable option for the future. Please be informed that I have obtained departmental management consent to conduct this study in the Department of Health, Western Cape Government, Supply Chain Management unit.

Written consent, research ethics and confidentiality: Upon obtaining consent from you, I will be in contact to arrange an interview. The interview will have various questions and the aim of the questions is to collect data that I can use for my study. Please note that your participation in this study is voluntary and you may withdraw from the study at any time and for any reason. Please also note that you may omit questions that you do not want to answer.

To align to Covid-19 protocols, as far as possible and unless otherwise requested, I will not be in direct contact with you and our interaction will be electronical via e-mail or any other relevant electronic method. Please be ensured that your data will be treated with full confidentiality and that if published, it will not be identifiable as yours.

Agreement:

By signing this consent form, you agree to participate in an interview.

Researcher/Supervisor Contact details:

Rentia van Heerden (Researcher)

t: +27 713584445 | e: Rentia.vanheerden@westerncape.gov.za

Professor Visvanathan Naicker (Supervisor)

NAICKERVI@cput.ac.za

Informed Consent By signing this form, I consent to be a participant in the research study as outlined above. I understand why this study is being conducted and what information will be collected. I also understand that my personal details will be kept confidential and that I may withdraw from this study at any time.				
I consent to partake in this study by completing a questionnaire.				
I agree / do not agree to complete the questionnaire.				
Signature of Researcher	Date			
Signature of Respondent	Date			

APPENDIX D: DATA COLLECTION CONSENT FOR A SURVEY

ELECTRONIC COMMUNICATION AND CONSENT (VIA RETURN E-MAIL) TO PARTICIPANTS FOR QUESTIONNAIRE COMPLETION

DATA COLLECTION FOR A RESEARCH STUDY WITH THE TOPIC

"The effect of staff morale during telecommuting in the health sector of a public institution in the Western Cape".

Research conducted by student: Rentia van Heerden (219399670)

At the Cape Peninsula University of Technology

In fulfilment of a master's degree in MBIA

Dear Participant

I am busy with my Master's Degree (MBIA). As part of my final thesis, I need to do a survey to collect data for my thesis. My research subject is "The effect of staff morale during working from home in the health sector of a public institution in the Western Cape". I have already obtained organisational permission (CD SCM, CFO and Head of People Management), I have discussed the collection of data within SCM with the Directors, and I have received ethics approval from my university (CPUT). This is an introductory e-mail as I would like you to be part of my data collection group and complete a survey for me. Participation is voluntary and I can guarantee confidentiality, and you will also be able to withdraw at any point in time from this study.

Agreement:

Kindly indicate via return e-mail whether you will be prepared to partake in my study. The questionnaire will take approximately 15-20 minutes to complete, and a link will be provided to you.

Signature:

Researcher/Supervisor Contact details:

Rentia van Heerden (Researcher)

t: +27 713584445 | e: Rentia.vanheerden@westerncape.gov.za

Professor Visvanathan Naicker (Supervisor)

NAICKERVI@cput.ac.za

APPENDIX E: HISTORIC DEFINITIONS OF SUPPLY CHAIN MANAGEMENT

Year of	Author(s)	Definition/Statement		
Publicatio				
n				
2021	Wieland, A	"Recent and ongoing crises have emphasized that the structures and processes of supply chains are fluid and interwoven with political-economic and planetary phenomena".		
2018	Lam, HKS	"Supply-chain management is concerned with topics related to sustainability and risk management, among others".		
2012	Wisner, Tan & Leong	"SCM is the integration of trading partners' key business processes from initial raw material extraction to the final or end customer, including all intermediate processing, transportation and storage activities and final sale to the end product customer".		
2008	Simchi-Levi, Kaminsky & Simchi-Levi	"SCM is a set of approaches used to efficiently integrate suppliers, manufacturers, warehouses and stores, so that merchandise is produced and distributed at the right quantity, to the right locations, and at the right time, in order to reduce system extensive costs while satisfying service level requirements".		
2007	Krajewski, Ritzman & Malhotra	"SCM comprises of developing a strategy to organise, control and motivate the resources involved in the flow of services and materials within the supply chain".		
1995	Baatz	SCM addresses materials/supply management from the supply of raw materials to its end of life (and possible recycling or re-use).		

APPENDIX F: DECLARATION OF EDITING

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32 Kherwe fload Kherwastan Durben 4002

Celt 084 702 25 55 neresh@ngcommunications.co.au

03/07/2022

RENTIA VAN HEERDEN

Cape Peninsula University of Technology rentia.vanheerden@westerncape.gov.za

RE: EDITING CERTIFICATE

FOCUS AREA: The effect of staff morale during telecommuting in the health sector of a public institution in the Western Cape

(Thesis submitted in fulfilment of the requirements for the degree Master of Technology: Business and Information Administration in the Faculty of Business and Management Sciences at the Cape Peninsula University of Technology)

This serves to confirm that this thesis has been edited for clarity, language and layout.

Kind regards,

Nereshnee Govender (PhD)

APPENDIX G: TURNITIN ORIGINALITY REPORT

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The effect of staff morale during telecommuting in the health sector of a public institution in the Western Cape

ORIGINA	ALITY REPORT			<u>'</u>	
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6	daten-q Internet Sour	uadrat.de			<1%
7	www.re	searchgate.net			<1%
8	"Te l ewo	e l zunegui - Eraso orking in the Con Sustainability, 20	itext of the Co		<1%