

**EXAMINING RESEARCH SUPPORT PROGRAMMES FOR
ACADEMIC STAFF AT A SOUTH AFRICAN OPEN AND DISTANCE
LEARNING INSTITUTION**

by

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I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.



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ABSTRACT

Academic research is essential for the development of individual academics. Universities support academic staff through various research support programmes in order to improve its research enterprise. To improve the quality of these programmes, they must be evaluated on a regular basis. However, in this study, the gap noted in respect to the University of South Africa's (Unisa) research support programmes was the lack of an academic study evaluating such programmes from the perspective of beneficiaries. As a result, there was a misalignment between the efficacy of the programmes and the significance of the experience for participants. Hence, the purpose of this study was to establish if the research support provided by Unisa through its research support programmes contributes to the research development of academic staff.

In this qualitative case study, interviews were conducted with 20 participants from three Unisa research support programmes, namely MDSP, AQIP, and ODL-RSP, who participated in the programmes between 2013 and 2020. To uncover and analyse the assumptions underpinning research support, a theory-based evaluation in the form of a realist programme theory approach was used. Following a document-based analysis, this thesis used this analytical technique to discover the context, mechanisms, and outcomes (CMO) and developed programme theories that revealed the supposed causal linkages between inputs and outputs to address the issues of research output and capacity in higher education. Following that, the framework's assumptions about what “works, for whom, and under what conditions” were compared to the perceptions of Unisa academics who benefited from the aforementioned programmes.

The findings revealed that Unisa academics' high teaching and administrative workload and domestic duties resulted in their demand for research support, including research funding, reduced workload, more time for research, and research mentorship. As a result, Unisa academics favoured support programmes aimed at addressing concerns, including reduced teaching and administrative workloads, more research and development leave concessions, and work-from-home. In particular, the AQIP was preferred by participants above the MDSP and ODL-RSP. Nonetheless, the

study presents a framework that may be used as a thinking tool to gain a better understanding of research support, as well as to plan and evaluate research support programmes similar to those provided by Unisa.

Keywords: distance learning, theory-based evaluation, research support programmes, programme theory, higher education, South Africa

ISISHWANKATHELO

Uphando kwezemfundo lubaluleke kakhulu kuphuhliso lwamagosa ezemfundo. Iyunivesithi ziyawaxhasa amagosa emfundo ngokusebenzisa iinkqubo zenkxaso ezahlukeneyo ukwenzela ukuphucula icandelo lezophando. Ukuze ziphuculwe ezi nkqubo, kufuneka zivavanywe rhoqo. Noxa kunjalo, kwesi sifundo kuphawuleke ukuba kukho isikhewu kwiinkqubo zenkxaso zeYunivesithi yoMzantsi Afrika, apho kungekho sifundo sivavanya ezi nkqubo siveze izimvo zabaxhamlayo kuzo. Isiqhamo salonto yaba kukungahambelani phakathi kokusebenza kakuhle kwezi nkqubo kunye nokubaluleka kwamava abathathi nxaxheba. Yiyo le nto injongo yesi sifundo yayikukufumanisa ukuba ingaba inkxaso yophando enikwa yileyinivesithi iyanceda na kuphuhliso lophando kumagosa ayo emfundo.

Kwesi sifundo sokuzathuza singumzekelo, kwaqhutywa iindleli ndlebe nabathathi nxaxheba abangama-20 beenkqubo zenkxaso ezintathu zakuleyunivesithi, eziyiMDSP, AQIP, kunye neODL-RSP, phakathi kweminyaka yama-2013 nama-2020. Ukutyhila nokuhlalutya izimvo zoqikelelo ezisuse esi sifundo senkxaso kwezophando, kwaqhutywa uvavanyo olusekelwe kwingcingane ethi ingaba inkqubo izidala njani iziphumo ezibonwayo, *irealist programme theory* ngesiNgesi. Emva kokuphengulula iimibhalo ethile, le ngxelo yophando yasebenzisa ubuchule bohlahlutyo ukuze kufumaniseke imeko, iindlela zokusebenza kunye neziphumo (CMO). Emva koko kwaphuhliswa iingcingane zeenkqubo ezadiza ulwalamano phakathi kokufakwayo (*inputs*) nokukhutshwayo/iziphumo (*outputs*) xa kusetyenzwa ngemiba yeziphumo zophando nezakhono kwimfundo ephakamileyo. Kwalandeliswa ngokuthelekisa izimvo zoqikelelo malunga nokuba yintoni “esebenzayo, isebenzela bani, phantsi kwezphi iimeko” nezimvo zeengcali zemfundo ezakha zaxhamla kwezi nkqubo sezikhankanyiwe.

Okufunyanisiweyo kwadiza ukuba umsebenzi wokufundisa nowokulawula iinkqubo weengcali zemfundo ukhokelela kwizidingo zenkxaso kwezophando, kuquka nenkxaso mali kwezophando, ukuncitshiswa komsebenzi, ixesha elithe chatha lokuqhuba uphando, kunye nokuba nabacebisi kuphando. Oko kwakhokelela ekubeni iingcali zemfundo zaseUnisa zinqwenele iinkqubo zenkxaso ezijolise ekukhawuleleni iminqweno yabo, kuquka ukuncitshiswa komsebenzi. Inkqubo yeAQIP yakhethwa

ngabathathi nxaxheba ngaphezu kweMDSP neODL-RSP. Isifundo sinikezela ngesakhelo esinokusetyenziswa njengesixhobo sokucinga, ukwenzela ukuba kubekho ukuyiqonda ngcono inkxaso yezophando, ukuze kucetywe, kuvavanywe iinkqubo zenkxaso yezophando ezifana nezo zinikezelwa yiUnisa.

Amagama aphambili: uvavanyo olusekelwe kwingcingane, iinkqubo zenkxaso yezophando, ingcingane yenkqubo, imfundo ephakamileyo uMzantsi Afrika

NGOKURHUNYEZIWEKO

Irhubhululo lezefundo liqakathekile ekuthuthukisweni kwesifundiswa ngasinye. Amayunivesithi asekelaba abasebenzi bomkhakha wezefundo ngamaphrogrému ahluahlukileko wezerhubhululo asekelako ngehloso yokuthuthukisa ihlelo layo lezerhubhululo kubhizinisi. Ukuthuthukisa ikhwalithi yalamaphrogrému, kufuneka bahlala bahlolwe ngasosoke isikhathi. Nanyana-kunjalo, kuleli rhubhululo, ukuba khona kwesikhala esimalungana namaphrogrému wezerhubhululo asekelako weYunivesithi yeSewula Afrika (Unisa) kubangelwe kutlhayela kwerhubhululo lezefundo elihlola amaphrogrému anjalo ngokomqondo wabazuzi.. Njengomphumela walokho, kube khona ukungakhambisani phakathi kwezinga lokusebenza ngepumelelo kwamaphrogrému kanye nokuqakatheka kwelwazi labadlalindima. Kanti-ngakelinye ihlangothi, umnqopho waleli rhubhululo kwakukuthola ukuthi mhlambe isekelo lezerhubhululo elinikelwa yi-Unisa ngamahlelo wayo wezerhubhululo elisekelako lifaka igalelo ekuthuthukisweni kwerhubhululo kubasebenzi bomkhakha wezefundo.

Kulesi sibonelorhubhululo (*case study*) engasebenzisi amanani, amanhlolombono enziwe nabadlalindima abama-20 abavela kumaphrogrému amathathu wezerhubhululo elisekelako we-Unisa, wona ngilawa; MDSP, AQIP, kanye ne-ODL-RSP, phakathi kuka-2013 no-2020. Ukuze kutholakale begodu kutsengwe nemicabango emumethe isekelo lezerhubhululo, kusetjenziswe ihlelo lokuhlola elisuselwe kuthiyori yezokuhlola ngendlela ekholelwa kuthiyori yephrogrému yezinto zamambala.. Nakulandelwa itsengo elisuselwa emtlotweni, le thesis isebenzise lendlela yokutsenga ukuthola ubujamo, amamekhenizimu kanye nemiphumela (*CMO*) kanye namathiyori wamaphrogrému athuthukileko aveze ukuhlobana okubizwa nge-*causal linkages* okuphakathi kwelwazi elisetjenziswako (*input*) kanye nelwazi elimiphumela (*outputs*) ukulungisa iindaba zemiphumela yerhubhululo kanye namandla asemazikweni wezefundo aphezulu. Ngemva kwaokho, imicabango yesakhiwo emalungana nokuthi “yini okusebenzela bani, begodu lokho kusebenza ngaphasi kwabuphi ubujamo”, imicabango le imadaniswe nemiqondo yeemfundiswa ze-Unisa ezizuze kumaphrogrému akhulunywe ngaphambilini.

Ilwazi elivunjululiweko lokuthiumthwalo weemfundiswa ze-Unisa wezinga eliphezulu lokufundisa kanye nezokuphatha, liveze isidingo sesekelo lezerhubhululo, kufakwa phakathi ukusekelwa kwezerhubhululo ngeemali, kuphungule umthamo womsebenzi, isidingo sesikhathi esinengi serhubhululo kanye nokuthogonyelwa ngelwazi lezerhubhululo. Njengomphumela walokho, iimfundiswa ze-Unisa zithande amaphrogremu asekelako anqotjhiswe ekurarululeni iminako, kufakwa phakathi ukuphungulwa komthamo womsebenzi Ikakhulukazi, i-AQIP yanyulwa badlalindima ngaphezu kwe-MDSP zine-ODL-RSP. Nanyana-kunjalo, irhubhululo lethula isakhiwo esingasetjenziswa njengethulusi lokucabanga lokuzuza ilwazi lokuzwisisa ngcono isekelo lezerhubhululo, kanye nokupulana/nokuhlela nokuhlola amaphrogremu wezerhubhululo asekelako okufana nalawo anikelwa yi-Unisa.

Amagama aqakathekileko: ihlelo lokuhlola elidzimelele kuthiyori, amaphrogremu wezerhubhululo asekelako, ithiyori yephrogremu, ifundo ephakemeko, iSewula Afrika

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LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|--------|---|
| AQIP | Academic Qualification Improvement Programme |
| ASSAf | Academy of Science of South Africa |
| CA | College of Accounting Sciences |
| CAES | College of Agriculture and Environmental Sciences |
| CEDU | College of Education |
| CEMS | College of Economic and Management Sciences |
| CGS | College of Graduate Studies |
| CHS | College of Human Sciences |
| CLAW | College of Law |
| CMO | Context, mechanisms, and outcomes |
| CSET | College of Science, Engineering, and Technology |
| Danida | Danish International Development Agency |
| DHET | Department of Higher Education |
| DST | Department of Science and Technology |
| ERSP | Emerging Researcher Support Programme |
| HEI | Higher Education Institution |
| IBSS | International Bibliography of Social Sciences |
| ISI | Institute for Scientific Information |
| ISP | Innovation Support Programme |
| KPA | Key Performance Area |
| LFA | Logical Framework Approach |
| M & D | Master's & Doctoral |
| MDSP | Master's and Doctoral Support Programme |
| NDP | National Development Plan |

| | |
|----------|---|
| NPO | Non-Profit Organisation |
| NRF | National Research Foundation |
| NSF | National Science Foundation |
| ODL | Open Distance Learning |
| ODL-RSP | ODL Research Support Programme |
| OECD | Organisation for Economic Co-operation and Development |
| OU | Open University UK |
| PFSP | Postdoctoral Fellowship Support Programme |
| R & D | Research and Development |
| RDC | Researcher Development Concordat |
| RI | Research Infrastructure |
| RPP | Research Professors Programme |
| RPSC | Research Permission Subcommittee |
| SAHRC | South African Human Rights Commission |
| SAMEA | South African Monitoring and Evaluation Association |
| SARAO | South African Radio Astronomy Observatory |
| SARChI | South African Research Chairs Initiative |
| SciStip | DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy |
| SDGs | Sustainable Development Goals |
| SERVQUAL | Service Quality Model |
| SRC | Student-run Clinics |
| SRIPCC | Senate Research, Innovation, Postgraduate Degrees, and Commercialisation Committee |
| S & T | Science and Technology |
| STEM | Science, technology, engineering, and mathematics |

| | |
|--------|--|
| STI | Science, Technology & Innovation |
| UK | United Kingdom |
| UN | United Nations |
| UNAM | University of Namibia |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| Unisa | University of South Africa |
| USA | United States of America |
| USAID | United States Agency for International Development |
| VKP | Vision Keepers Programme |
| VRP | Visiting Researcher Programme |
| WiR | Women in Research |
| WLB | Work-life balance |

CHAPTER 1

GENERAL INTRODUCTION

1.1 INTRODUCTION

Research support typically takes the shape of formal (given by the government and higher education institutions) or informal (supplied by individuals, colleagues, friends, mentors, and others). The form of research support given by universities to its academic staff is usually through various research support programmes. These refer to initiatives that seek to achieve the following: to identify young and talented researchers who have the potential to become change agents; to organise and deliver effective training interventions that are relevant to the country's context; to facilitate opportunities for the real-life application of acquired knowledge and skills in the area of research; and to promote the development of a sustainable career path with opportunities for growth and advancement (Frantz, Rhoda and de Jongh 2013:49; Nchinda 2002:1702). The importance of providing research support through such initiatives as mentioned above is grounded on the fact that academic research is important for the development of a sound economy.

Academic research is critical for a country's development, the development of higher education institutions, and the development of individual academics. In industrialised countries such as the United States of America (USA), university research has been essential in the exploration of breakthrough technology, such as new medications (Toole 2012:1). This strong link between science, innovation, and development and competitiveness and economic growth is confirmed by Kahn and Hounwanou (2008:515), who view innovation as a driver of growth and hence place a high emphasis on service innovation as a research priority. From this perspective, increased commitment to and commercialisation of research and development (R & D), an efficient logistics platform, and successful economic diplomacy would enable middle-income nations such as South Africa to compete on the basis of superior goods and products and to enter the global distribution market effectively (National Planning Commission 2011:31).

While university research serves as a catalyst for African socioeconomic development, the continent's growth and development potential is harmed by the neglect of this aspect (Chukwuemeka, Oji and Onwuchekwa 2014:46). Given Africa's diversity of difficulties, conventional thinking must be expanded to embrace more complex solutions to problems (Parker and Vlotman 2011:121). African higher education researchers will need to raise critical questions that will aid in the creation of African answers to the continent's numerous issues. These issues include poverty, insufficient education, poor health, unemployment, and a slow rate of economic development. As a result, academics must be well prepared to create high-quality scientific research based on the resolution of such difficulties. In the absence of other R & D metrics, their scientific publications provide a good approximation of a country's active research workforce. The fact that developed nations, such as those in Europe, have a high percentage of scientific publications and are developed, reflects the relationship between substantial investment in research and development and socioeconomic growth.

However, the purpose of academic research is not limited to publishing. According to Naidoo (2011:47), research is a systematic investigation conducted with the goal of validating and refining current ideas while also creating new knowledge. The connection between research and teaching is mutually beneficial. This is a connection of “symbiosis” or “mutuality”. From this vantage point, research-based education helps both lecturers and researchers in terms of intellectual understanding and teaching techniques. To be an effective lecturer at the university level, an academic must be an active researcher, aiding their students in developing research abilities, a critical skill in a knowledge economy (Nguyen 2016:11).

Despite all the above, concerns have been voiced in Africa about the need to expand the pool of doctoral-qualified academics in order to ensure the continuity of the “next generation” of scholars. The “next generation” of academics is critical to the future strength of institutions of higher learning in terms of teaching and research (Ngibe 2015:12). According to some, the major impediment is a scarcity of academic professionals with the requisite postgraduate degrees to supervise postgraduate research and the expansion of knowledge creation. The Academy of Science of South Africa (2010:16) raised concern in its *Consensus Report* that only one-third of

permanent academic staff at South African universities was qualified to supervise doctoral students.

Africa, it has been stated, requires "tens of thousands more PhDs" to handle the aforementioned issue. South Africa has established a strategic aim of raising the proportion of doctoral graduates in the population to 100 per million by 2030. The goal of 5 000 doctorates annually by 2030 is referenced in a number of policy documents, including the 2002 National Research and Development Strategy and the 2008 Ten-Year Innovation Plan. According to a recent SciSTIP report titled *The State of the South African Research Enterprise*, this objective is feasible under some conditions and given the current rising trend. SciStip is a DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy, hosted by the University of Stellenbosch. Doctoral degrees were awarded to little more than 3 300 students in 2018, up from 1 420 in 2010 and 973 in 2000 (Van Schalkwyk, Mouton, Redelinghuys and McKenna 2020:1).

The authors (Van Schalkwyk *et al.* 2020:2) demonstrate in the table below that the number of doctorate students and graduates in South Africa has been gradually growing since 2008, with a remarkable increase since 2008. The extent of the increase in doctoral graduates since 2005 is seen in Table 1.1.

Table 1.1: Graduation of doctorates in South Africa (2005 to 2017)

| Academic year | Number of doctoral graduates |
|---------------|------------------------------|
| 2005 | 1 189 |
| 2006 | 1 100 |
| 2007 | 1 274 |
| 2008 | 1 182 |
| 2009 | 1 380 |
| 2010 | 1 421 |
| 2011 | 1 576 |
| 2012 | 1 878 |
| 2013 | 2 051 |
| 2014 | 2 258 |
| 2015 | 2 530 |
| 2016 | 2 782 |
| 2017 | 3 040 |

Adapted from Van Schalkwyk *et al.* 2020:2.

Despite the statistics in the preceding table, the research capacity of higher education institutions in the country continues to exhibit wide disparities between historically advantaged and historically disadvantaged universities (Singh 2015:184). This is worrisome considering the 1998 World Declaration on Higher Education's statement that:

Without adequate higher education and research institutions providing a critical mass of skilled and educated people, no country can ensure genuine endogenous and sustainable development and, in particular, developing countries and least developed countries cannot reduce the gap separating them from the industrially developed ones (United Nations Educational, Scientific and Cultural Organization [UNESCO] 1998:19).

As a result of the foregoing, one may claim that the Department of Higher Education's (DHET) objective of increasing scholarly publications and staff credentials, as well as establishing a sustainable research culture, needed significant reforms within South African institutions. This led to institutions of higher learning pursuing research-active academics and developing support systems to increase research production in order to generate government funding and handle the problems associated with fulfilling research output objectives.

1.1.1 Research support by the South African government

Arguably, the main point of reference with respect to research support is embedded in the Constitution. Subsection 29(1) of the Constitution of the Republic of South Africa (South Africa 1996), in relation to the right to higher education, emphasises the state's obligation to "progressively make available and accessible" higher education through appropriate methods. This right to improved access to quality education and lifelong learning, upskilling, and employment opportunities, particularly for historically marginalised communities, was reaffirmed in South Africa's Vision 2030 National Development Plan (NDP), which calls for the prioritisation of efforts to ensure appropriate and affordable skills development programmes, as well as equitable opportunities for productive and gainful employment (National Planning Commission 2011:52).

The Department of Science and Technology (DST) in South Africa is mandated with the responsibility of creating an enabling environment for research and knowledge development. Additionally, it supports the strategic development of fundamental sciences and key scientific areas. This mission is drawn from the White Paper on Science and Technology (2013), which includes science promotion, human capital development, research infrastructure provision, and appropriate research support (DST 2013). The DST advances science and innovation in the country by:

- Developing science, technology, and innovation policies;
- Funding research and development in public research institutes and higher education institutions; and
- Establishing new institutions and instruments with the goal of maximising science's impact on society (SAccess 2013).

To serve South African society better, the DST plays a critical role in not only focusing national policies on research and innovation (DHET 2013:34), but also in matching them with the NDP's socioeconomic development objectives.

The NDP (National Planning Commission 2011:289) emphasises the importance of investing in R & D interventions by requiring national innovation systems to operate in a cohesive and coordinated way with broad shared objectives linked with national priorities. Both applied and basic research are critical for innovation and, consequently, for social and economic growth. In terms of research support, a coordinated system of grant financing has been established, with an emphasis on research conducted in higher education institutions (DST 1996:n.p). The National Research Foundation (NRF) was founded in 1998 in accordance with the South African national research and development plan. The purpose of the NRF Act (South Africa 1998) is to provide for the promotion of research, both basic and applied, and the extension and transfer of knowledge in the various fields of science and technology and indigenous technology; and for this purpose to provide for the establishment of an NRF and to provide for incidental matters.

One of the NRF's major tasks is to assure support for research and capacity building in the higher education sector. The NRF is responsible for running national research facilities such as the National Accelerator Centre (DST 1996:n.p). As a result, the NRF is required to establish processes and programmes for promoting, assessing, and

funding multidisciplinary research. To accomplish the Act's objectives, the DST and NRF created tools to attract new research leadership capacity to institutions and to maintain existing research leadership capability. In response to the country's dismal innovation system (National Planning Commission 2011:36), the NRF developed, in partnership with higher education institutions, the South African Research Chairs Initiative (SARChI), the Thuthuka Grant, and the South African PhD initiative. The latter was established to bolster the academic, business, and governmental sectors of the country by increasing the quantity and diversity of appropriately skilled doctoral graduates. The initiative aims to more than double the number of doctoral graduates (1 274 in 2007) by 2024, reaching about 6 000 by that date (Mouton 2011:14).

1.2 BACKGROUND

With approximately 400 000 students, Unisa is the largest university in South Africa and on the African continent. It has a significant regional presence and worldwide reach, with regional study centres located around South Africa and students from more than 130 countries (Unisa:n.d.). Unisa is comprised of the following colleges: College of Accounting Sciences (CA), the College of Agriculture and Environmental Sciences (CAES), the College of Economic and Management Sciences (CEMS), the College of Education (CEDU), the College of Human Sciences (CHS), the College of Law (CLAW), the College of Science, Engineering, and Technology (CSET), and the College of Graduate Studies (CGS). Unisa offers a vibrant and varied science community that fosters innovation. Academic staff and postgraduate students at this institution are committed to conducting research and developing novel ideas that will address critical national and global issues while also contributing to South Africa's and the African continent's economic, social, cultural, and environmental well-being (Unisa:n.d.). The institution boasts a highly competent pool of scholars, including 145 NRF-rated researchers. Each year, Unisa enrolls around 10 000 master's and doctoral students (Unisa:n.d.). Unisa presently has five broad niche areas:

- Knowledge production and capacity building in response to the needs of South Africa and the African continent.
- The promotion of democracy, human rights and responsible citizenship.
- Innovation and capacity building in science and technology.

- Economic and environmental sustainability.
- Open distance learning (ODL).

Unisa offers research support to its academic employees in accordance with government plans, such as the NDP, and in partnership with various government agencies, such as the NRF. The support is aimed at increasing academic staff's research capacity and maintaining experienced human resources (Unisa 2017:16). Some of the ways in which the support is offered are through various programmes including the following: The Master's and Doctoral Support Programme (MDSP); Postdoctoral Fellowship Support Programme (PFSP); Emerging Researcher Support Programme (ERSP); Vision Keepers Programme (VKP); Academic Qualification Improvement Programme (AQIP); Visiting Researcher Programme (VRP); Research Professors Programme (RPP); Innovation Support Programme (ISP); ODL Research Support Programme (ODL-RSP); and Women in Research (WiR).

These programmes are designed to develop and expand the research capacity of Unisa academic staff, to stimulate research debates and discussions, to facilitate knowledge transfer, and to build networks, both internally and internationally. Table 1.2 summarises Unisa's research support programmes and the number of participants between 2015 and 2019.

Table 1.2: Summary of research support programmes at Unisa (2015 to 2019)

| Research Support Programmes at Unisa (2015 to 2019) | |
|--|--|
| Name of programme | Number of participants (2015 to 2019) |
| MDSP | 210 (11.66%) |
| PFSP | 108 (external applicants only) |
| ERSP | 14 (0.7%) |
| VKP | 26 (1.44%) |
| AQIP | 144 (8%) |
| VRP | 95 (5.27%) |
| RPP | 25 (1.38%) |
| ISP | 16 (0.88%) |
| ODL-RSP | 8 (0.44%) |
| WiR | 38 (2.11%) |

Source: Unisa 2019:22-40

Despite substantial funding for research support programmes, data show what can, arguably, be referred to as either little participation or a lack of desire on the side of academic personnel to engage in the initiatives. This assertion is based on the percentages of participation in the initiatives described above between 2015 and 2019, in comparison to the 1 800 Unisa permanent academic staff composition (Unisa 2018a:45). At the moment there are no clear explanations for the academic staff's low level of participation.

Between 2015 and 2019, according to Unisa's Research and Innovation Report (Unisa 2019), the institution spent slightly more than R682 012 234 on research support programmes in an effort to strengthen and improve its research and innovation capacity. Typically, when such investments are made, follow-up evaluations are conducted to determine the quality and/or impact of the initiatives (Ngibe 2015; Nguyen 2016). Evaluating research support interventions is just as critical as funding them. It may be used to justify (or invalidate) a significant financial expenditure, develop a method for maintaining quality, and determine what works and what does not work (Wood 2015:2). Evaluation is important, as such an investment is neither neutral nor ineffective, and it might generate debate (The Conversation 2019:10 April).

1.3 PROBLEM STATEMENT

At this moment there is no evidence of an academic study evaluating the outcomes and contribution of Unisa's research support programmes. Unisa, on the other hand, monitors progress of beneficiaries through quarterly and yearly progress reports (Unisa 2018b:11). However, this study suggests that in order for an institution to increase its research output and the number of employees with postgraduate degrees through the provision of research support, specific institutional conditions must be established. This involves ongoing evaluation and enhancement of the quality of research support programmes. As a result, it is necessary to examine academic staff perceptions and expectations regarding the outcomes and contribution of research support programmes provided by the institution. Due to the fact that such an evaluation has never been done in an academic research context, there is a disconnect between the effectiveness of research support programmes and the meaningfulness of the experience for participants (Wood 2015:4). As a result, there is a lack of a framework

developed and tested through rigorous scientific research to examine such research support programmes.

1.4 RESEARCH PURPOSE

The purpose of this study was to explore and establish whether the research support provided by Unisa through its research support programmes contributes to the research development of academic staff. In particular, this study sought to establish whether the research support programmes provided by Unisa match the needs of its academic staff and contributes towards improving staff credentials and their research output. We believe that the literature analysis and data collection in this project will aid in the development of a framework that can be utilised to get a more comprehensive knowledge of research support, as well as to plan and evaluate similar research support programmes.

1.4.1 The objectives of this study

To address the research problem, the following research objectives were established:

- To explore Unisa academic employees' perceptions about their research support needs.
- To establish the contribution of Unisa's research support efforts to staff's research development.
- To develop a tool in order to gain an integrated and deeper understanding of research support, as well as for Unisa research support programmes.
- To recommend a tool that can be used to plan and evaluate Unisa's research support programmes, as well as similar programmes outside Unisa.

1.4.2 Research questions

To address the research problem, the above objectives were translated into the following research questions:

- What are the Unisa academic employees' perceptions regarding their research support needs?

- What is the contribution of Unisa's research support efforts to the research development of academic staff?
- Which tool can be utilised to evaluate Unisa's research support programmes and similar programmes outside Unisa?

1.5 PRELIMINARY LITERATURE REVIEW

Investing in research support programmes is one method to enhance and reform South Africa's higher education system in order to confront the colonial legacy (Hagenmeier, Lansink and Vukor-Quarshie 2017:84). This is probably because equity and redress programmes have been deemed critical in the transformation of South African higher education (Akoojee and Nkomo 2007:386). Volmink and Dare (2005:705) relate research support to research capacity in which the latter is defined as institutional and regulatory frameworks, infrastructure, investment, and adequately skilled individuals to do and publish research.

The NDP (National Planning Commission 2011:25) offers many recommendations to strengthen redress programmes, particularly those aimed at increasing economic prospects for historically disadvantaged individuals. In this sense, development is centred on research. South Africa's efforts to strengthen the country's research capacity, on the other hand, are hampered by a variety of issues. Balfour and Lenta (2009:9) suggest that the government pays less attention to developing "generic" research capacity or to the quality of research by emerging researchers. This current study argues that, considering the government's proactive actions stated earlier, the preceding assertion is not correct.

Maritz and Roets (2013:81) emphasise the need to address diverse problems such as power, gender, language, culture, and socioeconomic position in attempts to strengthen research capacity. Frantz *et al.* (2014:1217) identify a lack of advanced degrees, insufficient research and publication abilities, and working in an institution with a poor research culture as contributing to a lack of capacity. Fowler *et al.* (2009:174) emphasise the inefficiency of tenure as a barrier towards developing research capacity, particularly for fixed-term contracts, since it can cause anxiety and divert researchers' attention away from their projects.

Sawyer (2004:216–217) distinguishes two components of research capacity: the “active” and the “environmental” components. The former refers to the researchers' abilities, competences, attitudes, and values. The latter comprises the social, institutional, and managerial elements that shape the research enterprise's environment and determine its success or failure. The feature of active research is fostered by appropriate support interventions and involvement in research activities. Additionally, the author contends that one cannot discuss research capacity development effectively without engaging in ongoing research work. Furthermore, research capacity entails a conducive research atmosphere, adequate funding, appropriate infrastructure, research incentives, and time accessible to the researcher, in addition to the development of individual skills in research activity (Sawyer 2004:213). The time available to employees for capacity building, particularly at institutions with a low priority for research, is likely to be affected by the institution's readiness to allow for a more flexible approach to employee time management (Fowler *et al.* 2009:174).

1.6 CRITICAL REALISM PARADIGM

This study was embedded in the critical realism paradigm. This paradigmatic position helped the researcher to go beyond judgments about a social reality that are limited to a set of world views, observations, and deductions, to one that allows for "some grounds for determining whether some representations constitute better knowledge of the world than others" (Fairclough 2005:922). When assessed against a research philosophy that incorporates ontology, epistemology, and methodology, critical realism posits a realist ontology that attempts to generate actual events (Wynn and Williams 2012). It embraces a wide interpretivist epistemology that recognises social reality but attempts to connect it to causal mechanisms and structures (Peters *et al.* 2013:343) and is receptive to a variety of research methodologies applicable to naturalistic contexts (Mingers, Mutch and Willcocks 2013). Critical realism's axiology seeks a proposition for change (Syed, Mingers and Murray 2009), an aim that is not readily apparent within the constructivist paradigm. At its most fundamental level, critical realism's foundations investigate the interaction of structure and mechanisms that

provide conditions conducive to the creation of recognisable events (Wynn and Williams 2012).

Sayer (1992:92) defines structure in the context of critical realism as systems of internally linked objects or activities. As a result, structures might take on a physical or social form. Mechanisms are important to a critical realism methodology and are seen as either a causal force or tendency (Sayer 1992), yet they exist irrespective of the events they create. Mechanisms may consist of "dispositions, capacities, and potentials to do certain things, but not others" (Fleetwood 2004:46) and therefore have the ability to influence or effect a result or occurrence. An event is created by one or more mechanisms with causal capabilities or proclivity to contribute to the event (Mingers and Standing 2017:172) and is seen as an occurrence or action caused by one or more mechanisms (Wynn and Williams 2012:792).

The above features of the critical realism paradigm were therefore influential in making the methodological choices for this study. This study's theoretical framework and methodological perspective were based on realist evaluation. As a result, the research questions and methods were developed with this in mind. Rather than focusing on the question of whether a programme works, realism evaluation in this study sought to explain what works, for whom, and under what conditions. These issues were addressed by identifying underlying causal mechanisms, contextual elements that influence these mechanisms, and the effects of such context-mechanism interactions. The premise is that there are real mechanisms and contextual elements to be discovered.

The goal of this study was to determine the theoretical foundations of a university's research support programmes. The programme theories will be identified through the development of realist context-mechanism-outcome configurations (hypotheses) that explain how actions taken in the context of the South African higher education and institutional policy environments trigger various mechanisms and produce a pattern of outcomes for its various participants. The research questions are realistic in nature, examining what works, for whom, and under what conditions. The study questions are focused on identifying the context-mechanism-outcome configurations at play within the research support space in South African higher education in order to explain and

articulate the programme theories. A thorough discussion on the application of critical realism is provided in chapters three and four.

1.7 SINGLE EXPLORATORY CASE STUDY DESIGN

This was a qualitative research. Due to the study's purpose of eliciting academic staff's perceptions of research support programmes at Unisa, a single case study research design was utilised. Unisa, Africa's largest ODL institution, was chosen as the case to study. This approach was used to undertake a thorough (but narrow) examination of a phenomenon in which the emphasis was on small numbers studied attentively at a single or delimited point (Daymon and Holloway 2011:119). This approach therefore aided in the exploration of a problem about which little information was available (Kohn 1997:3), namely academic staff perceptions of the contribution of the University's research support programmes. Since the purpose of this study involved determining whether the programmes provided by Unisa match the needs of its academic staff and contributes towards improving their credentials and research output, the AQIP, MDSP and ODL-RSP were deemed appropriate to study. This is because these programmes, as shown in their programme theories (chapter 4), are geared towards developing the research output and credentials of academic staff, particularly the young, black and staff from previously disadvantaged backgrounds. Nevertheless, detailed discussion of this case study is presented in Chapter 4.

1.7.1 Data collection methods

The case study research approach is popular because it makes use of a variety of sources of evidence (Rule, Davey and Balfour 2011:302), including documents and interviews (Creswell 2013:105). The interview approach was used in this study because it is a good tool for examining the creation and negotiation of meanings in a natural context (Cohen, Manion and Morison 2007:29). The interview technique is valuable, not only because of its ability to build a holistic snapshot, analyse words, and report detailed views of informants (Alshenqeeti 2014:39), but also because it enables interviewees to "speak in their own voice and express their own thoughts and feelings" (Berg 2007:96).

As such, and in accordance with the study's objectives, a set of interview questions was administered to the sample in order to elicit information regarding the support requirements and expectations of academic staff at Unisa. These findings established consensus about what constitutes an acceptable research support intervention (expectations) from an academic standpoint. Essentially, the collection of interview questions was aimed towards academic staff who benefitted from three Unisa programmes, namely AQIP, MDSP and ODL-RSP, to elicit information about their research support needs and the benefits they derived from their involvement. Thus, this study concluded that comparing data on staff expectations and outcomes of research support programmes to data on academic staff's perceptions of their research support needs (Objective 1) sheds sufficient light on the research problem (whether Unisa's research support programmes contribute to academic staff's research development). Simply expressed, this study determines if Unisa's research support programmes meet the support needs of academic staff, and if not, whether this is the cause for the low uptake. Interviews were conducted indefinitely until saturation was reached.

Additionally, document analysis was used to analyse pertinent research policies and strategies. This approach was used to understand the context within which research support is provided. Therefore, this report provides insight into South African higher education research policies and initiatives, as well as into its attempts to provide appropriate research support to academic personnel.

1.7.2 Population and sampling

Academic staff at Unisa who benefited from the above-mentioned research support programmes was included in the population. The selection of a subset of the population, commonly known as sampling (Madzidzela 2008:40), was accomplished by intentionally choosing 20 academic staff members at Unisa who benefited from the programmes between 2013 and 2020. As Peterson and Merunka (2014:1040) suggest, empirical research should demonstrate the theoretical relevance of the examined objects in order to assess the specific research question for the target population. Purposeful sampling therefore aided the researcher in focusing on important informants (academic staff who were granted research support through the

programmes) who were intimately familiar with the topic under study, resulting in more in-depth findings (Anney 2014:278).

1.7.3 Data analysis

The data was analysed by means of the framework analysis. Framework analysis is a type of thematic analysis that is frequently used for analysing semi-structured interview data and when analysing documents. As is typical with such thematic approaches, it attempts to discover what is common in the data and what is distinctive. It then investigates probable links between various components of the data, assisting the researcher in developing plausible descriptive and/or explanatory accounts. It classifies and organises data according to defined themes, concepts, and emerging categories by utilising thematic frameworks and a sequence of methodical linked phases. It includes the steps of familiarisation, framework identification, indexing, charting, mapping, and interpretation (Srivastava and Thomson 2009:72). The framework analysis is discussed in detail in Chapter 4.

1.8 TRUSTWORTHINESS

In terms of credibility and dependability, which refer to the degree of trust placed in the truth of the findings, it was critical to guarantee that the findings were believable information drawn from the participants' original perspectives and were interpreted correctly. Credibility was established for this study by ensuring that all information essential to compare and contrast participants' perceptions of research support programmes at Unisa was obtained only through recorded interviews, which were then transcribed verbatim. Interviews were conducted by the researcher, and data transcription was performed by a qualified transcriber.

In terms of transferability, the findings are deemed to apply only to participants in this study since the study examined perceptions of participants from only one institution. While the findings of this study may not be transferred to other contexts, the resultant thinking tool, which is intended to facilitate an integrated and deeper knowledge of research support, may be used to develop and evaluate comparable research support programmes in other higher education settings.

1.9 SIGNIFICANCE OF THE STUDY

Quarterly and yearly reports by beneficiaries are insufficient for monitoring and evaluating Unisa's research support programmes. Continuous usage of such tools may provide misleading information to decision-makers when determining what works and what does not work. This study recognises that the outcome and contribution of certain services are context-dependent, and hence that general measures are ineffective. This research attempted to close this gap by examining the outcome and contribution of research support programmes within a specific ODL institution in South Africa, as seen through the lens of the programmes' participants. The data gathered were utilised to create a framework for a more comprehensive understanding of research support, as well as for developing and evaluating comparable research support programmes. Such a framework would enable higher education institutions to develop research support programmes that are tailored to the requirements and expectations of their staff, therefore contributing meaningfully to the country's R & D system.

1.10 LIMITATIONS OF THE STUDY

The limitation of this study is that the findings cannot be generalised to other contexts because of the subjectivity surrounding the studied phenomenon and the unique nature of ODL institutions compared to residential learning institutions. The data collected can therefore not be transferred outside the study population. However, as a mitigating factor, generalisation of the resulting framework as developed in this study can only be applied to similar contexts (Zongozzi 2020:7).

1.11 RESEARCH ETHICS

The ethical issues in this work were largely governed by the Unisa's Policy on Research Ethics (Unisa 2014:n.p.). Apart from establishing a fair relationship between the researcher and the participants, the policy emphasises the need of getting informed consent and guaranteeing privacy, anonymity, and secrecy. As a result, the study was required to follow the institution's ethical rules. This process began with the identification of possible ethical dilemmas associated with this study (Hofstee

2006:118), one of which was the inclusion of human subjects as participants. Due to the difficulty in identifying these individuals (Hofstee 2006:118), the following precautions were taken.

Participants had the right to remain anonymous, and this right was carefully honoured during data collection. As a result, their perspectives were preserved in a way that made tracing the participant's specifics impossible (Aldridge and Levine 2001:22-23). This was accomplished by asking participants to refrain from disclosing their own or other people's names during the interviews. As a result, the views may not be attributed to a specific individual or participant. Other precautions included instructing participants about the study's aims and perceived outcomes and obtaining clearance from the university's body charged with assuring ethical research conduct (see Appendix A).

Additionally, the institution has implemented a Policy for Conducting Research with Unisa Staff, Students, and Data, with the goal of adhering to established ethical research practices, demonstrating intellectual integrity and social responsibility, and safeguarding information security and privacy (Unisa 2016:9). As such, an application was filed and, in accordance with the aforementioned policy, approval was granted by the Research Permission Subcommittee (RPSC) (see Appendix B).

1.12 DEFINITION OF TERMS

For the purpose of this research, the following definitions apply:

Research support programme: This refers to an initiative that sought to identify young and talented researchers who have the potential to become change agents; to organise and deliver effective training interventions that are relevant for the South African context; to facilitate opportunities for the real-life application of acquired knowledge and skills in the area of research; and to promote the development of a sustainable career path with opportunities for growth and advancement (Frantz *et al.* 2013:49; Nchinda 2002:1702).

Open and Distance Learning institution: An ODL institution is any academic institution that makes use of a blended learning approach, that is combinations of online and

printed study material used for teaching purposes (Botha and Coetzee 2016:244). ODL institution in this study refers to Unisa.

1.13 THESIS OUTLINE

Chapter 1: General introduction

This introductory chapter discusses the study's background and context, as well as the research problem and purpose. Additionally, the chapter discusses the methodology that was used and the study's potential contribution.

Chapter 2: Literature review

This chapter reviews selected studies to establish what is already known in the literature about research support in higher education.

Chapter 3: Programme theory: A framework guiding the study

This chapter proposes a programme theory approach to evaluating research support programmes in order to acquire as much insight as possible into the characteristics and importance of the phenomena in the context of South African higher education. The purpose of this chapter is to establish a framework for understanding and evaluating research support programmes in South African higher education.

Chapter 4: Research methodology

This chapter reports on the case study approach, including the methods and procedures for designing instrument, data collection, sampling and analysis.

Chapter 5: Research findings

This chapter entails the presentation and discussion of findings.

Chapter 6: Summary of findings, limitations, recommendation

The researcher shares the limitations of the study, summarises the findings and draws conclusions. The chapter also makes recommendations for further research, as well as for practice.

CHAPTER 2

LITERATURE REVIEW ON RESEARCH SUPPORT IN HIGHER EDUCATION

2.1 INTRODUCTION

The purpose of this study was to explore academic staff's perceptions of Unisa's research support programmes in order to evaluate if such efforts contribute to their research development. As such, this chapter addresses aspects of research support at Unisa that may be applicable to other institutions of higher learning. The review was based on multidisciplinary research studies. To narrow the scope of the review, articles and books with the terms "research output", and/or "research productivity", and/or "research support", and/or "research capacity", and/or "postgraduate support" in their titles and abstracts were retrieved using reputable research databases such as Sage Research Methods, Taylor and Francis, Science Direct, Sabinet, and Web of Science. Boolean indicators (AND, OR, NOT or AND NOT) were used in the computer search. In terms of the review procedure, Hofstee (2006:94) suggests a funnel technique for structuring a literature review, in which material is classified according to its commonality. This aided in finding and categorising work in relation to a certain theme.

2.2 RELATED POLICY FRAMEWORKS AND STRATEGIES

Along with the government initiatives described in Chapter 1, many additional pieces of legislation and strategic documents promote research support in South African higher education to some degree. This section examined these major pieces of legislation and strategies pertinent to the issue being researched.

2.2.1 The Constitution of the Republic of South Africa

Our democratic state and collective citizenship are based on the Constitution of the Republic of South Africa's values of human independence, liberty, and the advancement of human rights and liberties (Act no. 108 of 1996) (South Africa 1996).

These principles imply that all South Africans have the burden and responsibility for establishing a compassionate and caring community that benefits all South Africans, not just a select few. This places a unique responsibility on higher education institutions to develop a 21st-century education and training system capable of implementing these requirements and ensuring that all people maximise their learning potential. The Bill of Rights (Chapter 2) makes it very apparent that neither the state nor a citizen may discriminate against someone on the basis of disability or social position. By extension, denial of any right on the basis of disability or socioeconomic position is a violation of that person's constitutional right.

Our Constitution presents us with a unique challenge when it comes to developing our education and training system, since it compels us to implement the universal right to education. According to Section 29 (1) of the Constitution, the state should gradually make higher education affordable and accessible to all South Africans through reasonable means. From a higher education perspective, this entails providing opportunities for university workers to upgrade their skills, such as providing adequate research support, among other things.

2.2.2 The National Development Plan Vision 2030

In 2012, the South African Cabinet approved the NDP as the policy framework for comprehensive government planning (National Planning Commission 2011). The NDP is a strategy for eradicating poverty and inequality in South Africa by 2030. It advocates for a more sustainable South African society and holds that all sectors of society contribute significantly to attaining national development goals. It recognises that many formerly vulnerable persons are unable to realise their full potential owing to a number of impediments, and hence mandates that these groups shall have improved access to high-quality education and employment. Priority should be given to efforts to ensure that such groups have access to appropriate and accessible skills development programmes, as well as equitable chances for productive and profitable employment. In light of these considerations, it is apparent that research support programmes should be viewed as a kind of equality and restitution intended to compensate for historical injustices.

2.2.3 The White Paper on Education and Training

The White Paper on Education and Training (Notice 196 of 1995) (Department of Education 1995) orders the provision of a broader choice of educational alternatives and more student autonomy. It places a special emphasis on redressing educational inequalities among those segments of our population that have faced particular disadvantages or are particularly vulnerable, such as street children, out-of-school youth, disabled and special educational needs citizens, illiterate women, rural communities, squatter communities, and communities damaged by violence. Additionally, it mandates that state resources shall be used in an equitable manner, so that they are used to provide essentially the same level of learning opportunities for all people. However, a significant focus is being placed on expanding access to a diverse variety of education and training programmes and on improving the quality of educational and training facilities.

2.2.4 The National Plan for Higher Education

Universities are required, under the National Plan for Higher Education (Ministry of Education 2001), to enhance access for historically disadvantaged communities. Institutions can use this approach to establish plans outlining their access objectives, policies, and actions. This strategy serves as a road map for prioritising historically disadvantaged groups when allocating research resources.

2.2.5 The Education White Paper 3 on the Transformation of the Higher Education System

The former Department of Education released the Education White Paper 3: A Programme of Transformation for Higher Education (Notice 1196 of 1997) (Department of Education 1997). It explains transformation as:

- eradicating all forms of discrimination;
- promoting equity of access and fair chances of success for all;
- advancing redress of inequalities;

- meeting the needs of learning and research programmes, national development needs;
- supporting democratic ethos and culture of human rights through education programmes and practices conducive to critical discourse and creative thinking, cultural tolerance and a commitment to a humane, non-racist and non-sexist social order; and
- contributing to the advancement of all forms of knowledge and scholarship and upholding of rigorous standards of academic quality.

As a result, the Education White Paper 3 underlines the necessity of a just and equitable system of higher education in South Africa that is free of all forms of discrimination. This involves equitable access to research support services for university staff, but with a focus on historically underrepresented populations to expedite transformation initiatives.

2.3 RESEARCH OUTPUT AND PRODUCTIVITY IN HIGHER EDUCATION

Academic research is distinguished from research in other areas by the fact that academic research results in publications in accredited journals, whereas research in other sectors normally does not. According to the Policy for the Measurement of Research Output of South African Public Higher Education Institutions (Department of Education 2003:3), research output is defined as textual output, with research defined as original, systematic study performed in order to obtain new knowledge and understanding. The policy establishes criteria for recognising research output for further subsidisation. In this sense, peer review should be used to ensure and improve the quality of research publications. Additionally, only accredited journal articles, books, and conference proceedings are recognised as research outputs. Journal outputs, as defined by the Department of Education (2003:4), comprise original research articles, letters, papers, and review articles submitted to accredited journals, whereas monographs, book chapters, and edited works are considered books. The conference proceeding is defined as a published record of a conference, congress, symposium, or other gathering with the goal of disseminating original research and new advances within certain disciplines, sub-disciplines, or fields of study.

Okafor (2010:181) defines research output as the process through which academics contribute their own expertise to the existing body of knowledge through journal articles, technical reports, books, book chapters, student supervision, and training. This is a slight expansion of the preceding description to encompass research supervision and postgraduate student training. Academic staff members are recognised for guiding postgraduate students effectively until completion (Callaghan 2018:48). Although this form of research output is not explicit in South Africa's Policy on Measuring Research Output, it is a common practice in the country's higher education institutions. Similarly, Van Raan (2005:4) defines research outputs as an institution's number of papers published in peer-reviewed journals, conference proceedings, letters, notes, and reviews. This definition, however, is restricted in that it omits references to books and book chapters, which are included in the preceding definitions.

Nonetheless, while journal articles appear to be the most prevalent form of research output in higher education, Madue (2006:35) argues that scholarship-based textbooks are critical knowledge transmitters because they allow researchers to examine and synthesize an issue in greater detail than what journal articles allow. Apart from teaching, many academics are often evaluated for funding, employment, or promotion based on their publishing record, with citations to their work serving as a measure of their research's impact (Academy of Science of South Africa 2006:94).

2.4 FACTORS ASSOCIATED WITH RESEARCH OUTPUT AND PRODUCTIVITY

Now that we understand what constitutes research output in the higher education context, it was important to further review the literature to identify the factors associated with research output and productivity in our effort to gain a deeper understanding of the phenomenon. Numerous factors affecting research output and productivity have been documented in the literature. These factors are classified into three categories: institutional factors, individual factors, and gender factors. This section examined such factors from global, African, and South African viewpoints.

2.4.1 Institutional factors associated with research output and productivity

The literature reports on a number of institutional factors, such as teaching and administrative workload of academic staff, time available for academics to conduct research, research funding and research incentives as associated with research output and productivity in higher education.

2.4.1.1 Time available for academics to conduct research

Internationally, it is widely acknowledged that time availability for academics to engage in research activities has an important bearing on research output and productivity in a majority of universities (Balakrishnan 2013:8; Buchheit, Collins and Collins 2001:17; Erkut 2002:115; Fowler *et al.* 2009:174; Rosentreter, Singh and Schönbohm 2013:24; Wills, Ridley and Mitev 2013:4). Buchheit *et al.* (2001:17) accept this point, stating that appropriate time allocation and less instructional preparations lead to a significant increase in research output and productivity at Texas University. Similarly, the detrimental consequences of insufficient time for academic staff's research output and productivity have been documented for over two decades. Erkut (2002:115) noticed that young academic staff members in Canada required many years to publish their first publications since research was not a high priority at several universities. This was due to the fact that academics still had to divide their time between teaching, research, and service in more research-oriented universities. Additionally, it was believed that the traditional academic life-cycle does not result in a consistent flow of research output. On the other hand, some senior academics had abandoned research entirely, devoting the majority of their time to administration and service. In this regard, Fowler *et al.* (2009:174) caution that the amount of time available for academic staff to engage in research activities, particularly in institutions with a low priority for research, is likely to be influenced by the institution's willingness to allow for a more flexible approach to employee time use.

Fowler *et al.*'s (2009:174) opinions were reinforced as a significant determinant in research output and productivity. Rosentreter *et al.* (2013:24) discovered that academics had less than 20% of their total working time available for research, resulting in negative impacts on research output. As a result, Balakrishnan (2013:8) argues that a majority of institutions have difficulty managing their strategic priorities.

The teaching burden, in particular, tends to have a detrimental effect on research, as the majority of institutions are teaching universities.

Rosentreter *et al.*'s (2013:24) findings above indicate that the issue of time for academics to engage in research is not exclusive to the international higher education realm. Their findings match those of Okafor (2010:181) and subsequently Kendagor *et al.* (2012), who placed emphasis on the institutional factors affecting research output and productivity in African universities. Kendagor *et al.* (2012) investigated the factors affecting the output and productivity of research in Kenya's public universities. Their research demonstrated a link between the availability of research funding, the quantity of time given to research, the credentials of academic staff members, the research environment, and the research output produced by these academic staff members. Their study demonstrated that time allocation had a detrimental effect on research output and productivity after conducting a descriptive survey of 1 424 Moi University academic staff. As a result, their analysis recommended that time availability for academics to engage in research activities be increased.

Based on the above discussion, the issue of time available for research appears to imply that teaching and research in higher education are mutually incompatible. This is problematic because these are both critical business functions of universities, especially in the South African context in which the amount of government subsidy given to a university is largely determined by the University's research output and student throughput. Additionally, the interconnectedness of these two factors is impossible to overlook, given that improved teaching techniques are founded on research. This was a sentiment shared by Nguyen (2016:11), who argued that to be an effective lecturer at the university level an academic must be an active researcher, aiding their students in developing research abilities, a critical skill in a knowledge economy. Nevertheless, maintaining a balance might be challenging in an ODL environment such as Unisa, where lecturers are expected to undertake research in addition to juggling an abundance of teaching and administrative responsibilities.

2.4.1.2 Teaching and administrative workload of academics

There seems to be a clear correlation between time available for academics to engage in research and their teaching and administrative workload in that lower teaching

workload and administrative services imposed on academics result in increased time available for these academics to engage in research, and vice versa. This is especially true in light of the instance of Texas University, where a significant increase in research output and productivity was ascribed to a reduction in teaching load, sufficient time allocation, and less classroom preparations for academic staff (Buchheit *et al.* 2001:17). Arguably, this method might assist to solve the issue described earlier, in which some senior academics abandon research entirely, devoting the majority of their time to administration and service (Erkut 2002:115). This current study argues, however, that such measures of reducing teaching and administrative load of academics are more feasible in well-resourced higher education institutions, like those in Europe, as they can appoint a large enough pool of academics. This can facilitate the alternation of academic staff in which some focus on teaching and administration while others do research, and vice versa. Such measures may be a daunting task in the South African higher education context or in the context of other similar developing countries characterised by resource scarcity and competing development priorities.

Based on the above, it is inevitable to assume that assuring enough time for academic staff to engage in research may be viewed as the university's primary role by lowering the teaching and administrative burden of academic personnel. However, academics on the other hand, have a role to play. Academics operate in a complicated setting and are tasked with a variety of tasks and duties. They function in an atmosphere that is prone to distractions that might derail their productivity and reduce their efficiency. Their typical workload includes producing study materials, preparing test papers, grading exam scripts, and responding to student inquiries, among other things, and involves some degree of multitasking. Therefore, effective time management from the academics' perspective, in conjunction with institutional support, enables academics to retain concentration on their work, therefore possibly enabling more time to focus on research. Creating and maintaining a successful research programme therefore requires more than merely lowering the teaching and administrative workload (Chase *et al.* 2013:155), but also good time management skills.

Nevertheless, in view of the foregoing, it is reasonable to anticipate that reducing teaching and administrative workload in order to free up time for academic staff to undertake research is probably the most commonly agreed upon solution (Balakrishnan 2013:8; Buchheit *et al.* 2001:17; Erkut 2002:115; Fowler *et al.* 2009:174;

Rosentreter *et al.* 2013:24; Wills *et al.* 2013:4). This might avert the unfavourable scenario in which teaching and administrative loads tend to have a detrimental effect on research, as the majority of universities are teaching institutions, leaving universities struggling to manage their strategic priorities (Balakrishnan 2013:8). Research support measures, such as the granting of research or study leave, are thus regarded as necessary to overcome this time constraint (Black and Bonner 2011:166).

However, this study argues that higher education institutions must be cautious of the potential of seeking to minimise academic staff teaching and administrative workloads at the expense of students, by abdicating teaching obligations. This argument is founded on the premise that learning relies primarily on teaching presence and quality and regular feedback. In terms of the community of inquiry theory, teaching presence in ODL is described as the design, facilitation, and direction of cognitive and social processes for the purpose of realising personally meaningful and educationally worthwhile learning outcomes. Teaching presence is measured by examining the extent to which students perceive the lecturers as being present (Garrison 2007:61). Abdicating the teaching and administrative responsibilities in order to increase academic staff's time to engage in research should therefore be treated with caution as it may affect students' perceptions about their lecturers' teaching presence negatively.

2.4.1.3 Research funding

Another important institutional element that is frequently related with research output and productivity is financing for research (Arora and Gambardella 2005:91; Chudnovsky, Lopez, Rossi and Ubfal 2008:86; Gush *et al.* 2018:227; Jacob and Lefgren 2011:1168; Jaffe 2002:22; Wills *et al.* 2013:4). In the USA, several studies discovered that some types of research support interventions, most of which are funded, had a small or average impact on research output and productivity (Arora and Gambardella 2005:91; Jacob and Lefgren 2011:1168; Jaffe 2002:22). Arora and Gambardella (2005:91) discovered that support in terms of research funding was more beneficial for junior academics than for senior academics who received funds from the United States National Science Foundation (NSF). Their study analysed data from 1 473 NSF recipients between 1985 and 1990. Jacob and Lefgren (2011:1168)

examined the influence of National Institutes of Health funding on research output and discovered that funding is related to a 7% increase in publications five to ten years after funding.

Chudnovsky *et al.* (2008:86) used the difference-in-difference approach to determine the influence of funding on future publications in Argentina. Despite determining that the impacts were beneficial, Argentina required 110 000 pesos (about R31 318.40) for an academic staff member to produce one more paper during a five-year period. A similar study to the above, but using a fuzzy regression discontinuity design to assess the effect of Chile's grant system on researchers, revealed an average increase of two publications six years after grant receipt (Benavente *et al.* 2012:15).

Gush *et al.* (2018:227) linked funding from the New Zealand Marsden Fund with a 6% to 15% rise in publications and an 11% to 22% increase in citation-weighted articles for research teams in New Zealand. The Marsden Fund is New Zealand's main source of funding for basic research. Although the government funds it, the Royal Society of New Zealand is responsible for selection and management. However, their study has a disadvantage in that the amount of the fund is not specified in their paper, making it impossible for this study to extrapolate the impact based on figures.

Generally, public research funding is provided in two ways (Jonkers and Zacharewicz 2016:12): project-based funding and organisational-level funding. The term "project funding" refers to the sum of a country's national budgets allocated to a group or an individual to conduct research and development activities that are limited in scope, budget, and time, typically on the basis of the submission of a project proposal describing the research activities to be conducted. Since the 1980s, the importance of project funding has grown internationally. The other conventional method of providing public support for research is to fund universities and public research organisations on an organisational level. Funding at the organisational level is described as the sum of a country's national budgets assigned to a research-performing institution (university), with no direct selection of R & D projects or programmes and with more or less discretion to specify the research activities to be conducted. Funding at the institutional level might be given through non-competitive block funding.

To a significant extent, the above block funding can be used to support specific expenditures such as infrastructure or researcher salaries, particularly in research

systems with permanent researchers who are public officials. On the other hand, the institution may exercise its discretion in allocating a part of its block funding to undesignated research activities. Additionally, organisational funding may be awarded in a flexible or competitive manner, depending on ex-post evaluations of university output and performance, for example. As previously noted, several nations have implemented some kind of performance-based funding during the last decade(s), and the percentage of organisation-level funding provided competitively on the basis of performance assessments has increased (Jonkers and Zacharewicz 2016:12).

Again, consideration of research funding and resource availability as core elements of research support appears to be widespread in the literature (Arora and Gambardella 2005:91; Chudnovsky *et al.* 2008:86; Jacob and Lefgren 2011:1168; Jaffe 2002:22; Gush *et al.* 2018:227; Wills *et al.* 2013:4). Typically, the resources that necessitate this funding requirement include, but are not limited to, the requirement for library support services (Haddow and Mamtora 2017; Hill 2016; Keller 2015; Milne and Davernport 1999; Sewell and Kingsley 2017; Zhao 2014), course fees (Black and Bonner 2011:166), laptops, and technical services.

It is critical to recognise that research funding has made measuring research output a standard practice across public institutions worldwide, and one that is becoming increasingly disputed and contentious. Madue (2006:7) states that such measurement is important in South Africa for decisions about professional staffing and resource allocation. Additionally, the author believes that such metrics of research output, which emphasise both quality and quantity, aid governments in defining priorities and allocating funds. Therefore, this notion supports this study's research problem in a sense that a lack of scholarly research evaluating Unisa research support programmes may endanger the institution's ability to justify for further research funding since there is no indication of the extent to which such funds are utilised effectively.

2.4.1.4 *Research incentives*

Provision of research incentives is viewed as essential to the output and productivity of research (Balakrishnan 2013:8; Sawyerr 2004:213; Wills *et al.* 2013:4). Research incentives include, but are not limited to, the subsidies provided by institutions for each piece of research and qualification completed by staff. Clearly the most problematic,

but also the most prevalent type of research incentive, is an extrinsic monetary payment to researchers, either directly or in the form of gifts, vouchers, or tokens. In academia, there is a genuine need for young researchers, and incentives may be an enticing way to recruit this “next generation” of academics.

According to Heath *et al.* (2009:36), many institutions view research incentives as a suitable method to demonstrate their gratitude to academics. However, as Gallagher (2009:23) notes, direct payment to academics is problematic for some higher education institutions since it reinforces undesirable principles of consumerist capitalism. Scott (2000:114) also notes payment issues, but believes that monetary incentives should be provided to all researchers to demonstrate their worth. Field and Behrman (2005:48) caution on this point, stating that the primary concern regarding incentives associated with research participation is that they may influence decision-making. In their opinion, certain forms of payments, for example reimbursements for reasonable expenditures, are generally permissible. Other incentives, they argue, are never acceptable. This study agrees with Scott’s assertion in that, if incentives are provided, then they should be provided to all staff. This argument is based on the belief that if research incentives are linked to research output, senior academics are more likely to benefit than junior staff members. Moreover, if co-publishing would imply that academics need to divide the incentives into two or more, senior academics may be reluctant in collaborating; if greed takes over, it would impact negatively on research capacity development or knowledge transfer.

2.4.2 Individual factors associated with research output and productivity

Some individual factors associated with research output and productivity were also reported in the literature, though scarcely. These factors are grouped into personal motivation and research networks and mentorship.

2.4.2.1 Personal motivation

According to a study done at 200 recognised business schools across the USA (White *et al.* 2012:586), academic staff members who do not place a high value on research were reported as less likely to engage in research-related activities. This was later

verified by Wills *et al.* (2013:4), who showed that intrinsic motivation, in the form of peer recognition or personal satisfaction, had an effect on the research output and productivity of Australian accounting academics. Using the search options mentioned earlier, this study did not find sufficient literature linking research output and productivity of academics with personal motivation. This should possibly be a considerable area of research interest for future studies.

2.4.2.2 *Research networks and mentorship*

Buchheit *et al.* (2001:17) discovered that increasing external consulting and mentor connections resulted in a substantial increase in research production at Texas University. To corroborate this, Wills, Ridley and Mitev (2013:4) discovered that having publishing peers had a beneficial effect on research output and productivity. Callaghan (2015:85) tested a hypothesis that claimed to predict the potential effect of various manifestations of experience on higher education research output in the setting of a large South African research university. The study, using Human Capital Theory, suggested that productivity in research is generally strongly linked to forms of work experiences other than that of a researcher. Membership of professional organisations was proven to have a favourable effect on research output, while years of formal schooling, strangely, were not. As a result, it was determined that research output and productivity may reflect particular human capital in the form of tacit learning, which is largely accessible via a process of “learning by doing”.

Other writers also exhibited access to research networks and mentorships, which are essential for research output and productivity, with the aid of a postgraduate supervisor. The supervisory function is thus emphasised within the framework of postgraduate studies by providing a high degree of integration into the researcher network in terms of access to resources, professional networks, knowledge, and learning opportunities (Cornér *et al.* 2018:277).

As was the case at Texas University (Buchheit *et al.* 2001:17), the literature indicates that mentorship has been utilised to build human resources at Unisa (Schulze 2009) and the University of Johannesburg (Nundulall and Reddy 2011). The latter study found that a majority of participants preferred a structured research mentoring

programme (Nundulall and Reddy 2011:1155); however, the study did not reflect on the participants' future abilities to generate research output (post-mentorship).

2.4.3 Gender factors associated with research output and productivity

South Africa's history is distinctive, marked by inequities and discrimination on the basis of race, social class, and gender, among other factors. Gender inequality has been a source of dispute as the higher education sector attempts to correct historical inequalities. Thus, gender is considered in connection with research output and productivity.

2.4.3.1 Male vs Female

Zulu (2013:751) examined the output of research and productivity of female academics at a South African higher education institution. The study identifies a number of impediments to women academics' research output and productivity, including the demands of obtaining a doctoral degree and the professorship, heavy teaching loads, a lack of time, family responsibilities, areas of specialisation, and the difficulty of connecting with supportive research networks. Following that, the study calls for higher education institutions to eliminate institutional obstacles to research productivity by establishing research support programmes geared toward the growth and development of women academics at all career stages.

The fact that transformation in South African higher education has been a topical issue in recent years, with equity and redress programmes deemed critical (Akoojee and Nkomo 2007:386), has prompted calls for more robust support programmes in the sector, targeting previously disadvantaged groups specifically. The research demonstrates that women in South African higher education, particularly black women, have historically experienced unequal representation, marginalisation, and underdevelopment. Thus, research support programmes geared at women researchers have the ability to enhance and alter the country's higher education system in order to overcome the colonial legacy (Hagenmeier *et al.* 2017:84) and the African patriarchal system.

Obers (2014:1107) found that, while the percentage of women academics in South African higher education institutions increased from 31.2% in 1994 to 44.2% in 2009, they remained underrepresented in top positions. As previously stated, Divala (2014:2079) comments on the narratives of black women academics in higher education, with a major focus on exclusion and marginalisation. Similarly, the experiences emphasised women's challenges to gain admission to higher education. Msimanga (2014:2013) argues that the time of womanhood, blackness and motherhood in academia is out of joint. According to her auto-ethnographic article, despite her breadth of knowledge, her professional path was defined by interruptions and discontinuity of presence, even at the age of 50, which led to her categorisation as an "early career academic". In some ways, this confirms the conclusion that family obligations are a hindrance to research output, particularly for women, and more particularly for black women (Zulu 2013:751).

The necessity for research support programmes is substantiated by studies demonstrating that academic males produce more research than women in comparable professions internationally (Brew and Lucas 2009; Brooks 1997). This was claimed to be the situation among women and black academics in South Africa (Christiansen and Slammert 2006). Morley (2006:550) noticed that one of the factors was the misrecognition and devaluation of women's professional and academic capital in African higher education institutions' efforts to create academic capital. Thus, Obers (2014:1107) advocates for measures, such as mentorship, to boost women's self-esteem and research productivity at higher education institutions, thereby increasing female representation in leadership and senior positions. Mentorship programmes have been advocated lately by Maphalala and Mpofo (2017:9216), who claim that while women academics in South African higher education institutions have achieved considerable success, more work has to be done to remove barriers to their full involvement.

To bolster the above points, Moody and Toni (2017:138) emphasised the importance of developing a framework that takes into account the specific personal circumstances of women seeking leadership posts in higher education. The study argues that ongoing initiatives might help to address the poor representation of women, as well as the cultural and environmental factors that contribute to these hurdles. This is true in light of Mayer, Surtee and May's (2015:200) findings that women academics benefit from

development opportunities provided to them. The study discovered that when women leaders in higher education are appropriately supported, they have a strong sense of significance in their lives in general and at work in particular.

2.4.3.2 Family responsibilities

Callaghan (2016:2) examined the relationship between family life and research publication output in order to further an understanding about work-life balance (WLB) impacts. The study's primary findings indicate that Institute for Scientific Information (ISI) and/or International Bibliography of Social Sciences (IBSS) journal article publishing is negatively linked with dependent children, but only for male academics, and is negatively associated with female gender independently of the influence of family life factors in testing. Later, Callaghan (2017:572) used Ascription and Human Capital Theories to investigate the extent to which job performance determinants of research productivity differ by gender in their contributions to research productivity in South Africa, a country where gender and other forms of historical discrimination were previously pervasive. According to the study, gender is shown to moderate the link between experience and research production, with the relationship being greater for males, who also produce more research. This is regarded as a contradiction, as English and African native languages, which serve as proxy for racial disparities in socioeconomic disadvantages and uneven opportunities, are not significantly related with variations in research output. Additionally, the findings indicate that none of the investigated inherent effects is gender-mediated, contradicting theories from general work context.

The above discussion exemplifies typical concerns about research output and productivity, except that the particular environment in which research support happens differentiates how universities throughout the world respond to academic staff's research support demands. This chapter will examine studies related to this one and how international higher education institutions respond to research support needs in the next sections.

2.5 RELATED STUDIES

Studies have been done worldwide and locally to evaluate research support interventions throughout the years, albeit in limited numbers. This section summarises such studies, focusing on their study objectives and methods.

Denmark's Ministry of Foreign Affairs (2020) initiated a review of the Danish International Development Agency (Danida) Support to Development Research (2008–2018) in 2020. The assessment was conceived as a forward-looking endeavour, with the goal of learning from the past and recommending future strategies for maximising the value of development research. It was intended to (a) distil strategic issues that point the way forward; (b) provide insight into how to ensure high-quality research and foster the most productive research partnerships; (c) facilitate development research prioritisation and responsiveness to the sustainable development goals (SDGs); and (d) consider how to respond to critical development issues in low-income or fragile countries that risk being left behind.

The evaluation design used in the preceding study was a hybrid of mixed-methods and systems-informed approaches. Qualitative and quantitative methodologies were combined, the systemic nature of the research enterprise was examined throughout, and the developing logic of the support modalities and channels was considered over the course of 11 years. Five elements influenced the design choices and details: the evaluation's aims, purpose, and intended application, the evaluation's criteria and questions, the systemic nature of the subject to be assessed, the risks to the evaluation's success, and finally, the evaluation's guiding principles.

Moyane (2007) established the research capacity requirements for academic employees in the University of Zululand's humanities faculty. The researcher's objective was to identify the research capacity strategies and policies in place at the specific university, to determine the level of research support available to academic staff, to gauge the level of research competencies and skills of academic staff, to examine the factors affecting research productivity, and to recommend possible solutions that could result in an increase in research productivity. Moyane (2007:28) used Bland's *et al.* (2005) model to forecast academic staff research output. This model is intended to explain the research output of academic personnel. The study discovered that the major factors impeding research production include funding for

research, access and publishing, research networking, enough work time, teaching loads, motivation and rewards (Moyane 2007:vi). While Moyane's (2007) research appears to be closely connected to this present study, it is limited in scope, most likely due to the fact that it is a Master's dissertation. Its emphasis on the research capacity needs of academic personnel is only one component of this present study. Rather than that, this study examined the support needs of academics, the perceived outcomes and contribution of a university's research support programmes.

Dison (2007) investigated the development of individuals' research capacity at three South African university research centres. The purpose of the study was to obtain insight into the development of individual research capacity in general, in the South African setting, and in the institutional contexts of the three research centres and their linked research disciplines. Additionally, the study evaluated the circumstances in which research centres foster research capacity development. Dison (2007:24) views research capacity development as a process of identity construction and socialisation, during which diverse components of knowledge and competence are gained within organisational and social contexts. The author believes that the disciplinary or interdisciplinary features of the study area in which the individual is socialised affect processes of research capacity development. That is why the study's theoretical framework is based on theories about learning, knowledge acquisition, and capacity development, all of which are believed to occur within processes of identity construction in social situations (Dison 2007:29).

Muller (2015) aimed to characterise the dynamics of research output productivity from the standpoint of statistical research support. According to the study, there is a dearth of research on research output productivity from the perspective of the statistical community that supports research throughout the research process. As a result, the study needed to establish a theoretical framework for the productivity of research output. To do this, the author utilised the established grounded theory (Muller 2015:iv).

Sotshangane (2015) studied the causes for the decline in research productivity in terms of research output and the ways in which this decrease may be reversed by participatory action research study intervention at the Walter Sisulu University. The study's use of participatory action research as a technique is supported. The author wanted to alter and enhance their work at the Walter Sisulu University as a Research

Associate, whose role was to promote the development of research capacity and quality among academics and postgraduate students (Sotshangane 2015:i). Thus, participatory action research was seen as a suitable technique for doing research by experts and practitioners with the ultimate goal of enhancing their management practice.

As with Moyane (2007), Oosthuizen (2018) investigated the research support needs and expectations of emerging researchers employed in the Faculty of Education at the Cape Peninsula University of Technology, except that Oosthuizen's (2018) research focus was more comparable to that of this present study in that it investigated both research support needs and researcher expectations. The distinction is that Oosthuizen's (2018) study focused on library support, whereas this present study examined research support programmes provided by the Research Support Directorate of Unisa. That is why Oosthuizen's (2018) research used a research life cycle as a conceptual framework (Oosthuizen 2018:25). As a result of the aforementioned variations in research emphasis, this technique is irrelevant to this current study.

Another study comparable to this one is Ngibe (2015), which examined student and staff perceptions of research structures and services provided by Faculty Research Offices at a South African University of Technology. It is critical to recognise the similarities between Ngibe's (2015) work and our present research endeavour. They both concentrate on academic staff perceptions of the university's research support interventions in order to better align staff research support needs to their expectations. This permits the identification of gaps in the needed service delivery criteria. As a result, Ngibe (2015:3) used the Service Quality Model (SERVQUAL) established in the 1980s to determine the gaps between the perceived and anticipated levels of research support services currently available to the university's research community. Following his analysis across four dimensions of service quality namely; reliability, responsiveness, assurance and empathy, the study found that Faculty Research Offices across each of the six faculties were inadequate, in certain respects, in the provision of research support and development in each of the dimensions. In particular, they were found lacking in terms of communicating the nature and details of the services they offer (Ngibe 2015:iii-iv).

2.6 RESEARCH SUPPORT AT DIFFERENT UNIVERSITIES

This section looks at how some universities approach their research support as well as a summary of Unisa research support programmes.

2.6.1 Research support at Open University UK

The United Kingdom's Open University (OU) is arguably the world's largest university. As with Unisa, OU is an ODL institution. In November 2020, Vice-Chancellor Professor Tim Blackman signed a Letter of Commitment to Support the Career Development of Researchers on behalf of the OU. This letter serves as a public declaration of the OU's commitment to the professional development of its researchers (OU 2020). This support is based on the values and obligations of the Concordat for Researcher Development (RDC). The OU is a signatory to the UK Concordat for the Support of Researchers' Career Development and is committed to implementing its principles. RDC is a contract that details the expectations and duties of researchers, their supervisors, employers, and funders. It aims to increase the number, quality, and impact of research conducted in the UK for the benefit of society and the economy, as well as to enhance the attractiveness and sustainability of research professions in the country (OU 2020).

The Concordat (2019), often referred to as the Researcher Development Concordat, laid the stage for substantial reforms to the OU's research environment and professional development opportunities for researchers. It is defined by three guiding principles: environmental and cultural stewardship, employment, and professional and career development. The Concordat establishes the major duties of four key stakeholder groups for each of these principles: researchers, researchers' managers, institutions, and funders. Given the compelling need to raise standards and ensure that researchers across the UK have a consistent experience, these responsibilities are presented as obligations. Because the Concordat acknowledges the vital role of professional and career development in enabling researchers to maximise their potential, the OU must:

- “Provide opportunities, structured support, encouragement and time for researchers to engage in a minimum of 10 days professional development pro

rata per year, recognising that researchers will pursue careers across a wide range of employment sectors.

- Provide training, structured support, and time for managers to engage in meaningful career development reviews with their researchers.
- Ensure that researchers have access to professional advice on career management, across a breadth of careers.
- Provide researchers with opportunities, and time, to develop their research identity and broader leadership skills.
- Recognise that moving between, and working across, employment sectors can bring benefits to research and researchers, and support opportunities for researchers to experience this.
- Monitor, and report on, the engagement of researchers and their managers with professional development activities, and researcher career development reviews” (OU 2020).

While the above entails what may be considered standard procedure for many higher education institutions, the fact that they are mandatory distinguishes the OU's provision of research support. More significantly, the Concordat requires the OU to conduct frequent reviews and reports on the research environment and culture, including soliciting feedback from researchers, and to utilise the results to improve institutional procedures. This is the present gap in the Unisa environment, as there is no externally mandated requirement to assess the quality of its institutional research support programmes.

2.6.2 Research support at the University of Namibia

The Centre for Grants Management and Resource Mobilisation is part of the Namibian university. The Centre manages research grants, programmes, and resource mobilisation activities in accordance with the University Research Policy. The Centre regularly releases calls for funding opportunities to academics as soon as they are released. The Centre meets with potential donors on a regular basis in order to optimise funding opportunities for researchers. The Centre, which opened in June 2019, plays a crucial role in organising and assisting efforts to mobilise and manage financial resources. These can be mobilised through research and non-research

grants, consultancies, commissioned research, non-accredited short courses, and other financial interventions aimed at generating revenue for the university. The Grants Office does this by providing professional administrative assistance to researchers across all faculties and campuses of the university. In a nutshell, the Grants Office is responsible for the following:

- Provision of donor and funder information for local, regional and international grants and consultancy opportunities and disseminating them to all relevant staff of the University of Namibia (UNAM);
- University's standing quality measures to consultancies and grants proposal development and management are applied and adhered to;
- Provision of support during pre-award stages of the projects (the preparation of grant and consultancy proposals);
- Working closely with the UNAM staff and consultants during implementation of projects (providing the post-award management services include award management, financial reporting and project close-out).
- Record-keeping of all grants and projects acquired by the University (UNAM 2021).

2.6.3 Research support at the University of Zululand

According to Moyane (2007:22), the University of Zululand provides reasonable teaching and marking loads to its academic staff in order to enhance research output and productivity by allowing ample time for research. The author describes numerous University support interventions aimed at providing academic researchers with research-related skills and ensuring that they have enough time to do research. These include, for example, academics' ability to take sabbatical or study leave in accordance with the University's policies. Furthermore, academic staff at the University has access to tools such as computers and the internet, allowing them to stay in contact with their research network(s) in order to share research information. The author goes on to say that academic staff at the University of Zululand receives favourable exposure as well as institutional and systematic acknowledgment for their work. The University provides effective mentorship programmes for emerging scholars, the author states.

2.6.4 Research support at the Walter Sisulu University

The Research Resource Centre is part of the Walter Sisulu University. The primary goal of the centre is to enable the transfer of research skills to emerging researchers. The strategy used to achieve the aforementioned goals, according to the Centre's then manager (Sotshangane 2015:2), included organising seminars, specific discipline workshops, and training programmes to address research-related issues such as the Statistical Products and Service Solutions (SPSS), a software program that is meant to be a solution for research solutions. According to Sotshangane (2015:15), the Centre, which is part of the Directorate of Research Development, functions more like a research mentorship centre. The Research Resource Centre is best described by the following characteristics: connecting experienced colleagues with those less experienced to assist in training; building research capacity; inviting researchers to learn from examples; building collaboration; offering encouragement and advice; providing empowerment and affirming one's environment of field of specialisation; building confidence among researchers and novice researchers; encouraging or promoting researchers' exposure through attending conferences for public scrutiny; writing for publication for the purposes of promoting research output; and promoting a research culture and research productivity. The above interventions stress the importance of networks and mentorships to enhancing research productivity, a notion largely discussed earlier.

2.7 RESEARCH SUPPORT PROGRAMMES AT UNISA

Unisa established strategic interventions aimed at increasing the production of Master's and Doctoral graduates, expanding their scientific research and innovation capacity and that of South Africa as a whole, creating research career pathways for young and mid-career researchers, and improving Unisa's, and by extension, South Africa's international research capacity (Unisa 2017:23).

2.7.1 Increasing the production of Master's and Doctoral graduates

Under this category, Unisa established, among others, the Master's and Doctoral Support Programme (MDSP), Academic Qualification Improvement Programme (AQIP) and Women in Research (WiR) programme.

2.7.1.1 Master's and Doctoral Support Programme (MDSP)

According to the Unisa Research and Innovation Report (Unisa 2019:24), the MDSP initiative was established with the goal of achieving equity and redress by providing support to all staff, but especially previously disadvantaged groups such as blacks, females, and disabled academics pursuing postgraduate qualifications. Between 2015 and 2019, the programme sponsored a total of 210 postgraduate personnel, with grant funds totalling R120 653 488 provided over the aforementioned period. According to the Unisa Framework for MDSP (Unisa 2018b:5), the eligibility criteria include the following: permanent (tenured) Unisa employees, proof of postgraduate qualification registration (in any recognised higher education institution in South Africa), and formal approval of the research proposal. The grant lasts two (2) and three (3) years for Master's and Doctoral degrees, respectively. The intended outcomes is definitely completion of the certification in the shortest feasible time, that is three (3) years or fewer for Master's studies and four (4) years or less for doctoral studies. In terms of funding distribution, the MDSP provides R60 000 for Master's studies and R135 000 for Doctoral studies for the duration of the study periods stated above. Table 2.1 shows a breakdown of MDSP participants between 2015 and 2019.

Table 2.1: Participants in the MDSP (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------------------|-------------|-------------|-------------|-------------|-------------|
| Black | 86 | 70 | 79 | 78 | 93 |
| Coloured | 4 | 4 | 2 | 2 | 6 |
| Indian | 14 | 19 | 12 | 10 | 8 |
| White | 18 | 14 | 9 | 5 | 1 |
| Total number | 122 | 107 | 103 | 95 | 108 |
| Total amount awarded | R27 172 636 | R35 460 852 | R18 995 000 | R14 800 000 | R24 225 000 |

Source: Unisa 2019:25

The above initiative covers the following items: registration and study costs, local research training workshops not provided by Unisa, technical research equipment such as a recorder, laptop, and camera, applicable research software where no license agreement exists within Unisa, data collection services (online surveys, copy writing fees when using existing instruments, and transcription of interviews). In addition, special conditions apply. These include providing quarterly and yearly reports, continuing in Unisa employment for at least 12 months following qualification completion, and reimbursing the full amount of money in the event of poor progress. In terms of monitoring and evaluation, quarterly and yearly progress reports must be produced and signed off by the supervisor, Head of the Institute or Department, and the School Director (Unisa 2018b:1-14).

There is no indication that the above-mentioned initiative was evaluated within the context of scholarly research. In addition, there is a dearth of work on similar research support programmes in higher education institutions.

2.7.1.2 Academic Qualification Improvement Programme (AQIP)

AQIP, which is primarily funded by the DHET University Capacity Development Grant, appears to be more extensive than the MDSP in terms of meeting staff research capacity needs. AQIP offers attractive grants for permanent Unisa academic workers to study postgraduate qualifications (Master's and Doctoral degrees) on a full-time basis, in accordance with Unisa's strategic objective 3.2, which is to enhance employees' research capacity development and NRF rating (Unisa 2018c:4). To be more precise, the programme aims to increase the number of permanent academic staff with Doctoral degrees, train the next generation of academics, and support transformation initiatives. As a result, in addition to proof of registration for a Master's or Doctoral degree, permanent academic employees (tenured) under the age of 50 are also eligible. Between 2015 and 2019, a total of 144 employees profited from the initiative (Unisa 2019:22). Nonetheless, it was temporarily halted in 2017 owing to funding difficulties, and it was scheduled to restart as soon as finances became available. AQIP costs totalled R327 980 113 for the four-year period shown above. The following is a breakdown of who participated in the AQIP over the aforementioned time period.

Table 2.2: Participants in the AQIP (2015 to 2019)

| | 2015 | 2016 | 2017* | 2018 | 2019 |
|---|--------------|-------------|-------|---------------------------------|---------------------------------|
| Black | 30 | 16 | | 21 | 27 |
| Coloured | 0 | 0 | | 2 | 0 |
| Indian | 1 | 5 | | 1 | 3 |
| White | 14 | 12 | | 8 | 4 |
| Total number | 45 | 33 | | 32 (M-3; D-29) | 34 (M-0; D-34) |
| Total amount awarded for two-year (M) and three-year (D) cycles | R109 509 168 | R58 014 310 | | R74 538 516 | R85 916 119 |

* Call for new applications not issued in 2017 due to funding uncertainty

Source: Unisa 2019:22

In terms of its provisions, AQIP covers research expenditures related to the registered qualification, identical to those covered by the MDSP and for the same number of years. Except for research, AQIP devotes funding to the employment of temporary academic staff on a contract basis to relieve successful candidates of their academic obligations (up to two years for Master's degrees and three years for Doctoral degrees), therefore exempting them from their key performance areas. Despite being on AQIP leave, these academic staff members continue to receive their full salaries. By doing so, the elements of decreased burden and time available for research (Balakrishnan 2013:8; Buchheit *et al.* 2001:17; Erkut 2002:115; Fowler *et al.* 2009:174; Rosentreter *et al.* 2013:24; Wills *et al.* 2013:4) are addressed. Therefore, it would be interesting to compare the views of participants in this programme to those of participants from other programmes since the AQIP seems to contain all the necessary conditions for improving research capacity, as observed in earlier literature.

2.7.1.3 Women in Research Support Programme (WiR)

Unisa (2018g:4) states that under the WiR framework, the institution aspires to promote gender equality in research by increasing the proportion of permanent female workers generating high-quality, accredited research outputs and female academics holding NRF-rating through the WiR programme. The WiR programme was also created to improve talent transfer, enhance quality research capacity, and promote empowerment and professional growth within the institution. This initiative, however,

does not support individual projects. Rather, it supports WiR groups with the expectation that group leaders will also mentor, support, and develop junior researchers in the WiR group, with a focus on junior women researchers, particularly from the designated groups and Unisa employees. Only permanent Doctoral graduate academic personnel or staff members with at least three (3) years remaining on their five-year fixed-term contracts are eligible. This programme, as Unisa states, will last three (3) years and will provide at least four (4) recognised research output points, as well as mentorship of at least one (1) younger female academic staff member. The research items covered, as well as the reporting method, are comparable to those covered in the MDSP and AQIP.

Table 2.3: Participants in the WiR programme (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|----------|------------|------------|------------|------------|
| Black | 1 | 4 | 7 | 2 | 5 |
| Coloured | 0 | 0 | 1 | 0 | 0 |
| Indian | 0 | 5 | 1 | 1 | 0 |
| White | 1 | 12 | 1 | 2 | 0 |
| Total number | 2 | 16 | 10 | 5 | 5 |
| Total amount awarded for a three-year cycle | R834 518 | R4 928 377 | R4 200 000 | R2 210 000 | R1 820 000 |

Source: Unisa 2019:34

The fact that transformation in South African higher education has been a trending issue in recent years, with equity and redress programmes viewed as critical (Akoojee and Nkomo 2007:386), has prompted calls for more robust support programmes in the sector that specifically targets previously disadvantaged groups. According to the literature, women in South African higher education, particularly black women, have long been exposed to unequal representation, marginalisation, and underdevelopment. As a result, research support programmes geared at women in research can help to overcome the above challenges (Hagenmeier *et al.* 2017:84).

2.7.2 Creating research career pathways for young and mid-career researchers

Providing opportunities for academic personnel to earn postgraduate credentials is not the final objective of research support programmes. Again, the argument applies that holding a postgraduate qualification is not the final goal because it is not the primary determinant of improved research output and productivity (Callaghan 2015:85). This argument compels the government and higher education institutions to continue providing ongoing research support interventions to nurture the research pathways of both developing and emerging researchers as part of their efforts to increase the country's scientific research and innovation capacity. A developing researcher is an academic staff member who is registered for a Master's degree and is permanently employed by Unisa, as defined in the Unisa Research and Innovation Policy and for the purposes of this study. In addition to the latter, an emerging researcher is an academic member of staff who is a doctoral candidate or whose doctorate is less than

five (5) years old, has generated fewer than three (3) accredited outputs in the previous five (5) years, and is not a proven and NRF-rated researcher (Unisa 2018d:3).

In an effort to create research career pathways for young and mid-career researchers, Unisa established the Emerging Researcher Support Programme (ERSP), Postdoctoral Fellowship Support Programme (PFSP), a programme for attracting and retaining excellent researchers, and the Vision Keepers Programme (VKP).

2.7.2.1 Emerging Researcher Support Programme (ERSP)

The goal of this competitive programme is to help permanent academic staff members who have completed their doctoral degrees in the last five (5) years to develop as researchers, and to increase their measurable research output in order to eventually obtain NRF rating. The support programme does so by providing funding for research expenses, relief lecturers and bursaries for postgraduate students (Unisa 2017:17).

Table 2.4: Participants in the ERSP (2013 to 2017)

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------------------|------|------|------|------|-------------------------------|
| Emerging Researcher Programme | 3 | 5 | 5 | 1 | No new grants awarded in 2017 |
| Breakdown by race | | | | | |
| Black | 3 | 1 | 4 | 1 | |
| White | 0 | 4 | 1 | 0 | |

Source: Unisa 2017:17

Statistics about the participation of Unisa academic staff in this programme were not available in the 2019 report, hence the 2017 report, as shown above, was used.

2.7.2.2 Postdoctoral Fellowship Support Programme (PFSP)

The PFSP by Unisa is offered to candidates whose doctorates are less than five (5) years old and who are not employed by the university, with the aim of offering them an exclusive opportunity to enhance their understanding of a specialist subject and, in the process, imbue them with unique and sought-after skills (Unisa 2017:17). The programme has supported 535 postdoctoral fellows between 2015 and 2019. In terms of the relevant Postdoctoral Fellows Policy of Unisa (Unisa 2018e), the fellowships seek to support doctoral graduates in preparation for academic positions, yet they are

not allowed to participate in teaching and learning activities, nor any other administrative functions. Furthermore, they are not allowed to supervise postgraduate students, although they could supervise as part of mentorship.

Table 2.5: Participants in the PFSP (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------------------|-------------|-------------|-------------|-------------|-------------|
| Black | 86 | 70 | 79 | 78 | 93 |
| Coloured | 4 | 4 | 3 | 2 | 6 |
| Indian | 14 | 19 | 12 | 10 | 8 |
| White | 18 | 14 | 9 | 5 | 1 |
| Total number | 122 | 107 | 103 | 95 | 108 |
| Total amount awarded | R27 172 636 | R35 460 852 | R18 995 000 | R14 800 000 | R24 225 000 |

Source: Unisa 2019:25

Postdoctoral fellows at Unisa are generally ineligible for any of the research incentives available. It may also be claimed that exempting such fellows from completing teaching and learning tasks may prevent their integration into academia, thereby undermining the programme's entire objective. Furthermore, denying this group meaningful research incentives may have a negative impact on their job satisfaction, as incentives are regarded crucial for research output and productivity (Balakrishnan 2013:8; Sawyerr 2004:213; Wills *et al.* 2013:4).

The postdoctoral fellowship is a short-term position in which aspiring researchers work to accomplish their goals in academia, either as researchers or as teaching and research academics, under the supervision of a senior faculty member (Scaffidi and Berman 2011:686). This Australian-based survey study intended to determine how postdoctoral fellowship programme characteristics, such as quality supervision, career mentorship, collaboration, networking, and a supportive research environment affected postdoctoral researchers' experiences and productivity. Job insecurity and a lack of a career structure have been recognised as ongoing concerns for this group of researchers. These findings were later confirmed in a comparison study of two Dutch institutions, which found that postgraduate fellows' job satisfaction was lower when they were unsure about their future prospects in academia (Van der Weijden *et al.* 2016:25). Such findings support the findings of Fowler *et al.* (2009:174), who identified tenure instability, particularly for fixed-term contracts, as a barrier to research capacity

building initiatives since it can create anxiety and detract researchers from their work. The study did, however, discover a clear relationship between quality supervision, such as expressing the significance of accepting responsibility for their future academic career by enhancing their track record, and the number of peer-reviewed articles generated (685). In contrast, while Lin and Chiu (2016:335) discovered that postdoctoral positions increased the likelihood of progressing to the Taiwan academic sector by around 6.1%, their analysis gave little consideration to the possible issues highlighted above.

A study done in America by Rybarczyk *et al.* (2011:699) demonstrates the additional benefit of organised postdoctoral fellowship programmes that include research and teaching opportunities. They discovered that determinants of research productivity, such as scientific seminars presented, students mentored, service contributions, and participation in professional development activities, were significantly higher among scholars in the programme compared to those who were not in the programme. Furthermore, postdoctoral fellows were found to have acquired professor posts at three times the rate of a national sample of postdoctoral researchers. As a result, the effort is more closely aligned with the academic professorship.

Postdoctoral respondents in Vranas and Hendry (2017:461) indicated the following reasons for embarking on the fellowship in the results obtained after studying the postdoctoral phenomenon in South Africa, specifically the University of Cape Town: additional research experience in the doctoral field, developing research portfolio through focused research, enhancing future employment prospects within higher education, beginning an academic career, inability to obtain postdoctoral employment and/or wanting to pursue a research career in a different field.

2.7.2.3 Vision Keepers Programme (VKP)

The Unisa Research and Innovation Report (Unisa 2017:18) states that through the VKP, the institution aims to support the development of highly competent and confident young researchers who possess solid plans. The initiative was founded in line with goal one of the Unisa Research Strategy of enhancing innovative research and research capacity. In particular, the VKP consists of the following primary objectives:

- Address the problem of the aging research-productive cohort.
- Accelerate the development of the next generation of researchers.
- Support transformation of the research cohort.
- Improve the number of publications in high impact factor journals, thus enhancing the quality of research published by Unisa researchers.
- Increase the number of NRF-rated researchers at Unisa.
- The programme supports young researchers by providing funding for either or both: pursuing research work with a view to producing high-quality research publications or hosting a research mentor from another institution.

The programme has attracted 26 participants between 2015 and 2019. Basically, the VKP supports young researchers by providing funds to pursue research work abroad with a view to producing high-quality research publications by working with a research mentor in a host institution outside South Africa. Like most of the above interventions, permanent Unisa academic staff members, holding a doctoral degree or whose doctorate will be completed within the next 12 months, 45 years old or younger, and who have an intention of applying for NRF rating are eligible. Table 2.6 shows a breakdown in the number of participants in the VKP during 2015 to 2019.

Table 2.6: Participants in the VKP (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|------------|----------|------------|------------|------------|
| Black | 6 | 1 | 3 | 5 | 4 |
| Coloured | 0 | 0 | 0 | 0 | 1 |
| Indian | 0 | 0 | 0 | 2 | 1 |
| White | 1 | 0 | 1 | 1 | 0 |
| Total number | 7 | 1 | 4 | 8 | 6 |
| Total amount awarded for a two-year cycle | R3 666 783 | R500 515 | R1 800 000 | R3 525 000 | R3 525 000 |

Source: Unisa 2019:29

2.7.3 Strengthening research and scholarship at Unisa

Although the other research support programmes mentioned in this study also contribute to strengthening research and scholarship at Unisa, the Visiting Researcher Programme (VRP) appears appropriate to be placed under this category.

2.7.3.1 Visiting Researcher Programme (VRP)

The VRP is a research excellence initiative, managed by the Research Directorate to strengthen research and scholarship at Unisa. The goal of the VRP is to raise the research profile of Unisa while increasing the already existing research capacity in colleges. The programme supports research excellence by providing funding for hosting a visiting researcher from an institution outside of Unisa for an extended period of up to two (2) years (Unisa 2017:17). Table 2.7 details the number of participants in the VRP between 2015 and 2019.

Table 2.7: Participants in the VRP (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|-------------|-------------|------------|------------|------------|
| Total number | 31 | 19 | 14 | 18 | 13 |
| Total amount awarded for 3-month to 24-month cycles per visit | R15 331 284 | R10 418 009 | R6 579 040 | R8 320 000 | R6 460 000 |

Source: Unisa 2019:27

2.7.4 Retaining excellent researchers

Professors play a critical role in providing academic leadership to the university, primarily through demonstrating and fostering excellence in research, teaching, professional activities and policy development at a variety of levels within the academic discipline, within the academic unit, and within the institution. Therefore, it is crucial to retain such employees. Hence, Unisa offers the Research Professors Programme (RPP).

2.7.4.1 Research Professors Programme (RPP)

Unisa introduced the academic rank of Research Professor to serve as a mechanism for, among other things, increasing dedicated research and innovation participation, increasing specialised expertise and improving research outputs. Research Professors are appointed in three-year cycles. Table 2.8 indicates participation in the RPP from 2015 to 2019 (Unisa 2019:27).

Table 2.8: Participants in the RPP (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|----------|------------|------------|------------|------------|
| Black | 1 | 2 | 1 | 0 | 1 |
| Coloured | 0 | 0 | 0 | 0 | 0 |
| Indian | 0 | 0 | 0 | 0 | 0 |
| White | 1 | 7 | 4 | 4 | 4 |
| Total number | 2 | 9 | 5 | 4 | 5 |
| Total amount awarded for a three-year cycle | R600 000 | R2 700 000 | R1 500 000 | R1 200 000 | R1 500 000 |

Source: Unisa 2019:27

2.7.5 Promotion of innovative research

The NDP states that South Africa needs to sharpen its innovative edge and continue contributing to global scientific advancement through greater investment in research and development (National Planning Commission 2011:23). In this regard, Unisa introduced the Innovation Support Programme (ISP) for staff.

2.7.5.1 Innovation Support Programme (ISP)

The aim of the ISP is to stimulate innovative research through seed funding. The programme provides funding to researchers to develop research projects that offer innovative solutions to the challenges that society faces and in so doing strengthen their ability to apply innovative problem-solving techniques to research problems and to increase the number of high-quality innovative research projects (Unisa 2017:20).

Table 2.9: Participants in the ISP (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------------------|----------|----------|----------|----------|----------|
| Black | 2 | 1 | 2 | 0 | 2 |
| Coloured | 0 | 0 | 1 | 0 | 0 |
| Indian | 0 | 0 | 0 | 0 | 0 |
| White | 2 | 1 | 2 | 1 | 2 |
| Total number | 4 | 2 | 5 | 1 | 4 |
| Total amount awarded | R400 000 | R400 000 | R500 000 | R100 000 | R400 000 |

Source: Unisa 2019:30

2.7.6 Increasing the number of accredited ODL research outputs

Unisa is primarily an ODL institution, thus it is expected that ODL research outputs aimed at strengthening the functioning of the institution be produced. In order to achieve this, Unisa established the ODL Research Support Programme (RSP).

2.7.6.1 Open Distance Learning Research Support Programme (ODL-RSP)

The ODL-RSP provides support to ODL researchers towards the development and improvement of their research capacity and skills to increase skills transfer, research quality and capacity building, and to encourage professional development in ODL research at Unisa. Ultimately, the programme aims to support permanent employees to produce accredited ODL research outputs and to mentor, support and develop junior researchers in the ODL-RSP group. An increase in the number of permanent employees producing quality ODL research publications not only contributes to the achievement of Unisa's Research and Innovation Strategy targets, but also supports researchers in becoming recognised and proven ODL researchers (Unisa 2017:22).

Table 2.10: Participants in the ODL-RSP (2015 to 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019* |
|----------------------|----------|----------|----------|------------|----------|
| Black | 0 | 1 | 1 | 3 | 0 |
| Coloured | 0 | 0 | 0 | 1 | 0 |
| Indian | 0 | 0 | 0 | 0 | 0 |
| White | 2 | 0 | 0 | 0 | 0 |
| Total number | 2 | 1 | 1 | 4 | 0 |
| Total amount awarded | R828 075 | R266 272 | R266 272 | R1 570 000 | R0 |

* No application approved in 2019

Source: Unisa 2019:25

The above discussion assisted in summarising the research support programmes provided by Unisa. Three of these programmes, namely the MDSP, AQIP and the ODL-RSP, formed the units of analysis for this study. However, before indulging in the development of the framework used to analyse the above-mentioned programmes, it was prudent for this study to examine the global trends in programme evaluation.

2.8 TRENDS IN THE EVALUATION OF PROGRAMMES

Evaluation of programmes dates all the way back three generations. According to Balakirev *et al.* (2006:9), evaluation has historically been used to measure project and programme outputs and outcomes in the context of international development aid. In the 1950s, evaluation began to be applied in institutions headquartered in the United States (World Bank, United Nations [UN], United States Agency for International Development [USAID]), with an emphasis on appraisal rather than evaluation. Evaluation, according to the United Nations Development Programme (2021:1) “is an assessment, conducted as systematically and impartially as possible, of an activity, project, programme, strategy, policy, topic, theme, sector, operational area or institutional performance. It analyses the level of achievement of both expected and unexpected results, by examining the results chain, processes, contextual factors and causality, using appropriate criteria such as relevance, coherence, effectiveness, efficiency, impact and sustainability.” Whereas the above source defines appraisal as “a critical assessment of the potential value of an undertaking before a decision is made to implement it” (p.3). Nonetheless, during the time period mentioned above,

agencies attempted to structure projects logically and to create processes and indicators for measuring project outputs. The Logical Framework Approach (LFA) was thus created in the 1970s as a method for planning, implementing, monitoring, and evaluating projects using criteria that enabled successful output measurement.

This was followed by the second generation of evaluations in the 1980s, when interest in evaluation grew. International organisations began institutionalising evaluation, and evaluation units were established not just in the USA, but also in Europe, mostly as a means of satisfying public opinion and the government's need to know how public aid monies were used. At this point, international organisations developed a greater capacity for conducting evaluations focusing on the long-term impact of aid assistance. According to the Balakirev *et al.* (2006), the third phase (1990s) saw agencies internalise the significance and necessity of the evaluation role within organisations. They began utilising evaluation as a strategic instrument for knowledge acquisition and building in order to facilitate decision-making and organisational learning.

In contrast to European nations, where evaluation was mainly led by the government, South Africa's evaluation practices were mostly driven by funders (Mouton 2010:57). Evaluation studies began in South Africa's Non-Profit Organisation (NPO) sector in the late 1980s and early 1990s, and grew in popularity following 1994 as a way of accountability and cost-effectiveness (Mouton 2010:57). Prior to 1994, donor funding was not conditional, particularly for anti-apartheid activities (Mouton 2010:82). This was owing to the danger inherent in anti-apartheid activism. Conducting a rigorous evaluation would have exposed members of the anti-apartheid movement and risked their imprisonment (Mouton 2010:181). As a result, accountability mechanisms for programmes were flexible, with reports and yearly financial statements deemed acceptable. Additionally, many of the programmes run by NPOs before 1994 were motivated by anti-apartheid rationale rather than developmental concerns.

Therefore in South Africa, evaluation of programmes or evaluation research was regarded relatively new in the last two decades (Abrahams 2015:1). According to Abrahams (2015:1), its growth in South Africa has been hampered in part by the interdisciplinary nature of monitoring and evaluation, as well as the difficulty of establishing roots inside a traditionally very discipline-based higher education system. However, academics and professionals in psychology, sociology, economics,

education, health, philosophy, and political science have developed an interest in and practice of programme evaluation. Initially, the government placed a greater emphasis on monitoring. However, as time passed, the government switched its emphasis toward evaluation. South Africa has experienced a rise in the number, scope, and quality of evaluations conducted in recent years. This advancement in the growth and professionalisation of evaluation was also facilitated by the formation of the South African Monitoring and Evaluation Association (SAMEA), which is regarded essential in establishing a forum for emerging and seasoned evaluators to collaborate (Abrahams 2015:2).

Recently, there has been an increased emphasis on enhancing evaluation practices, particularly in the higher education sector in South Africa; a concept that reinforces the current study's research problem. Mouton (2010:184) argues that South Africa needs a new generation of evaluators to address the critical gap necessary to assure the sustainability of a specific quality of monitoring and evaluation. This is consistent with previous assertions that few educational programmes in the country have been evaluated for their effectiveness and efficiency (Meyer and Hofmeyr 1995:356). As a result, the authors advised that prospective educational programmes be meticulously evaluated in order to influence the future policy environment.

Additionally, the literature review raised concerns about how little emphasis is placed on the theoretical aspects of social programmes in contemporary evaluation studies. The term "theory" in evaluation has a variety of meanings and uses, ranging from broad overarching theories such as Marxism to particular hypotheses evaluated in a laboratory experiment. The missing theoretical component is the theory of what a programme or intervention is intended to accomplish and, in certain circumstances, the theory of how it is supposed to do it (Lentsa 2019:4).

For a long period of time, evaluation relied on experimental approaches since they were reasonably straightforward and understood intuitively, and hence appealed to evaluators conceptually (Abrahams 2003:2). While experimental approaches have been critical in determining whether a programme worked or not, they have fallen short of understanding how and why a programme works or identifying the programme mechanisms. As a result, they have deprived evaluators of key knowledge about the

critical factors that contribute to programme success or failure, as well as critical information about replicating programmes in other environments.

As a result of the above, some scholars have criticised methodological approaches to evaluation and advocated for a more theoretical approach (Chen and Rossi 1989; White 2009). The next section discusses the phenomenon of theory-driven evaluation in detail.

2.9 THEORY-BASED EVALUATION

Since the 1980s, theory-based evaluations have grown in popularity and strength. These are defined by the creation of a plausible programme theory, which serves as the major product of the evaluation and serves as the foundation for the evaluation's results, recommendations, and conclusions. The analytical focus of these evaluations is different from that of logic model construction: they are not intended to report on expected relationships between resources, processes, and outcomes, but rather to provide a validated model that will enable a judgment to be made about the intervention being evaluated. They are referred to as theory-based, theory-driven, theory-anchored, or theory-oriented evaluations, and they all attempt to bolster the explanatory power of evaluations (Brousselle and Buregeya 2018:154).

However, while the literature in the preceding sections shows that multiple approaches to evaluate programmes have been employed, there has been little discussion of theory-based evaluation. According to White (2009:272), theory-based evaluation entails investigating the assumptions underpinning the causal chain from inputs to outcomes and impacts. In theory-based evaluation, there are two conceptualisations of the term "theory", according to Blamey and Mackenzie (2007). The first relates to the hypothesised linkages between the programme's actions and its expected outcomes (Blamey and Mackenzie 2007:444). The second definition of theory is the hypothesised causal connections between processes unleashed by an action and the expected outcomes (Blamey and Mackenzie 2007:445). Theory-based assessment has evolved and improved, resulting in a wide range of scholars arguing for various approaches to theory-based evaluation.

To begin, theory-based approaches focus on exposing expected outcomes as they are accounted for by stakeholders and/or evaluated by evaluators. Secondly, in programme evaluation, context is essential. Thirdly, because there are no standard practices for assessing programmes, evaluators can adopt any methodology that fits without prejudice or undue reliance (Stame 2004:63). According to some interpretations, the objective of theory-based assessment is to interact with what happens between the input and output processes of interventions.

In response to the black box issue, Chen and Rossi (1989) devised the first method to theory-based evaluation. According to Stame (2004:58), the black box is the gap between the actual inputs and the intended outputs of a programme. For a long time, decision-makers were focused on programme inputs and ignored expected actions, such as how and why interventions were formed. Method-driven evaluators are more concerned with measuring outcomes by attributing them to inputs. As a result, according to Chen and Rossi (1989:299), black box programmes are the way they are because there is no theory to explain them, their goals are unclear, and their measures are insufficient. As a result, Chen and Rossi's (1989) theory-driven evaluation approach argues for studying treatment, addressing stakeholders' and evaluators' perspectives on outcomes, and evaluating why and how a programme performs as it does (Stame 2004:61).

In contrast to Chen and Rossi (1989), Weiss (1987) believes that programmes do incorporate theories of change in the form of assumptions. In evaluation, change theories emphasise the need for implementation theory and programme theory. Implementation theory refers to actions that must be completed during the programme's implementation stage, which Chen (1990) refers to as "descriptive theory" (Blamey and Mackenzie 2007:444). The other theory, which was used in this thesis, is referred to as "programme theory". The term "programme theory" relates to people's reactions to programme activities (Blamey and Mackenzie 2007:445). This type of theory is referred to as "prescriptive theory" by Chen (1990). This theory may be used to investigate Unisa academics' perceptions or responses to the institution's research support programmes.

2.10 CONCLUSION

The purpose of this chapter was to identify and explore issues of research support in higher education. The chapter examined policies and strategies relevant to research support in South Africa, as well as research support literature. A variety of institutional, individual, and gender factors influencing research output and productivity were also discovered. The chapter also discussed how other international and local institutions of higher learning, such as the OU, UNAM, the University of Zululand, and the Walter Sisulu University approached research support. The chapter concludes with an overview of Unisa's research support programmes for academic staff members and a brief discussion of theory-driven evaluations.

CHAPTER 3

A FRAMEWORK GUIDING THE STUDY: A PROGRAMME THEORY APPROACH

3.1 INTRODUCTION

The purpose of this chapter was to develop an analytical framework for the empirical evaluation of the outcomes and contribution of various programmes aimed at achieving universities' research development objectives. Such a framework was built using the realist's programme theory approach. Guided by this approach, the chapter provides a contextual review of historical and institutional developments in the South African higher education system, as well as the policy climate and various actions to enhance the state of academia through research support.

3.2 PROGRAMME THEORY

In the 1930s, Karl Mannheim (Mannheim 1935-1967) wrote *Man and Society in an Age of Reconstruction*, in which he argued for the articulation of the assumptions underpinning what was then referred to as "social planning." The term "policy theory" was invented in the 1950s by a Dutch sociologist, Jacques van Doorn. Rogers, Petrosino, Huebner and Hacsí (2000:5) refer to a "more than 30-year history" of programme theory in the evaluation field. While underlying assumptions are occasionally referred to as policy theories, the terms programme theory or programme logic are more frequently used. There is a critical distinction between programme theory and programme logic. Often, programme logic describes the inputs and components of a programme, as well as the short and long-term outputs, and the anticipated relationships between them. However, a programme's logic seldom describes the underlying mechanisms thought to be responsible for such connections. In comparison, Rogers *et al.* (2000:5) define a programme theory as an explicit theory or model describing how a programme results in the desired or observed outcomes.

Therefore, the idea of evaluating programmes using a causal model is not novel. As early as the 1960s, Suchman (1967:55) indicated that programme evaluation might be

used to assess the achievement of a "chain of objectives" and advocated for the value of doing so. The evaluation study tests the premise that action A will accomplish objective B because it has the ability to impact process C, which is responsible for this objective's occurrence. A thorough grasp of all three factors – the programme, the aim, and the intervening process – is therefore critical for doing evaluative research (Suchman 1967:177).

Weiss (1972) went on to describe how an evaluation might uncover many causal models for a teacher home-visiting programme and determined which was the most evidence-based. Since then, this type of evaluation has been referred to by a variety of different terms, including programme theory, programme logic, theory-based evaluation or theory of change, theory-driven evaluation, theory-of-action, intervention logic, impact pathway analysis, and programme theory-driven evaluation science (Rogers 2008:30). The term "programme theory" has, nevertheless, been the most frequently employed.

In recent decades, interest in programme theory has exploded. Internationally, more agencies and institutions are at least paying lip service to programme theory. This was demonstrated by the demands for discussion of programme theory in applications for evaluation support submitted to government research funders in the USA (Rogers *et al.* 2000:6). As a result, a large number of non-profit organisations globally have embraced this method in generating measurements that are based on a general causal model of inputs-processes-outputs-outcomes.

Basically, programme theory refers to a number of approaches of building a causal model that connects programme inputs and activities to a chain of expected or observed outcomes, and then utilising this model to drive evaluation (Rogers 2008:30). Programme theories are at the heart of theory-driven types of evaluation, and they are often represented as graphical diagrams that describe connections between programmatic activities, outcomes, and other elements, although they can also be portrayed in tabular, narrative, or other formats.

Inputs, activities, and outputs are frequently (but not always) used to describe or represent a programme theory, as are initial outcomes (sometimes called short-term, proximal, or immediate outcomes), intermediate outcomes (sometimes called medial outcomes), and long-term outcomes (sometimes called distal outcomes or impacts)

(Donaldson 2007). Inputs comprise many types of resources required to carry out a programme (e.g. human, physical, and financial). Activities are the actions (e.g. training and service delivery) performed to achieve a desired outcome in these types of programme theory models. Outputs are the direct consequences of an action (e.g. number of training events and number of persons trained or who received services). Outcomes are the changes that are expected to occur as a direct or indirect result of inputs, actions, and outputs. Changes in knowledge, skills, talents, and other qualities are commonly used to represent initial outcomes (e.g. increased knowledge of conducting research). Intermediate outcomes are frequently defined as behavioural changes (e.g. work ethic and professionalism) that are expected to result in changes in long-term outcomes, such as increased employee motivation, loyalty, or satisfying the requirements of a programme's target audience (e.g. enhanced research output).

Theorists such as Wholey (1979), among others, favoured linear models to represent programme theories in earlier conceptualisations. However, writers like Rogers (2008) have lately called for more contextualised, complete, ecological programme theory models. These models deviate significantly from the more basic linear models. In general, these models are designed to incorporate systems thinking into programme theory, taking into consideration contextual and other elements that might impact and operate on programme processes and outcomes.

It is for the above reasons that different approaches to programme theory emerged, namely logic analysis, contribution analysis and realist evaluation. Logic analysis is a type of programme theory evaluation in which scientific knowledge is used to assess the validity of an intervention's theory and to suggest potential alternatives for achieving the intended outcomes (Rey, Brousselle and Dedobbeleer 2012:62). It is used to determine the programme theory's plausibility (Brousselle and Champagne 2011). It illuminates the programme's strengths and shortcomings, establishes a connection between the programme's design and the achievement of intended objectives, and highlights contextual factors (Brousselle and Champagne 2011; Rey *et al.* 2012). Logic analysis examines: "(a) the important characteristics the interventions must have to achieve the effects and (b) the critical conditions required to facilitate the implementation and produce the effects" (Rey *et al.* 2012:63). There are two types of logic analysis: direct and reverse (Rey *et al.* 2012). Direct logic analysis examines the intervention's essential characteristics and important conditions

that result in planned or unexpected consequences. It shares significant parallels with the realist approach, which establishes connections between context, mechanisms, and outcomes through the use of current scientific and empirical literature (Pawson and Tilley 2004).

The second approach to programme theory is contribution analysis. Contribution analysis is an effect analysis approach. It investigates the contribution, rather than the attribution, of a complex programme to predicted outcomes and consequences in complex environments, using plausible causal assertions (Brousselle and Buregeya 2018:157). Six critical phases comprise the contribution analysis process: 1) defining the cause-effect issue to be addressed; 2) developing the postulated theory of change and assessing its risks, including competing explanations; 3) assembling and evaluating evidence supporting the theory of change; 4) assembling and assessing the contribution claim and assessing its challenges; 5) acquiring additional evidence; and 6) revising and strengthening the contribution story (Mayne 2012:272). Its objective is to use systematic investigation to derive a plausible link between the programme and a collection of relevant outcomes (Lemire, Nielsen and Dybdal 2012:295). According to Dybdal, Nielsen, and Lemire (2010), contribution analysis establishes the programme's contribution by establishing the postulated theory of change, identifying critical threats to impact pathways, establishing additional contributing factors, and evaluating the major competing explanations. It takes uncertainty into account while evaluating complex dynamic programmes. To infer causation for the programme, five conditions related to the embedded theory of change must be met: 1) the plausibility of the theory of change; 2) its implementation as stated in the theory of change; 3) evidential confirmation of critical aspects; 4) discovery and study of additional influencing factors; and 5) the extent to which important alternative explanations have been refuted (Mayne 2011:7).

The third approach to programme theory is the realist evaluation which examines complex programmes by delving into what works, for whom, and under what conditions (Pawson and Tilley 2004). Realist evaluation entails four critical steps: 1) expressing the programme hypotheses to be evaluated; 2) gathering data to test the hypotheses; 3) testing the hypotheses; and 4) evaluating and revising them (Pawson and Tilley 2004). It elucidates the implicit or explanatory theory that underpins the programme and its numerous components, and it finds contextual elements that

catalyse change pathways that result in desired outcomes. It is an inquiry logic that illuminates the underlying programme theory that underpins the inherent characteristics of programme implementation (Pawson and Tilley 2004) in order to investigate the generative mechanisms associated with the programme (M), the contexts in which the pathways operate (C), and the ways in which outcomes occur (O). According to Pawson and Tilley (2004), context–mechanism–outcome (CMO) configurations facilitate the investigation of recurrent patterns in the midst of complex social realities by providing in-depth explanations of causal pathways. This enables the evaluator to explain the programme's theory to be investigated and test hypotheses in order to generate transferrable recommendations and to influence both decision-making and evidence-based policy-making processes.

This study adopted a realist evaluation approach in order to identify the contexts in which the pathways function in addition to developing a programme theory framework addressing the mechanisms and anticipated outcomes of research support.

The use of the realist programme theory evaluation approach to investigate recurrent patterns in the midst of complex social realities is also evident in the literature. Maxwell (2018), a Bournemouth University doctoral graduate, conducted a study to address the gap of a lack of understanding of how interprofessional student-run clinics (SRC) operate or the processes and outcomes of interprofessional education within them. This was done through a realist evaluation of a SRC. Clinic documentation was analysed and realist semi-structured interviews were conducted with 25 key stakeholders (student leaders, volunteers, and faculty clinicians) within one SRC between June 2015 and February 2016. Analytic induction and framework analysis were used to link the threads of critical contexts-mechanisms-and-outcomes. The study discovered that a realism approach was effective in elucidating how an interprofessional SRC functions, and that the generated programme theories had the potential to aid in the development and evaluation of SRCs (Maxwell 2018:iv).

Lentsa (2019:ii) used the realistic evaluation approach to elucidate and analyse the underlying assumptions of South Africa's basic education policy. Following a document-based study, Lentsa's (2019) thesis utilised realistic evaluation as an analytical tool to deduce the CMO and construct a programme theory that revealed the assumed causal relationships between inputs and outputs intended to address the

policy problem of a lack of access to quality basic education. Following that, the basic education policy's assumptions were examined using the realistic evaluation question of what the basic education policy assumes “works, for whom, and under what circumstances”. The study applied a qualitative approach to evaluate the theory underpinning the basic education.

Craig (2020:6) also stated that their qualitative longitudinal study adopted a realist programme evaluation approach to consider what works for whom and in what context, in relation to implementing practice change in line with policy ambitions. Participants' understandings of the change process and their attributions for successful changes were explored over a 17-month period. CMO configurations, as entrenched in the realist programme theory approach, were constructed and refined through three tranches of focus groups (4), interviews (23), observations (50 hours) and documentary analysis (16 documents) to provide a robust explanation of how knowledge drawn from a learning activity was mobilised across a complex adaptive system of health and social care. Following that, the research commends the realism approach for its ontologically thorough examination of the factors influencing individuals and collectives as they tried to generate, exchange, and utilise knowledge in order to effect change in practice. Additionally, the realist approach created a place for participants to reflect on and deconstruct their experiences, situating them within the context of how events unfolded throughout the larger system across time.

In essence, theory-driven evaluation, including the realist programme theory approach, includes two essential components: conceptual and empirical. Theory-driven evaluation explains a programme theory or model conceptually. Following that, an empirical method to theory-driven assessment is used to explore how programmes generate the desired or observed outcomes. The conceptual element of programme theory-driven analysis is the subject of this chapter. However, in this chapter, the construction of a programme theory analytical framework takes into consideration Rogers' (2008) perspectives for more contextualised, complete, ecological programme theory models. Such programme theory, as stated earlier, deviates significantly from the more basic linear models. The goal is to incorporate systems thinking into programme theory, taking into consideration contextual and other elements that might impact and operate on programme processes and outcomes.

In light of the above discussion about realist evaluation, which studies programmes by considering what works for whom and in what context (Craig 2020:6), it was important to construct an analytical framework for this study detailing these CMO configurations. The CMO configurations, as guided by the realist approach to programme theory, suggest a need to begin by identifying the various contexts under which research support in South African higher education is or ought to be provided. Studying these contextual conditions, especially from the South African higher education policy perspectives, is important as policies and legislations may direct or limit the extent to which such support can be provided by HEIs. These contextual elements, including policies such as redress policies establish how, when and to whom such support should be provided. Thus, within the scope of this study, contextual background encompasses the institutional and national policy framework regulating issues of higher education.

3.3 HISTORICAL AND POLICY CONTEXT OF SOUTH AFRICAN HIGHER EDUCATION

The point of departure when developing a realist analytical framework is to consider the CMO configurations in which the context is the starting point. Therefore, the investigator embarked on a review of the literature and policy documents to establish “in what context” is research support in South African higher education provided or ought to be provided (Craig 2020:6). Hence, the circumstances in which higher education policy is developed and implemented are considered crucial in the development of such a framework since such legislations or policies direct or limit what higher education institutions (HEIs) can or cannot do. Therefore, most higher education policy interventions in South Africa are developed as a response to the political, social, and historical dynamics of the country. For example, there has been a growing need to transform the higher education sector in order to address the imbalances of apartheid, which inevitably directs how resources should be distributed among different people of different races. Therefore, contexts are essential in programme evaluation because they explain why some mechanisms can be activated, while others cannot. It is also critical to be aware of contexts, since contexts allow us to learn which mechanisms create which outcomes (Lentsa 2019:45).

Therefore, as stated above, the major contexts underlying the South African higher education system are political, historical, and social. The circumstances of historical inheritance and economic situations influenced how and when development attempts emerged. These settings also help to explain why particular priorities were included in higher education policies, as well as the logic behind policy activities. Therefore, understanding these contextual conditions may enhance our understanding of why some research support programmes in South African HEIs are designed as they are.

3.3.1 Transformation of the South African higher education sector

Most research support interventions in the country's higher education sector are designed to bring about transformation within the sector. The South African DST is tasked with improving research in response to the country's challenges. This requirement is based on the White Paper on Science and Technology published in 2013 (DST 2013). In line with the aforementioned, the NDP (2011:289), which is the country's major economic plan, emphasised the necessity for the national systems of innovation to work in a cohesive and coordinated way with broad shared objectives that are linked with national priorities. This is consistent with the recommendation of the Organisation for Economic Co-operation and Development (OECD) framework for policy coherence, which recommends the use of existing coordination structures to guide sustainable development integration (OECD 2015:18).

As suggested by the DHET, the DST plays a significant role in focusing national policies on increasing research and innovation and improving research quality (DHET 2013:34). It defines innovation as the practical application of innovative new ideas, which often entails the introduction of innovations into the marketplace (DST 1996). This point of view validates the importance of applied and basic research in the natural and social sciences, to innovation and, as a result, social and economic development. As a result, the DST promotes the country's science and innovation by developing science, technology, and innovation policies, funding research and development (R & D) in South African public research institutes and higher education institutions, and establishing new institutions and instruments with the goal of maximizing science's impact on society (SAccess 2013).

Taking into account the legacy of apartheid, the above should be carried out within the context of South Africa's higher education transformation. Inequalities, equity, and redress are all key aspects of transformation. According to Keet and Swartz (2015:8), in a Transformation Barometer for South African Higher Education discussion document, the figures that indicate the extent of change in staff demographic profiles at universities since 1994 are stark and extremely jarring; they suggest that painfully little has been done, at least not on a systematic (system-level) basis, by higher education's leadership, to “grow” black academics of all genders. As a result, transformation inertia has spread across the national system. However, the need to secure government subsidies, as well as the NDP's call for prioritisation of efforts to ensure appropriate redress programmes for skills development, coupled with equitable opportunities for productive and gainful employment of previously disadvantaged groups (National Planning Commission 2011:52), compels the provision of research support programmes. Therefore, some legislations and strategies such as the NDP guide the distribution of resources aimed at supporting researchers to focus mainly (not solely) on the previously disadvantaged groups of academic staff within the context of transforming the South African higher education sector. Therefore, this implies that when evaluating the Unisa research support programmes, the evaluator needs to understand the limits and opportunities posed by this contextual background.

3.3.1.1 Redressing the apartheid legacies

The current state of higher education in South Africa may be ascribed primarily to the legacy of apartheid education policies. As a result, the education system of South Africa diverged considerably from that of other nations. The extent to which racially entrenched attitudes and the institutionalisation of discriminatory behaviours lead to considerable inequities in higher education, a mirror of society's fragmentation and inequality, is one such differentiating trait (Engelbrecht 2006). Higher education was a highly contested sector during this time period. This resulted in an obdurate legacy of social and economic disparities, which was backed by a complex skein of discriminating political and cultural attitudes, dispositions, and orientations. Despite the uncompromising obstinacy, which likely contributed to disagreements over the

ideal of transformation (Development Bank of South Africa 2010), the post-1994 government administration continued to devise ways to reform the higher education system.

Discriminatory measures, it may be said, have been removed with the end of apartheid. Transformation has been a major topic in the country, where justice and recourse are seen as critical to achieving transformation. Access to affordable, high-quality higher education, in this perspective, is important for promoting acceptable notions of justice and redress (Akoojee and Nkomo 2007:386). As a result, research support aimed at redressing historical injustices by giving black academics the opportunity to become professors became a major focus.

Research support, it should be noted, would also address what Mr Majola, Chairperson of the South African Human Rights Commission (SAHRC), regarded as the academic profession's challenges in South Africa. Among these were a failure to recruit and retain black, particularly female academics, an aging academic population, a failure to promote African languages as academic languages, and insufficient staff development. Additionally, there are challenges associated with leadership and governance capacity in higher education institutions, including the inability of many of their councils to provide appropriate leadership, insufficient accountability for the implementation of transformation policies, and institutional corruption (SAHRC 2021). Within this perspective, research support in South African HEIs should be understood as being provided within the context of redressing the above apartheid legacies.

3.3.1.2 Socioeconomic inequalities

Apartheid's legacy has arguably resulted in socioeconomic disparities in the country. Poverty, unemployment, and income disparities, which defined apartheid South Africa, have continued to affect the development of higher education policy in the post-apartheid era. The apartheid education system was designed to function within a system in which a certain percentage of the population was poor. According to the OECD (2012:32), poverty has a direct impact on the affordability, access to, and potential benefits of education. Other inequalities occur, independent of race or gender, and are sometimes exacerbated by them, according to the White Paper on Post-School Education and Training (Department of Higher Education and Training

2013:5-6): differences based on socioeconomic position, ability/disability, or health status (particularly HIV/AIDS status). People born and raised in disadvantaged rural regions have fewer chances than those raised in metropolitan areas, and those raised in townships and informal settlements perform worse than their suburban counterparts.

The White Paper also identifies youth as the primary sufferers of rising unemployment and as the DHET's primary priority. Historical injustices must be addressed if we are to progress toward a more equitable and stable society. Education, and by extension, research support, has long been seen as a means of alleviating poverty and fostering equality of opportunity. Greater social justice is inextricably linked to equal access to quality education and upskilling for all segments of the population.

The above arguments reinforce Taylor and Yu's (2009:1) assertion that South Africa's development agenda prioritises emancipating people from poverty and transforming current patterns of inequality. Much hope is sometimes placed on education as a means of overcoming the disadvantages of one's background and escaping poverty. The rationale behind this is frequently framed in terms of the human capital model, which holds that education increases an individual's productivity, which is rewarded on the labour market through higher earnings. However, there is a circularity in the link between socioeconomic status and education, since it is widely established that one's socioeconomic situation has a significant impact on one's educational success, as the above authors explain. However, research support for academics within the framework of higher education is assumed to help break the vicious cycle of stagnation experienced by the majority of black academics who come from historically underprivileged homes.

3.3.1.3 Lack of capacity in South African higher education

Despite the historical context, research support in South African higher education is guided by the need to capacitate the sector. Mouton *et al.* (2019:2) note in a study titled *The State of the South African Research Enterprise* that the country's research capacity is insufficient and must be enhanced urgently. This argument is illustrated starkly by the fact that comparator nations have on average twice as many full-time equivalent researchers per 1 000 employees and three times as many per million

people as South Africa. Our poor investment in R & D, they state, is reflected in South Africa's low rankings on the measures of research capacity in 2015. Despite significant progress in extending the doctoral pipeline over the last 15 years, the ratio of doctoral graduates per million of the population remains much lower than worldwide standards.

A lack of research capacity is one of the barriers that prevents developing-countries' HEIs from doing effective and necessary research. Africa generates less than one percent (1%) of worldwide scientific papers, underlining the need for growth in this domain. This lack of ability might be attributed to a lack of advanced degree-holding employees, inadequate research and publication abilities, and/or working in an institution with a weak research culture. Alternatively, it might be owing to a lack of retention of personnel who are capable of publishing but leave due to low salaries, inadequate resources and infrastructure, or a lack of career pathing, resulting in a "brain drain". One approach for universities to solve this situation is to provide quality education and opportunities for continued professional development for current academics (Frantz *et al.* 2014:1217).

The White Paper on Post-School Education and Training (DHET 2013) establishes recommendations for improving the ability of the post-secondary education and training system to fulfil the requirements of the country and for integrating the various components of the post-secondary system. Key aims include enhancing administration and governance of higher education institutions from their prior positions, boosting teaching and learning quality, expanding training responsiveness to local labour markets, improving student support services, and building college infrastructure.

The capacity crisis in South African higher education affects more than just employees' ability to produce research outputs. It also has a detrimental influence on the provision of high-quality education to students. As discussed in Chapter 1, the relationship between research and teaching is one of "symbiosis", with research aiding teaching by prescribing best teaching practices. Thus, academics who do not constantly engage in research activities are unlikely to improve as lecturers. Such an argument was recently made in Nyamupangedengu (2017), who examined the factors affecting students' achievement in South African higher education. Her study discovered that the majority of student protests in South Africa were sparked by factors affecting

students' performance, such as a lack of transformation and the manner in which universities deliver their courses, which does not adequately cater for the increasingly diverse student body. The primary educational challenge was not the variety of the student body, but rather the institution's and individual's failure to tailor standard teaching and learning procedures to the realities of the vast majority of today's students. These failures were primarily due to ineptitude on the part of lecturers (Nyamupangedengu 2017:113). Research support is therefore seen to have the potential to improve universities' teaching and learning by allowing academics to conduct rigorous research, which will then improve their teaching and learning abilities and methods.

Therefore, in light of the realist evaluation which examines complex programmes by delving into what works, for whom, and under what conditions (Craig 2020:6), the above discussion has provided a context under which research support in South African higher education is provided. These contexts guide and limit the degree to which research support is provided. As such, the evaluation of research support programmes should be understood within the framework of these contextual conditions.

3.4 INTERVENTIONS TO SUPPORT RESEARCHERS

The second phase of developing a realist analytical framework to programme evaluation entails reviewing the literature to formulate assumptions about “what works” (Craig 2020:6) or what mechanisms (inputs and activities) are necessary to achieve particular programme outcomes. According to Lentsa (2019:51), performing programme evaluation entails discovering the intended mechanisms or interventions (inputs and activities) of programmes. Understanding mechanisms entails determining how resources, opportunities, and ideas are meant to influence subjects' reactions. Furthermore, the author believes that programmes only operate (have effective results) when they provide relevant ideas and opportunities (interventions) to groups in appropriate circumstances. Therefore, the next section is a postulation of what mechanisms, if applied within the context previously described, would generate certain anticipated outcomes.

3.4.1 Funding for research

The review of the literature points to research funding as the main element of research support. Madue (2011:88) claims that research funding allows researchers and higher education institutions to engage in the global community of research and technological development. Through recurring funding and grants, institutions of higher learning all over the world invest substantially in research and research infrastructure. Hence, this section of the analytical framework discusses characteristics of research funding that may be beneficial in achieving specific targeted objectives of research support programmes.

According to Jonkers and Zacharewicz (2016:12), research funding is often distributed in two ways: project funding and organisational-level funding. Project funding is the sum of national budgets in a given country, attributed to a group or an individual to carry out an R & D activity limited in scope, budget, and time, normally on the basis of the submission of a project proposal describing the research activities to be carried out. The other traditional method of providing public support for research is through organisational-level financing of universities and public research organisations. Funding at the organisational level is the sum of national budgets in a given country attributed to a research performing organisation (university), with no direct selection of R & D projects or programmes, and for which money the organisation has more or less freedom to define the research activities to be performed. Non-competitive block money can be given at the organisational level. This block financing may be designated to a considerable degree for specific expenditures such as infrastructure or researcher salaries, particularly in research systems where permanent researchers are public officials. However, the institution may use its own judgment in distributing a non-earmarked portion of its block funds to research activities.

Organisational money may also be given in a flexible or competitive manner, for example based on ex-post assessments of university production and performance. Performance-based financing is defined as the latter sort of competitively distributed organisational-level funding. As previously stated, many nations, including South Africa, have introduced some kind of performance-based financing during the last decade(s), and the proportion of organisational-level funding that is distributed

competitively on the basis of performance evaluations has grown (Jonkers and Zacharewicz 2016:12).

Generally, the literature appears to agree on research funding and resource availability as the primary mechanisms of research support programmes (Arora and Gambardella 2005:91; Chudnovsky *et al.* 2008:86; Gush *et al.* 2018:227; Jacob and Lefgren 2011:1168; Jaffe 2002:22; Wills *et al.* 2013:4) to achieve particular research objectives. This, as stated earlier, was found to be the case in the NZ Marsden Fund in which the financial support provided to research teams resulted in a 6% to 15% increase in publications and an 11% to 22% rise in citation weighed papers (Gush *et al.* 2018:227).

Such research funding is particularly necessary to effect certain research opportunities and activities. Library support services (Haddow and Mamtora 2017; Hill 2016; Keller 2015; Milne and Davernport 1999; Sewell and Kingsley 2017; Zhao 2014), course fees (Black and Bonner 2011:166), laptops, and technical assistance are examples of resources that demand this need for research funding. Course fees, of course, typically apply to academic staff members who are still pursuing postgraduate studies. Other resources, such as research equipment, professional and technical support, and language editing, are relevant to all types or stages of research. Academic employees in most institutions of higher learning do not always require funding for library services, unless in rare circumstances, such as when universities do not maintain on-campus libraries that provide free services to staff.

In addition to the above, some writers emphasise the significance of research funding for academics to attend research workshops and conferences. These activities are seen to be significant for academics' professional growth. Jenkins (2015:156) agrees, citing conferences as giving opportunities and areas for learning and professional development, such as evidence-based practice and current awareness, obtaining new information and perspectives, and networking. As part of the programme theory framework for research support programmes, funding may therefore be utilised to enable additional research inputs and activities (infrastructure, time available to do research, and access to research networks).

The importance of research funding was emphasised further in a policy brief published by the Cape Higher Education Consortium (2014:3), that recommended that

comprehensive funding packages covering the full cost of research (including time off for data collection, analysis, and writing up theses) be provided in order to maximise research training and development opportunities for individual students and emerging researchers. Given the fact that highly successful postgraduate programmes incorporate extra activities, comprehensive financing packages enable students and novice researchers to participate in research forums while concentrating on their research work.

Mouton *et al.* (2019:2) recently complimented the funding approach for South African higher education research for the increase in the actual number of doctoral graduates from 972 in 2000 to 2 794 in 2016. This indicates that the average number of doctorates awarded per million people grew proportionately from 21 in 2000 to 49 in 2015. Additionally, they assert that this growth was most likely fuelled by both national strategies and interventions and changes to the DHET funding framework for research at South African institutions. In 2005, the framework was amended to include research master's and doctoral students under the subsidy structure. Universities are increasingly receiving large subsidies for producing research graduates. Thus, the growth in numbers during 2008/9 demonstrates that the research funding in the form of an incentive programme has been highly beneficial. Therefore, the realist analytical framework assumes that research funding is necessary to effect certain opportunities, such as access to infrastructure, making time available for academics to engage in research activities and for enabling them access to research networks and mentorship.

3.4.2 Infrastructure, equity and access

The South African Research Infrastructure Roadmap (Wood *et al.* 2013:1) defines Research Infrastructure (RI) as the facilities, resources, and services used by scientists across all disciplines to conduct cutting-edge research for the generation, exchange, and preservation of knowledge. It encompasses large-scale facilities, individual instruments or sets of instruments, collaborative networks, and knowledge-rich resources such as collections, archives, data, as well as biobanks. The authors state that RI can be "single-sited," "distributed," or "virtual" (the service being provided electronically). Thus, a national RI provides a service to research in the following ways:

- Awards free open access to users selected through a world-class peer-review competition;
- Encourages users to publish/share their research findings in the public domain;
- Manages access for proprietary and/or training purposes as a distinct and, in most circumstances, marginal activity; and
- Has a defined national emphasis as a purpose and goal; for example, to recruit at least 30% of selected users from non-host (non-owner) nations.

The relevance and strategic importance of RIs stems from the diverse roles they play in all of the science and technology (S & T) areas identified for a South African RIs Roadmap. These are the following roles:

- RIs serve as catalysts for scientific advancement. RIs become critical tools for performing experimental research (in fields such as astronomy, oceanography, particle physics, and material sciences, for example) since they speed up or even enable the generation or confirmation of scientific information in a particular field.
- RIs serve as catalysts for advanced technology development. Typically, developing a new RI entails developing or optimising new technologies and technical procedures during the building and operating phases. Many of these technologies subsequently find valuable uses in other sectors, such as health or security.
- Economic growth is accelerated by RIs. Due to the advanced activities facilitated by the RIs' rich environment, RIs (including those in the humanities and social sciences) are critical determinants of competitiveness and critical to "science-based innovation". Specific industrial programmes and increased collaboration between universities and industry are critical components.
- RIs serve as drivers for global collaboration. Certain RIs are too large and expensive to be supported by a single country; moreover, even when economic resources are available, the requirement to access global scientific knowledge necessitates and also provides an opportunity for international cooperation.
- RIs act as accelerators for building territorial cohesiveness. RIs contribute to regional economic growth by attracting skilled workers and high-tech investments. They then add value by increasing expenditures in

complementary infrastructures such as transportation, education, health, communications, and culture (Wood *et al.* 2013:3).

Despite the above, in South Africa the digital divide is a major concern (Lourie 2017), with some parts of the population having access to information technology, allowing them to pursue better career and educational opportunities, greater personal progression, and fuller access to social networks, while others do not (NGO Pulse 2020). Infrastructure development thus ensures that everyone has equitable access to the resources needed to conduct research, such as laboratories and information and communication technologies.

Science, technology, and innovation (STI) is an important element of South Africa's national development strategy and has been highlighted as a driver of socioeconomic transformation. The need to invest strategically in STI and execute programmes that support research excellence and human capacity development successfully is critical to realising a transformed society. Research equipment and infrastructure are critical components of the STI value chain. Given this critical role, the South African government invests in and organises research infrastructure platforms in support of the STI agenda through the DST and the NRF. For example, the creation of the South African Radio Astronomy Observatory (SARAO) consolidates South Africa's efforts in radio astronomy, cementing the country and continent's position as a significant participant in the field. With limited financial, human, and physical resources, regional RI cooperation is becoming increasingly important in Africa (Ramoutar-Prieschl and Hachigonta 2020:vii-1).

As illustrated, research facilities are a fundamental and essential component of the STI ecosystem. They serve as a hub for the creation of new knowledge and innovation. Large universities, such as Unisa, are made up of several colleges, such as the CAES and the CSET, as well as various specialty areas, such as science and technology innovation. As a result, some areas, such as science, technology, engineering, and mathematics (STEM), rely on advanced tools to conduct research. Research support that lacks the essential resources, including infrastructure (Volmink and Dare 2005:705) is therefore deemed to fail. Gamade *et al.* (2020:3) emphasise the significance of infrastructure for research, observing that although some laboratory trials would be impractical during a pandemic like COVID-19, virtual laboratories and

remote control laboratories, on the other hand, are excellent alternatives for the aforementioned studies. Therefore, the realist analytical framework's assumptions are that research funding should be targeted at enabling access to RI.

3.4.3 Time available for academics to conduct research

Researchers operate in a complicated setting with a variety of roles and responsibilities. Distractions are common in the academic setting, and they can impede research productivity and efficiency. In my view, this situation is much worse in ODL institutions where lecturers have more teaching, research and administrative responsibilities. Effective time management enables researchers to stay focused on their jobs, which may increase their research output. Thus, strengthening time management skills is critical to creating and maintaining a successful research programme (Chase *et al.* 2013:155).

Reduced teaching loads, proper time allocation, and fewer teaching preceptors are probably the most common or widely accepted mechanisms to support researchers (Balakrishnan 2013:8; Buchheit *et al.* 2001:17; Erkut 2002:115; Fowler *et al.* 2009:174; Rosentreter *et al.* 2013:24; Wills *et al.* 2013:4). This might avoid the undesirable situation in which the teaching load has a detrimental influence on research since most universities are teaching universities, resulting in universities struggling to manage their strategic goals (Balakrishnan 2013:8).

It is critical not to overlook the significance of teaching in the context of research. Research and teaching have a mutually beneficial relationship (Nguyen 2016:11). This idea is backed by the complementary role theory, which claims that time spent preparing for classes may benefit research practice by fostering the development of complementary knowledge and skills. Other academics, on the other hand, have suggested that a balanced dedication to diverse jobs is likely to have an invigorating effect on all activities. This viewpoint implies that there are non-linear connections between time spent on alternative roles and research output, with moderate involvement in alternative roles linked with the highest levels of performance (Mantikayan and Abdulgani 2018:4). However, most higher education institutions' current situation exemplifies the time scarcity hypothesis, which holds that devoting time and attention to one job must come at the price of success in another. According

to this viewpoint, time spent in any job other than research is adversely and linearly connected to research performance (Mantikayan and Abdulgani 2018:4).

As a result, writers such as Black and Bonner (2011:166) advocate for mechanisms, such as study and research leave, to address the issue of time. Sabbatical leave is defined as a term of paid leave provided to a university academic staff member for study or travel, usually one year for every seven years worked (McDermid 2013:3). The authors go on to say that for university employees, time off is expected to be spent on academic accomplishments and activities such as research, study, and writing. In reality, sabbaticals are frequently granted based on such declared aims and objectives. The above views support Iravani's (2011:3610) claim that leave, such as a sabbatical leave of absence, has a variety of positive, observable, and non-observable consequences. The author suggests that, in addition to the scientific consequences of sabbatical breaks, one can pursue personal scientific interests while enjoying work independence, which leads to motivation and job satisfaction. Therefore, the assumption of the realist framework is that research support programmes are effective as long as they allow academics time to focus on research, either through research leave or through the reduction of teaching and/or administrative workload.

3.4.3 Access to research network and mentorship

Mentorship programmes in higher education, according to Ismail and Jui (2014:13), have two key components: communication and support. According to the authors, mentors' ability to communicate effectively with and encourage their mentees may contribute to mentee success, particularly their academic achievement. Anekstein and Vereen (2018:1) emphasise the relevance of mentorship in enhancing research productivity. They view research mentoring as a critical component of emerging academics' preparation. The authors discovered that mentoring contributes significantly to the development of doctoral students' and emerging researchers' research ability and productivity through their review of the literature on research mentorship in counsellor education and related fields.

The above corroborates the points made in Chapter 2 that access to research networks and mentorship are essential components of research support programmes (Buchheit *et al.* 2001:17; Wills *et al.* 2013:4). To recap, Buchheit *et al.* (2001:17)

discovered that increasing the number of outside consulting and mentor relationships resulted in considerably improved research productivity. Wills *et al.* (2013:4) showed that having peers who published had a favourable influence on research output and productivity.

Within the framework of higher education, there are several methods for networking and giving mentorship to developing scholars. Research workshops, conferences, and mentorship programmes are examples of these mechanisms. Conferences, according to Rowe (2018:714), are usually thought to encourage information sharing and exchanges among participants, as well as to assist formative higher education and continuing professional education. From this point of view, conferences may be viewed as excellent networking opportunities for inexperienced researchers to learn from and develop long-lasting relationships with seasoned academics in their subject areas. The notions of conference networking and information sharing are generally accepted, and they are backed by established theories of experiential learning, legitimate peripheral participation, and communities of practice (Rowe 2018:715).

The function of networking through conferences has been shown to be beneficial in a variety of ways. This is a sentiment mirrored by Oanda (2014:91), who believes that first, research collaboration conversations are likely to take place mostly throughout the African continent. Another explanation is that there is a growing sense in which large research topics and methodologies are defined and framed at the global level. Therefore, this study's analytical framework assumes that academics research output and productivity will be enhanced through programmes in which funding is directed to provide access to research mentorship or networks opportunities. This could be through enabling academics to attend research workshops and conferences.

3.5 INTENDED OUTCOMES OF RESEARCH SUPPORT

The realist evaluation framework is based on the assumption that if certain mechanisms are implemented within a specific context, they should lead to certain observable outputs or outcomes. As such, this study has already discussed the contexts which, if certain mechanisms are implemented, would result in certain observable outcomes. The assumptions about the possible outcomes are discussed in this section. As previously mentioned in this chapter, the assumed programme

theory approach's outcomes can be represented as expected changes in knowledge, skills, capacities, and behaviour. In this chapter, it was also said that the outcomes of inputs, actions and outputs are the anticipated changes that occur, directly or indirectly. This chapter defined intermediate outcomes as behavioural changes (e.g. work ethic and professionalism) that are expected to lead to changes in long-term outcomes, such as increased employee motivation, loyalty, or satisfying the requirements of a programme's target population (e.g. enhanced research output). As a result of analysing policy papers and the literature, the assumed outcomes to be achieved through implementing the research support mechanisms already discussed, include improved research output, an increase in the number of employees with master's and doctoral degrees, staff retention and staff motivation.

According to Lentsa (2019:59), outcomes result from actions cultivated in certain circumstances. The process of causality that leads to outcomes is stated as follows: outcomes = mechanisms + contexts. Following this logic, the outcomes of research support mentioned in this chapter indicate the anticipated outputs of implemented treatments (inputs and activities) such as research funding, access to research infrastructure, and access to research networks and mentoring.

3.5.1 Enhanced research output

Most universities, including Unisa, strive to promote and improve research performance across disciplines by making considerable investments in resources and support for researchers. As a result, research outputs are critical indications of the efficacy of research support programmes (Unisa 2018f:3). An increase in the availability of resources is expected to boost academic research outputs, as such; failure is viewed as a waste of such resources. As a consequence of the interplay between the above discussed context and mechanisms, academics are anticipated to have improved research output, or research skills and knowledge at the conclusion of the programme. These academics' research outputs may be seen in the form of journal articles, technical reports, books, book chapters, and supervision of postgraduate students until completion (Okafor 2010:181).

The relationship between research support and research output and productivity is illustrated in Fuad and Rosyidi (2019:123), who discovered that several institutional

elements have a substantial impact on academic staff's research productivity. These factors, which include research training, staff support, technical assistance and guidance, resources, awards, workload, research culture, research emphasis, tenure and promotion, financial awards, performance standards, and peer and social recognition, all have an effect on research output. Within this context, research support focused on the aforementioned, with the goal of increasing academic staff's research output, is regarded as a solution.

Academic research has extensively demonstrated the possible effects of appropriate research support. Pulford *et al.* (2020:7), for example, identify enhanced research output as one possible outcome indicated as the number of articles published in peer-reviewed journals, the number of conference papers, the number of citations, and publications in journals with a high impact factor index. This finding is consistent with the findings from a study examining whether a significant increase in public funding for researchers results in a major difference in their output. In that study, Fedderke and Goldschmidt (2015:467) discovered a positive correlation between substantial funding and increased research output when they compared researchers with similar scholarly standing who did not receive such support to researchers with similar scholarly standing who received substantial funding. Thus, this study's analytical framework assumes that if research support through funding leading, *inter alia*, to enabling access to research training, staff support, technical assistance and guidance, access to research resources, awards, and workload reduction, such mechanisms would result in enhanced research output of academic staff.

3.5.2 Increased number of staff holding postgraduate qualifications

Given the context in the South African higher education sector, such as inequalities and a lack of capacity, support mechanisms such as research funding, making time available to conduct research, access to research infrastructure and research networks are expected to contribute to an increase in the number of university staff with postgraduate qualifications. The MDSP initiative given by Unisa, for example, aims to achieve equality and reparation by offering targeted support to members of staff in general, and especially to black, female, and disabled academics seeking master's and doctoral degrees. Such support is in line with Section 29(1) of the

Constitution of South Africa (South Africa 1996) with regard to the right to accessible higher education, that institutions of higher learning, through reasonable measures, are expected to make progressively available and accessible.

The aforementioned constitutional imperative, as well as the NDP's call for the prioritisation of efforts to ensure appropriate programmes for skills development, coupled with equitable opportunities for productive and gainful employment of previously marginalised groups (National Planning Commission 2011:52), have necessitated research support. These appeals were made in anticipation of the expected outcomes of a trained workforce in universities. As a result, the intended outcome of research support programmes should be an increase in the number of university employees with postgraduate credentials. Such an outcome may be measured by examining whether the support mechanism contributed to academic staff completing their master's and/or doctoral courses successfully. Thus, in addition to research outputs as an anticipated outcome, the assumptions made in this study's analytical framework are that when the support mechanisms mentioned earlier are provided, they should contribute towards helping academics to complete their postgraduate qualifications.

3.5.3 Staff motivation and retention

Staff retention is a process in which academic staff members are encouraged to stay with the university for as long as feasible (Kaur 2017:161). According to research, staff retention is viewed as a strategic opportunity for institutions to maintain a work environment that is competitive and appealing on an industry level (De Long and Davenport 2003; Porter 2011; Schramm 2006). Messmer (2006:13-14) views staff retention as enhanced when employees are provided with competitive salaries and benefits packages, a positive work environment, opportunities to advance and grow, and opportunities to maintain a good work/life balance. Employees leave organisations for a variety of reasons, including tangibles (e.g. compensation and perks) and intangibles (e.g. connection with manager, work/life balance, duties of the job, opportunities to grow) (Oladapo 2014:19-36). These tangibles and intangibles are frequently unsatisfactory, and when employees discover possibilities to join another

institution where the working conditions are more favourable, they frequently do not hesitate to do so (Kates 2006:22-30).

As a result, one of the motivations for offering research support is to keep employees engaged. The degree to which workers find their work meaningful is referred to as staff motivation (Reiljan and Paltser 2015). Motivation is defined as anything that provides conduct direction, intensity, and persistence (Wren 1995:328). When employees see their jobs as meaningful, the chances of that work being internally inspirational increase considerably since the individual believes that their work is important (Wood 2015:23). When personal goals are achieved, they almost always result in improved self-awareness, self-acceptance, and social integration (Sheldon *et al.* 2002:6-31). These are essential qualities of personal development for individuals in positions of leadership. People are affected by alterations in the life-tasks or social responsibilities that they face, write Sheldon *et al.* (2002:6). These typically result in new understanding, the rediscovering of important ideals, or the overcoming of long-lasting ruts (Sheldon *et al.* 2002:6).

Maritz and Roetz (2013:80) discovered that following the coaching and mentoring programme for novice nurse researchers in Africa, there were positive experiences among the researchers, such as increased personal motivation, personal resilience, and innovative methods of research education. Thus, in order to retain academic personnel, universities must inspire them by expanding their possibilities for advancement and growth.

3.6 THE RESULTING ANALYTICAL FRAMEWORK

The following diagram is an analytical framework deduced from the preceding discussion. The diagram provides a representation of the supposed relationship between the realist configurations of contexts, mechanism, and outcomes operating to offer excellent research support in higher education. White (2009:274) defines causal chain as the programme theory framework as to how the intervention is expected to have its desired impact or outcome.

Table 3.1: An analytical framework of research support programmes in South African higher education

| A programme theory of research support in South African higher education | | | | |
|--|---|---|---|---|
| Impact | Staff motivation and retention Staff professional development | | | |
| | ↑ | ↑ | ↑ | ↑ |
| Outcomes | Enhanced research output (journal articles, technical reports, books, chapters in a book, supervision of postgraduate students) Increased number of staff holding master's and doctoral qualifications | | | |
| | ↑ | ↑ | ↑ | ↑ |
| Research support interventions | → | | | |
| | Research funding Course fees, laptops, professional and technical services | Infrastructure, equity and access ICT, laboratory | Time available for research Reduced lecturing and administration workload, research and development leave | Access to research network and mentorship Research workshops, conferences |
| | ↑ | ↑ | ↑ | ↑ |
| Context | Transformation of South African higher education Redressing the apartheid legacies Socioeconomic inequalities A lack of capacity in South African higher education | | | |

3.7 CONCLUSION

This chapter offered a brief overview of the key socioeconomic issues, institutional frameworks, and policy architecture implemented in the South African higher education system after 1994. It has also highlighted issues such as, among others, a lack of capacity and inequalities in higher education, which persist in South African institutions, as the main contexts underlying the provision of research support in the country's higher education system. The chapter has offered an overview of some of the most important research support mechanisms which, if offered within the contexts described above, should lead to certain anticipated outcomes. Such research support mechanisms include research funding, which should lead to opportunities such as access to research infrastructure, access to research networks and mentorship, and making time available for academics to engage in research. The assumption is that if such mechanisms are provided through the programmes, they should lead to outcomes such as increased research output of academic staff, completion of their postgraduate studies and staff motivation.

The suggested framework is not intended to provide a comprehensive framework for research support in higher education. It is essentially a visual summary of the framework gleaned by the researcher from the worldwide and more specifically the South African academic and policy literature on research support, which has been reviewed throughout this chapter. This framework is for the overall system; however, each university's research support programme should have its unique programme theory guided through this framework. Hence, this framework will be used to guide the development of programme theories for the three Unisa research support programmes which will be examined in this study.

The analytical framework of this thesis will be used to develop programme theories which will be used to examine research support programmes at Unisa. This study firmly believes that a rigorous study of the contribution of Unisa's research support programmes towards academic staff research development is required. More learning may occur through the case study regarding the important features, factors, and contexts that contribute to the effectiveness of research support interventions targeted at boosting an institution's total research outputs.

CHAPTER 4

THE CASE STUDY

4.1 INTRODUCTION

The previous chapter served as the theoretical foundation for the conceptual and methodological framework offered in this study. To establish whether the framework is effective, practical, and appropriate, it must be applied within a university context to demonstrate its worth and usefulness for a real-life research support programme's evaluation. Unisa was chosen as a single case study to demonstrate the suggested set of analytical approaches and tools because it provided many of the necessary conditions for the application of the evaluation framework. As stated in the problem statement, Unisa offers a range of research support programmes to its academic staff; however, no scholarly evaluation of such programmes has occurred thus far. As a result, Unisa was selected as an appropriate testing ground for testing this framework for assessing the outcomes and contribution of research support programmes in South African higher education.

Therefore, the primary research support programmes empirically examined using the analytical framework presented in this study included the ones offered by Unisa to its academics through the Research Support Directorate. In particular, the AQIP, MDSP and ODL-RSP programmes were examined. The second chapter covered these programmes. As part of its research support to this current study, Unisa's RPSC granted ethical clearance for this project, provided funds through the MDSP grant, and enabled access to data for the researcher to conduct a complete evaluation of its research support programmes. This study was able to investigate and determine whether the research support provided by Unisa through its research support programmes, contributes to the research development of academic personnel. This study demonstrates the application of the evaluation framework presented in the preceding chapter using a real-life example. This current study employed a theory-based evaluation approach that employs qualitative methodologies as part of the set of methods and approaches proposed in this research.

This chapter, guided by the analytical framework described in the previous chapter, begins with presenting programme theories customised for the three research support programmes that were examined. Furthermore, the chapter will explain data preparation as well as the methodologies and procedures utilised in the qualitative field work for programme evaluation.

4.2 THE THREE RESEARCH SUPPORT PROGRAMMES

After developing the analytical framework for a realist evaluation of research support programmes, this chapter went on to use the framework to create customised programme theories for each of the evaluated programmes. This entailed using the analytical framework as a guide to embed features of each programme to create its unique programme theory. Therefore, the analytical framework developed in the previous chapter, together with information provided in the funding frameworks for each studied research support programme, was used to create programme theories. However, these resulting programme theories differed slightly from the guiding analytical framework as Unisa programmes are geared towards specific outputs and not aimed towards long-term impact as suggested in the analytical framework.

4.2.1 Programme theory for the AQIP

Deduced from the previously-mentioned analytical framework and the funding framework for AQIP (Unisa 2019), the following table constitutes a programme theory for the AQIP.

Table 4.1: Programme theory for the Unisa AQIP

| A programme theory of the Unisa Academic Qualification Improvement Programme | | | | |
|---|---|---|---|--|
| Expected outputs | <ul style="list-style-type: none"> • Successfully complete Research Master's Degree – maximum of 24 months, or less • Successfully complete Doctoral Degree – maximum of 36 months, or less | | | |
| | ↑ | ↑ | ↑ | ↑ |
| Research support interventions | <ol style="list-style-type: none"> 1. Master's (maximum of R55 000 for year 1 and R60 500 for year 2) 2. Doctoral (maximum of R80 000 for year 1 and R88 000 for year 2 and R96 800 for year 3) | <ol style="list-style-type: none"> 1. Technical Equipment (Laptop, Camera, Voice recorder) 2. Software 3. Data collection (Online surveys, Copyright fees, Transcription of Interviews, Fieldwork assistance) 4. Laboratory Services 5. Data Analysis (Statistician Consultations, Co-coding and/or Analysis of Data) 6. Translation 7. Language and Technical Editing | <ol style="list-style-type: none"> 1. Appointment of Substitute Lecturer 2. No inside/outside work 3. Not involved in any learning programmes 4. No student supervision | <ol style="list-style-type: none"> 1. Local Research Training (Accommodation, Transport, Subsistence allowance) |
| | ↑ | ↑ | ↑ | ↑ |
| | Research funding | Research items | Time available for research | Access to research network and mentorship |
| | ↑ | ↑ | ↑ | ↑ |
| Context | <ul style="list-style-type: none"> • Support the transformation of Unisa's research cohort. • Provide limited financial support for qualifying and eligible permanent employees in pursuit of their first research Master's or Doctoral degree. • Prioritise ODL research to position Unisa as a leading provider of higher education through ODL, nationally, continentally and internationally. • Support research focusing on one of the seventeen interconnected SDGs of the UN, as the SDGs are the blueprint to achieve a better and more sustainable future for all, in that they address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. • Restore epistemic, linguistic, gender and race equity, increasing Africanised institutional cultures and systems in pursuit of social justice. | | | |

The above programme theory assumes that if funding is made available to provide Unisa postgraduate student academics with research support in terms of funding for research items, time available to engage in research and access to research networks and mentorship through conference funding, these mechanisms should lead to the completion of their postgraduate degrees within the prescribed period or less. Therefore, the perceptions of Unisa academic staff about the contribution of the AQIP

programme against the anticipated output of obtaining a postgraduate qualification within the prescribed period or less were examined.

4.2.2 Programme theory for the Master's and Doctoral Support Programme

In terms of the analytical framework and the funding framework for the MDSP (Unisa 2021a), Table 4.2 constitutes the programme theory for the MDSP.

Table 4.2: Programme theory for the Unisa MDSP

| A programme theory of the Unisa’s Master’s and Doctoral Support Programme | | | | |
|--|---|---|------------------------------------|--|
| Expected outputs | <ul style="list-style-type: none"> • Successfully complete Research Master’s Degree – maximum of 24 months, or less • Successfully complete Doctoral Degree – maximum of 36 months, or less • Submit journal article to DHET-accredited, high impact, high quality journals after completion of the postgraduate qualification: <ul style="list-style-type: none"> ○ Research Master’s Degree – submission of at least 1 article ○ Doctoral Degree – submission of at least 2 articles | | | |
| | ↑ | ↑ | ↑ | ↑ |
| Research support interventions | 1. Master’s (maximum of R55 000 for year 1 and R60 500 for year 2) 2. Doctoral (maximum of R80 000 for year 1 and R88 000 for year 2 and R96 800 for year 3) | 1. Registration and study fees 2. Technical Equipment (Laptop, Camera, Voice recorder) 3. Software 4. Data collection (Online surveys, Copyright fees, Transcription of Interviews, Fieldwork assistance) 5. Laboratory Services 6. Data Analysis (Statistician Consultations, Co-coding and/or Analysis of Data, Testing of Results) 7. Translation 8. Language and Technical Editing | 1. No exemption from normal duties | 1. Local Research Training (Accommodation, Transport, Subsistence allowance) |
| | ↑ | ↑ | ↑ | ↑ |
| | ↑ | | | |
| | Research funding | Research items | Time available for research | Access to research network and mentorship |
| ↑ | ↑ | ↑ | ↑ | |
| Context | <ul style="list-style-type: none"> • Support the transformation of Unisa’s research cohort. • Provide limited financial support for qualifying and eligible permanent employees in pursuit of their first research Master’s or Doctoral degree. • Prioritise ODL research to position Unisa as a leading provider of higher education through ODL, national, continentally and internationally. • Support research focusing on one of the seventeen interconnected SDGs of the UN, as the SDGs are the blueprint to achieve a better and more sustainable future for all, in that they address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. • Restore epistemic, linguistic, gender and race equity, increasing Africanised institutional cultures and systems in pursuit of social justice. | | | |

The above programme theory assumes that Unisa academics who are also postgraduate students, should be able to complete their postgraduate qualifications in the prescribed minimum period or less and submit at least one or two articles for

master's and doctorates respectively, through the funding. It assumes that these anticipated outputs could be achieved even if the beneficiaries remained engaged with their normal teaching, research and administrative duties. The contribution of this programme towards academic staff was therefore assessed against the stated or anticipated outputs.

4.2.3 Programme theory for the Open Distance Learning Research Support Programme

The ODL-RSP is another programme that was evaluated. Its programme theory, based on the guidance of the analytical framework and the funding framework for the ODL-RSP (Unisa 2021b), is presented in Table 4.3.

Table 4.3: Programme theory for the Unisa ODL-RSP

| A programme theory of the Unisa’s Open Distance Learning Research Support Programme | | | | |
|--|---|---|------------------------------------|--|
| Expected outputs | <ul style="list-style-type: none"> • Successfully complete the 3-year research project. • Produce at least 4 accredited research output units over the 3-year period by submitting journal article(s) to DHET-accredited, high impact, high quality journals during and/or within 12 months after completion of the research project. • Submit at least 2 articles based on their research to The Conversation Africa within 12 months after completion of the research project. • Mentor at least 1 emerging or developing Unisa employee over the 3-year period. • Create a profile on the NRF Online Submission System, if one does not already exist, by registering and uploading their CV. | | | |
| | ↑ | ↑ | ↑ | ↑ |
| Research support interventions | 1. R45 000 | 1. Technical Equipment (Laptop, Camera, Voice recorder) 2. Software 3. Data collection (Online surveys, Copyright fees, Transcription of Interviews, Fieldwork assistance) 4. Laboratory Services 5. Data Analysis (Statistician Consultations, Co-coding and/or Analysis of Data, Testing of Results) 6. Translation 7. Language and Technical Editing | 1. No exemption from normal duties | 1. Local Research Training (Accommodation, Transport, Subsistence allowance) |
| | ↑ | ↑ | ↑ | ↑ |
| | | | | |
| | Research funding | Research items | Time available for research | Access to research network and mentorship |
| | ↑ | ↑ | ↑ | ↑ |
| Context | <ul style="list-style-type: none"> • Support research excellence by providing scholarships for three years to researching leading collaborative, high quality research projects. • Prioritise ODL research to position Unisa as a leading provider of higher education opportunities through ODL and enhancing the competitiveness of Unisa national, continentally and internationally. • Increase the number of employees who generate accredited ODL publications in high quality journals • Address insufficient ODL research as Unisa. • Facilitate knowledge transfer. • Accelerate the development of the next generation of researchers, especially those from the designated groups. | | | |

The assumptions of this particular research support interventions’ programme theory are that, with a maximum budget of R450 000 for three (3) years to cover costs for

research items and travelling for data collection purposes, participants would be able to achieve the following: completion of the 3-year research project, produce at least four (4) accredited research outputs over a 3-year period, submit at least two (2) articles to the Conversation Africa, mentor at least one (1) developing scholar, and create a profile on the NRF online system. The perceptions of staff regarding this programme's contribution towards their research output publications were examined.

4.3 RESEARCH DESIGN

Unisa, Africa's largest ODL institution, was chosen as the single case to be investigated. The researcher conducted interviews with academic employees who were accepted in the above-mentioned programmes between 2013 and 2020. The researcher opted to engage with individuals who had taken part in the support programmes throughout the aforementioned time period to guarantee that the experience was still fresh in their minds (Wood 2015:42). The study recognises time as a key driver of development since various dimensions and features of time in space can have a substantial impact on the development of research capacity (National Development Agency 2016:3). As a result, the above-mentioned time period was carefully chosen to examine how researcher development occurred over time. Time was also an important issue, since about 40% of competencies are transferred in the weeks and months immediately following a training intervention (Wood 2015:17). As a result, there is a good chance that by 2021, participants would have had enough time to use whatever knowledge and skill(s) the research support programme(s) intended, and would be in a better position to reflect on the outcomes or contribution the initiative(s) made.

As this study was performed during the COVID-19 period, when people were supposed to exercise social distancing in South Africa, the interviews were semi-structured Microsoft Teams, Telephonic, and Zoom interviews. These platforms were deemed the most suitable substitutes for face-to-face interviews because they allowed for back-and-forth interaction between the interviewer and interviewee, providing similar advantages as face-to-face interviews. However, the researcher's use of these platforms demanded ensuring the confidentiality and safe custody of the obtained data. This was accomplished by enforcing a password on all devices used, such as

the laptop and cell phone, as well as asking participants to refrain from mentioning their names so that the responses could not be attributed to them in the event that someone other than the researcher gained access to the data.

4.4 CASE SELECTION

Unisa was chosen as a case study because it met several of the requirements for using the evaluation framework. It is the biggest ODL university on the African continent, with an academic staff composition of 1 800 full-time employees (Unisa 2018a:45). The University has established several research support programmes throughout the years in order to improve the research outputs and credentials of its academic staff (Unisa 2017:16-23). The institution is committed to doing research and creating innovative ideas that will address key national and global challenges, while also contributing to South Africa's and the African continent's economic, social, cultural, and environmental well-being (Unisa:n.d). This long-term commitment to research, as well as the need to evaluate, reflect on, and improve its research support programmes, motivated its selection as an ODL case study. Furthermore, Unisa satisfies all of the requirements for an ODL institution.

The chosen participants were academic staff at the university who took part in Unisa's research support programmes between 2013 and 2020. Fixed-term lecturers and those permanently appointed to teach and/or do research at Unisa and any other employee designated as such by the Council (Unisa 2019:2) are examples of academic employees. As a result, research support programmes are available to the above-mentioned employees who satisfy the criteria of a given programme. Unisa typically sends out annual calls for applications to all staff members (depending on funding availability) so that individuals who are interested and eligible can apply.

Academic staff who was participating in research support programmes for the first time during this study period were excluded since they had not yet applied the programme's gains and so were unable to reflect on the programme's contribution(s). Furthermore, academic staff who participated in the programmes before 2013 was omitted from the research because the experience may no longer be fresh in their minds (Wood 2015:17).

4.5 SAMPLING PROCEDURES

To guarantee that participants met the needs of this study, the purposive sampling approach was used. This refers to the deliberate selection of key informants or academic personnel who took part in the programmes between 2013 and 2020. Participants in this category were deemed relevant because they were deemed knowledgeable about the issues under study (the benefits they have derived), providing more in-depth findings than other probability methods (Anney 2014:278).

There was no set sample size for this investigation. Instead, prospective participants from the aforementioned groups who replied to the original e-mail invitation were interviewed. The plan was to conduct interviews until the point of saturation was achieved. After 20 interviews, saturation was achieved.

4.6 DESCRIPTION OF THE PARTICIPANTS

As part of this research project, 20 people were interviewed. The biographical information of the research participants is included in the tables below:

Table 4.4: Participants by gender

| Participants by gender | |
|------------------------|-----------|
| Male | Female |
| 7 | 13 |
| Total | 20 |

The sample comprised more female than male participants.

Table 4.5: Participants by age

| Participants by age | |
|---------------------|------------------------|
| Age group | Number of participants |
| 31-40 | 9 |
| 41-50 | 7 |
| 51-60 | 3 |
| 61 and above | 1 |
| Total | 20 |

The majority of the participants were between the ages of 31 and 40, followed by those between the ages of 41 and 50, and those between the ages of 51 and 60. Only one person was beyond the age of 60, and no one was under the age of 30.

Table 4.6: Participants by race

| Participants by race | |
|-----------------------------|-----------|
| Black African | 17 |
| White | 2 |
| Coloured | 1 |
| Total | 20 |

A majority of participants in this study included Black Africans, followed by Whites and one Coloured participant. This is not surprising, considering that a majority of participants in the programmes were Black. This is probably because of the context underlying research support in South African higher education and at Unisa, as discussed in the previous chapter. In particular, the reason for the large number of Black participants in the programmes could be that Unisa seeks to achieve transformation and reduce inequalities by empowering the previously disadvantaged groups.

Table 4.7: Participants' highest qualifications

| Participants' highest qualifications | |
|---|-----------|
| Honours | 3 |
| Master's | 8 |
| Doctorate | 9 |
| Total | 20 |

A number of participants held Master's and Doctorate qualifications, while a few had Honours degrees.

Table 4.8: Participants by College

| Participants by College | |
|---|-----------|
| College of Human Sciences | 3 |
| College of Law | 3 |
| College of Education | 5 |
| College of Economic and Management Sciences | 6 |
| College of Agriculture and Environmental Sciences | 1 |
| College of Accounting | 2 |
| Total | 20 |

Academics from CEMS and CEDU largely participated in this study. Other participants were from CLAW, CHS, CAED and CA.

Table 4.9: Participants' academic positions

| Participants' academic positions | |
|---|-----------|
| Researcher | 2 |
| Lecturer | 9 |
| Senior Lecturer | 3 |
| Associate Professor | 5 |
| Chair of Department (Associate Professor) | 1 |
| Total | 20 |

The positions held by participants ranged from Researcher, Lecturer, Senior Lecturer, Associate Professor and Chair of Department.

Table 4.10: Participation in research support programme(s) (2013 to 2020)

| Participation in research support programme(s) (2013 to 2020) | |
|---|-----------|
| Academic Qualification Improvement Programme | 6 |
| Masters and Doctoral Support Programme | 10 |
| Open Distance Learning Research Support Programme | 4 |
| Total | 20 |

The types of research support programmes in which individuals participated are depicted in the table above.

4.7 SETTING

Because of various compelling reasons, the semi-structured interviews were conducted over the Telephone, Microsoft Teams, and Zoom platforms. According to

Zongozzi, Sefora and Ngubane-Mokiwa (2019:5), such interviewing platforms are effective in the ODL situation where staff are geographically scattered across many campuses. Furthermore, face-to-face meetings were not permitted owing to the impact of the COVID-19 pandemic, which led to lockdown rules restricting human mobility in South Africa, and the consequent Unisa position statement on conducting research involving human subjects during the pandemic. As a result, the researcher used the telephone and online meeting platforms such as Zoom and Microsoft Teams as alternatives.

4.8 POSITIONALITY

In this study, I took the stance of both a teacher and a learner. Participants are seen as crucial sources for generating programme theory and providing evidence on how the programme operates in the realist approach, according to Pawson and Tilley (2004:12). However, the authors contend that it is not believed that they are all-knowing or that they will always agree on how, for whom, and under what conditions a programme will function. I needed to acknowledge that stakeholders or participants had a general understanding of, and consequently expertise in, specific phases and processes within an intervention. Realist evaluation necessitates data on the process and outcome, as well as on individuals, interrelationships, organisations, and infrastructure. There was a need for a division of labour in terms of information and informants in order to put together this bricolage of data.

The somewhat theory-testing function of evaluation is recognised in the realist interview, and it is this that determines the research relationship. As a result, it is assumed that participants are attempting to respond to the interviewer's interests. Collecting data for evaluation purposes thus entails teaching (often in more or less subtle ways) the participant the specific programme theory under study in order for participants to elicit responses that are relevant to the CMO configuration in question. The participant can teach the evaluator about those aspects of a programme in a particularly informed manner after learning the theory under study (Pawson and Tilley 2004:12).

Therefore, in addition to conceptualising this study, that is developing a defensible and researchable research problem, my involvement as a researcher in this study included

arranging interviews with each participant in order to assure solitary sessions. During the interviews, I focused on the participants' perspectives and avoided injecting any personal biases into their opinions (Wood 2015:49). As the investigator, I decided that I should encourage the discourse or dialogue rather than just asking questions and answering them. Interviews were centred on “what”, “how”, and “why” questions to provide participants with adequate opportunities to express themselves, investigate, and discuss matters of importance to them. This technique was also helpful in allowing individuals to respond in their own "voices". It should be noted that this position was restricted to interviews done over the telephone and via Zoom and Microsoft Teams, which allowed for back-to-back conversations.

Prospective participants expressed their willingness to participate in the study by replying to the initial e-mail invitation to participate. The e-mails of the potential participants were collected via the Unisa Research Directorate and a search from the Unisa personnel directory. In addition, after potential participants consented to be interviewed, I sent them e-mails ahead of their scheduled interview dates, giving them time to prepare for the actual interview. Participants were extremely likely to want to elaborate because semi-structured interviews are open-ended, enable new thoughts to develop, and are therefore adaptable. The problem, though, was that the conversations seemed to deviate from the interview's goal. For example, one participant tended to speak about another capacity development programme provided by Unisa, but which does not form part of the research support programmes provided through the Research Support Directorate. As a result, my role as the researcher was to steer the dialogue back to the study's questions and objectives.

Wood (2015:49) emphasises the significance of active listening skills during the interview process. As a researcher, it was critical for me to be conscious of the participant's tone and to document the interviews in this case. As a result, I used a notepad and a tape recorder to take notes on the intangible characteristics of the interview environment and experience, such as the participant's mood, pauses throughout the talk, and the enthusiasm in their voices.

As a researcher in this current study, I also played an important part in the data analysis process. This included designing the codes and coding the data on my own. The assigned co-parallel coder's co-coding task was to find confirmations and

contrasts. Following the completion of our coding analysis by myself and the co-coder, we conducted collaborative talks to compare the results. However, as the researcher, I made the ultimate decision.

4.9 DATA GENERATION METHOD

The interview guide employed in this study was heavily influenced by the realist analytical approach constructed in Chapters 3 and 4, which resulted in a framework for understanding, planning, and assessing research support at Unisa. This framework was used in an exploratory manner to guide the development of the interview guide and data analysis process, with the hope that the data collected would result in a carefully built framework that could be used to gain a more comprehensive understanding of research support, as well as to plan and evaluate similar research support programmes.

Westthorp's (2008) recommendation of broad strategies to aid in identifying contexts, mechanisms, and outcomes was helpful in framing the realism interview questions. While documents were employed in this study (see chapter 3), Westthorp indicates that contexts in realist evaluation can also be discovered using narrative questions that ask participants to recall stories or examples of when the programme has been exceptionally beneficial or ineffective, and for whom. Prompting for greater detail in the stories and using feedback by reframing the participants' explanations and returning them to participants for comment were also proposed as ways to encourage participants to reflect on their comments and refine theoretical propositions that emerged throughout the interviews. These strategies were used throughout the interviews.

As indicated in the first chapter, a pilot or field test of the interview guide was undertaken to enhance its quality. This was accomplished by doing a pre-test of the interview guide prior to conducting the real study. Thus, the objective of this exercise was to discover any potential flaws in the tool early on by identifying potential issues and places that may require modification. Such an approach was used in a qualitative realist study similar to this particular study in which piloting of interviews was said to allow the interviewer prepare and practice question delivery and probing, thus promoting a more natural conversational style (Maxwell 2018:67-68). Due to the fact

that there are no set rules or minimum numbers of participants in a qualitative pilot study, the sample size is determined by several of these factors, including the purpose, usefulness, credibility, available time and resources, and the willingness of participants or experts to participate in the pilot (Gani, Rathakrishnan and Krishnasamy 2020:140-141). The pilot was therefore conducted with the assistance of three subject experts who ensured that the interview questions were clear, comprehensible, and pertinent to the study issue. These experts offered critical contributions that resulted in the interviews being modified to ensure that the questions flowed logically and that the interview questions were framed properly to address the research topic. To do this, the investigator needed to discuss the study's background and a research proposal outlining the study's entire scope with the experts in order to familiarise them with the study and its possible participants. To enhance the quality of the interview guide, the following questions were asked to experts, as described in Wood (2015:50):

- *Are the questions worded inaccurately or confusing in any way? If so, which questions?*
- *Are the questions unnecessary or not relevant to the study? If so, which questions?*
- *Are there any questions that are omitted from the interview guide? If so, please explain further.*

Following expert input, the evaluator made some amendments, the majority of which addressed grammar errors. For example, the question numbered 'g' in appendix D initially read as follows: When you were awarded the research support initiative by Unisa, how many research outputs were you expected to produce? However, one expert argued that the question was phrased in a manner that limits participants to respond with just a number. Instead, the expert recommended that I ask participants "what were your expectations from the research support initiative provided to you by Unisa in relation to your research output and productivity?" Another expert warned me of a typo where I had to fix the spelling from 'esearch' to 'research'. Nonetheless, the experts considered the questions to be thorough and legitimate, and thus saw no reason to add more questions.

4.10 DATA COLLECTION

Within realism evaluations, qualitative interviewing has been identified as the most widely employed data collection approach (Manzano 2016). While some authors have debated the best way to conduct qualitative interviews (Denzin and Lincoln 2000), few have explored the specific methodologies and strategies that would be acceptable for realist qualitative interviews. Most authors used semi-structured interview approaches, and few provided descriptions of how realism was infused into the design and conduct of the interviews or within the data analysis process, according to a review of data collection methods used in realist evaluations of related programmes (Manzano 2016). They also failed to adequately demonstrate how the data was collected with a specific focus on incorporating realist ontology.

Realist qualitative interviews in this study were used to identify, investigate, and refine propositions or theories about how programmes work for causal and explanatory purposes (Manzano 2016). This is because realist interview data is regarded as "evidence of real phenomena and processes" (Maxwell 2012:103), rather than constructions. According to Pawson and Tilly (1997), realist ontology needs distinct interviewing procedures than constructivist interviews. As a result, in the sections that follow, this study will show how realist philosophy and concepts were used in the preparation, conduct, and analysis of the interviews. It describes how realist philosophy was applied in the selection of participants, the conception and design of the research interview guides, and the conduct of the semi structured interviews, as well as how realist principles informed the approach to data analysis.

Nevertheless, the study obtained ethical clearance and permission to conduct research with Unisa employees as participants from the Unisa College of Education Ethics Review Committee (Ref: 2020/06/10/50785532/26/AM) and the Senate Research, Innovation, Postgraduate Degrees, and Commercialisation Committee (SRIPCC) Research Permission Sub-Committee (RPSC) (Ref #: 2020 RPSC 032), respectively. The researcher was able to get a list of academic staff members who participated in the programmes between 2013 and 2020 from the research manager in Unisa's Research Support Directorate at the time this study was performed, using these permissions. The lists were sorted according to the three programmes which formed part of the analysis in this study and detailed the names of participants, their respective colleges and year(s) of participation. Only academic employees who

participated in the programmes between 2013 and 2020 were invited. Email invitations were forwarded to all prospective participants who appeared on the above-mentioned lists in no particular order. Twenty (20) academic staff members decided to take part in the study following the e-mail invitations that were sent.

Prior to conducting the interviews, all parties signed informed permission forms to guarantee that their rights to voluntary participation and confidentiality were respected, among other things. This included advising them of their right to withdraw from the interviews at any point during the process. After signing the informed consent form (see Appendix C), the researcher planned interviews at times that were convenient for all parties. Thus, participants were invited to select times and days that were more convenient for them than for the researcher. As a consequence, interviews took place between 15 March 2021 and 15 April 2021, depending on the participant's availability. Although there were a few minor setbacks along the way, including the need to reschedule a few interviews due to family crises and other obligations, all participants who agreed to participate in the first call were later interviewed. Before commencing the interviews, participants were asked for permission to use a tape recorder and the reasons for this were provided. During the interviews participants were asked open-ended questions (see Appendix D) on their participation in Unisa's research support programmes.

Interviews took an average of 45 minutes to complete. To capture non-verbal cues such as pauses, pitch of voice, pace of speech, and so on, it was determined that the researcher should take notes in a notebook. Following each interview, participants were told about the process of possible member verification that would occur following the transcription of the interviews. Saturation was determined via a data discussion with the supervisor following the 12th and 20th interviews, the latter of which was considered to be the suitable point of saturation.

Completed audio recordings of interviews were forwarded to an independent professional transcriber for verbatim transcription and conversion to a Microsoft Word document. Although the transcriber is deemed to have experience in this role, it was necessary to remind the transcriber to uphold the research ethics unique to this study including confidentiality, safeguarding of transcripts and verbatim transcription.

4.11 FRAMEWORK ANALYSIS

It is important to highlight that this study produced a large body of data including 20 transcripts and numerous documents. Therefore, it became essential to select an analysis approach that could support a large data set and would produce an output from the analysis that was both manageable and comprehensive. Furthermore, it was deemed important to select an approach that could both reduce the data but also maintain the connection to the whole data set. This was particularly important as this study adopted a realist approach in which the researcher explores the data to uncover CMO configurations.

Contexts, mechanisms, and outcomes are viewed as interwoven threads rather than isolated components. As a result, a strategy was required that looked for connections, such as how participants discussed how contexts influence the activation of mechanisms, and so shaped the programme's outcomes. Framework analysis provided a systematic and transparent procedure for generating CMO configurations, assessing the data for ways in which individuals connected mechanisms, contexts, and outcomes. Such an analysis necessitated an approach that allowed for in-depth data analysis as well as a data reduction technique that preserved linkages to the original data.

Thus, framework analysis was used in this study as a qualitative approach for data management and analysis. This approach of framework analysis has been in use since the 1980s. Although the technique originated in large-scale social policy research, it is gaining popularity in a wide variety of sectors and disciplines (Gale *et al.* 2013:1), demonstrating its promise as a multidisciplinary analytic approach. The fact that framework analysis is deemed appropriate for programme evaluation research and is better suited to studies with specified questions, a limited time frame, a predesigned sample, and a priori issues made it relevant for this study. This analysis method provided an effective tool for assessing programmes and processes from the perspective of the individuals they affect (Srivastava and Thomson 2009:72), which was one of the objectives of this study.

Additionally, framework analysis was deemed superior to thematic analysis since it highlights how both a priori and emergent data-driven themes should lead the framework's development. This was consistent with the study's objectives, as I had

pre-defined areas to investigate but also desired to stay open to the unexpected (Parkinson *et al.* 2016:112). Framework analysis responds to the concerns levelled about thematic analysis. While this form of analysis is comparable to thematic analysis, particularly when recurrent and developing themes are found, it gives greater transparency and verifiable connections across the stages of the research. In comparison to grounded theory, framework analysis places a little focus on theory as a product of research and is an effective technique for addressing specific questions. As such, it is adaptable in that it enables data collection and analysis to occur concurrently and sequentially using a systematic method to address the research objectives (Arifin, Cheyne, Maxwell and Pien 2019:740). Gale *et al.* (2013:3) emphasise the method's adaptability by stating that it is not connected with any specific epistemological, philosophical, or theoretical perspective. Rather than that, it is an adaptable tool that may be used with a variety of qualitative techniques.

Several writers concur on the five steps that comprise the framework analysis method (Gale *et al.* 2013; Parkinson *et al.* 2016; Srivastava and Thomson 2009). These steps or procedures include familiarisation, framework identification, indexing, charting, mapping, and interpretation.

4.11.1 Familiarisation

Familiarisation, often known as immersion, is a common technique in qualitative research. During this stage of framework analysis, the researcher attempts to get a holistic understanding of what is occurring by significant interaction with the data, ranging from individual interviews to the data's overall "feel". This activity often includes listening to interviews, reading transcripts, and discussing issues emerging from the data (Parkinson *et al.* 2016:114-115). Thus, in this present study, the researcher listened to the interview audio recordings repeatedly while reading the transcriber's transcripts. Each interview was listened to and read multiple times to ensure familiarity, while also taking notes. Following that, the researcher reflected on this activity, in which he felt immersed in the participants' experiences and had a sense of some of the significant issues that had surfaced.

4.11.2 Identifying a framework

The second step, also known as framework identification, aimed to organise data in a meaningful and manageable manner in order to facilitate retrieval, exploration, and examination during the subsequent mapping and interpretation stage. Prior considerations and emerging issues resulting from the aforementioned familiarisation stage aided in the process of establishing framework categories. As previously stated, the value of both priori and emergent issues is that they focus the framework on research questions, while remaining flexible enough to integrate my personal interests as a researcher and the issues that are most important to participants (Srivastava and Thomson 2009:76).

The analysis in this research was largely influenced by the framework provided in Chapters 3 and 4 for programme theory approach. That framework aided in directing my attention to the critical areas of my study, upon which the framework categories were eventually established. Because I intended the framework to be adaptable to issues raised by the literature and data, I piloted it on a single interview in order to modify my priori categories based on the data. This was accomplished by concurrent co-coding, in which I the researcher, and a designated coder coded the interview separately, marking the categories to which each piece of text in the transcript applied. Following that, a meeting with the co-coder was held to establish consensus on where to code a section of text, resulting in the refining of the priori framework in a way that made sense in light of emergent issues in the data.

4.11.3 Indexing

Indexing is the process of identifying sections or portions of data that belong to a specific framework category. Indexing is applicable to all obtained textual material (i.e. transcripts of interviews). Srivastava and Thomson (2009:76) recommend that a number system be used for indexing references and that they be marked in the margin beside the text. As a result, qualitative data analysis tools such as Atlas.ti may be advantageous for doing this task. Indexing was performed throughout the transcript text in this thesis, marking a section of text and choosing to which category (or categories) from the framework to allocate the text. For example, extracts from the data were copied from the original transcripts and placed in categories under which

they were deemed to belong in line with the analytical tool. These categories included mechanisms and outcomes among others.

4.11.4 Charting

According to Gale *et al.* (2013:5), the fourth step, charting, entails the organisation of the categories and themes associated with the individual pieces of data that were indexed in the preceding stage in charts. This implies that the data is extracted from its original textual context and organised in charts using the headings and sub-headings determined during the thematic framework process, or based on a priori research inquiries, or in any other manner deemed appropriate for reporting the study. It is critical to note that when the data is extracted from its context, the data remains readily identifiable as to the instance from which it originated. Cases should always be kept in the same sequence in each chart for clarity.

4.11.5 Mapping and interpretation

As Parkinson *et al.* (2016:122) remark, the purpose of mapping and interpretation extends beyond data management to its comprehension. This stage entails assembling essential features of the data in order to map and analyse the entire data set. This may include defining and clarifying concepts, representing the range and nature of phenomena contained within the data, developing typologies, establishing relationships, and developing “bottom-up” explanations for these, as well as proposing intervention and practice strategies, as appropriate. Mapping and interpretation were employed in this study to identify patterns and articulate the researcher's own sense-making of the data, among other things, in light of the research questions. This resulted in the narrative presentation of the findings in this study.

4.12 CHAPTER SUMMARY

This chapter discussed the case that was studied. Additionally, the chapter detailed the study's research design, data collecting, and analytic processes. The study addressed the research problem through the use of qualitative research methodologies. These methods included the use of a single case study research

design and data collection using semi-structured interviews. The study's population included academics from all seven of Unisa's colleges. However, as mentioned previously, the resulting interviews were limited to academics who replied to the first invitation to participate. As a result, only 20 members of academic staff who participated in the AQIP, MDSP and ODL-RSP programmes were interviewed.

CHAPTER 5

FINDINGS FROM THE EVALUATION OF UNISA RESEARCH SUPPORT PROGRAMMES

5.1 INTRODUCTION

The preceding two chapters illustrated how the analytical and methodological framework could be applied to the evaluation of Unisa's research support programmes. This chapter aims to further the framework's application by piloting the approaches and methods mentioned previously for the purpose of examining the contribution of these Unisa's research support programmes towards academic staff research development. Within the context of South Africa's higher education transformation policy, which is extensively discussed in Chapter 3, this study examined the various research support programmes implemented by Unisa to address the challenges of research capacity, inequalities, and a lack of access to research infrastructure in South African higher education. Recognising the dearth of evidence in the literature regarding what works and what does not work, in relation to Unisa's research support programmes, the following chapter summarises findings from interviews with 20 academics who participated in the institution's aforementioned programmes, thereby contributing to the field's body of knowledge.

The chapter examined how staff perceived their research support needs, how they perceived the contribution of Unisa's research support programmes, and how they perceived the programmes' outcomes towards their research development. The data obtained in this chapter will be used to refine the analytical framework in order to improve the understanding, planning, and evaluation of similar research support programmes in higher education.

5.2 REPORT ON UNISA ACADEMIC STAFF WORKLOAD

The preceding chapters argued primarily that a typical academic's workload, which includes household obligations, teaching, research, and administrative tasks, is a significant determinant of research output and productivity. The first objective of this

study was to establish the research support needs of Unisa academics. However, when asked about their research support needs, opinions about their workload also emerged. Thus, it was prudent to delve deeper and report on their workload before delving into their research support needs. In addition to their primary home duties, the typical workload of Unisa academic workers included teaching, research, administration, community engagement, and academic citizenship.

5.2.1 Home responsibilities of Unisa academics

Based on the findings, it is apparent that academics function in a complex environment. Along with their teaching, research, and administrative responsibilities, certain academics' obligations at home as parents and married partners cannot be overlooked since they influence their research output and productivity. This is partially due to the fact that these employees have to balance their time between academic work and being the greatest possible partners.

5.2.1.1 Home responsibilities for female academics

Consistent with the earlier literature, the research output and productivity of women academics at Unisa are primarily determined by the responsibilities they have at home. This research claims that in South Africa, certain cultural norms dictate that women, particularly black women, are expected to fulfil specific home responsibilities, such as child care and household chores. These norms act as significant impediments to women's professional growth. This notion was backed by evidence derived from the study's data, which demonstrated the extent to which women academics shoulder home duties. Regarding this theme, female academics stated the following:

Okay, before COVID, every morning, I would prepare lunch boxes, you know. I would wake my son up prepare lunch box, make sure that he's ready for school, and I have to take him to school, drop him off, and then go to work. When they come back, I go via his school, pick him up and then come home. And then when I get home I do the normal things, I make sure that I cook for him and for myself of course and I clean and make sure the house is clean and everything, you know. Then maybe check his homework, work with them and I will ask how

his day was and so forth. But now that is COVID, you know, things have changed because now they are there at home. Like, for instance, as I'm talking now, he's still at home because of the pandemic so the roles are completely different and I'm also working from home so it is not that whole thing of me going to work every day. So I don't have to wake up in the early hours of the morning and prepare for him. Yeah, so I no longer do some of the things. So now it's more like waking up at around eight o'clock, nine o'clock during the week. I prepare lunch and in between I do my work, my Unisa work. So that's me at home. I do some gardening, I take care of my dog walk, you know, go to the gym if there's time in between. So I do a lot of things. Yeah, it's quite hectic. So that is what I do in a nutshell. (Participant 3)

In supporting my children, um, I have to ensure that they, you know, to support them for their studies. So I keep track of what is it that's happening in their schooling, support them in whatever way I can. If there is a need to do any kind of project, I might not be able to do the project. Of course, it's not my work, but maybe I might need to, you know, we might need to brainstorm an idea and then I, I actually avail myself. Then I cook. Of course, due to COVID, now, we have to do the cleaning mostly ourselves because we thought it would be safer for us to not keep on bringing in someone to come into the kitchen. So we share those duties and of course, you know, when it's boys you play the role of reminder, reprimand, and, and all that. Yeah, but that's one thing that we've always done since they were young because I always studied while they were at school. So there's this very nice synergy that when I take my laptop and sit down, they also have their work to do. So there is always this, you know, we are able to work around each other without disturbing each other. Also, they understand that they have a mother who avails herself, I'll sit and watch them playing games. I understand what they're doing. I'll sit and watch movies with them. But when there's a deadline, I have to work and they know that. So I want to believe that we've always had a nice balance in our being at home. Yeah. (Participant 5)

I'm a mom and a fiancé. My role at home since COVID has been a dual role both in terms of being a mom and being a teacher. My daughter's curriculum has moved to an online space. So a lot of the facilitation of learning is done in

front of a laptop, so she has to be guided through there. So juggling both that and then trying to get my own work done on top of that. In addition to that, I'm also pregnant with our second child. So that's also another role that I've taken on. So my role is compounded at the moment. There's quite a lot going on, like I said, from being a mom and a fiancé, to a teacher, a Grade 4 teacher. It's, it's quite a hectic role at the moment with COVID and the lockdown situation. (Participant 8)

When I knock off from work, I fetch my child from preschool. Then when we get home, I prepare a snack for her and take her for a walk or to a jungle gym, just for her to play. After that, I will prepare supper for her and prepare for bed. (Participant 9)

It is important to highlight the fact that this study was conducted during the COVID-19 pandemic. This period took the higher education sector globally by storm in a manner compelling the sector to change the way it composes itself, in which academic staff had to change the way they operate (Tesar 2020). It is no wonder that in their responses to the interview questions, emphasis was placed on the changes brought about by the pandemic. Nevertheless, interestingly so, all of the female academics mentioned above appeared to have responsibilities that included childcare, a task that no good parent should shirk, as this study argues. This confirms Msimanga's (2014:2013) observation that the temporality of women, blackness, and motherhood in academia are disjointed. The author claimed in her auto-ethnographic research that, despite her depth of knowledge, her professional path was marked by pauses and discontinuity of presence, even at the age of 50, which resulted in her being classified as an “early career academic”. This study corroborates Zulu's (2013) observation that family commitments impede research productivity, particularly for women, and particularly for black women.

5.2.1.2 Home responsibilities for male academics

In contrast to the preceding, academic males' involvement in domestic duties appears to be less intense than those of their female counterparts. Male academics replied to comparable questions presented to female academics as follows:

Yeah like I said, I'm a 32 year old young man, a father of one daughter, husband, yeah. My role is like any other middle-aged black man who is employed. Outside of the ordinary Unisa work that one does, the typical everyday household activities, you know, include fixing what is broken, cleaning the house you know, washing cars, just making sure that the household is in good shape, make sure that the ordinary day-to-day activities are performed. (Participant 6)

"Now that we are working from home ... there's work that I do here. I throw away the dust bin and other things that a man does." (Participant 2)

Yes, I am married, I have three children under my care. I have five dependants in total that I live with. I largely provide support in many aspects of the domestic life. I cook when I feel like, especially when I wake up and I see that the kids are already up also. They wake up soon after me and the mother is usually still in bed, then I start preparing breakfast and it can carry on through to dinner. Yeah. I'm also a teacher in the house. I teach my kids how to write, how to read. I also am a postgraduate supervisor in the house. My wife is busy with MCom Accounting Studies, so I provide supervision to her which is informal. Let me say it's not paid for. So yeah, um, I do a bit of counselling also if the kids don't feel so good. I give them a bit of hope, and, you know, and yeah, so I think I also provide security. The fact that I am here, it gives the family confidence that they are secure, and, yeah, that kind of thing. I think I must probably say also that I do kind of provide some motivation or some thoughts to the family. Above all, I'm an entertainer, I make sure that we work hard, but we don't forget to also have fun in the house, especially nowadays with the lockdown. I think ever since the lockdown started, the kids have grown to know that once in every two weeks, they must be activated. (Participant 7)

Without undermining men's roles in the home, statements such as those made in the previous interviews, such as "I cook when I feel like it" speak volumes. It implies that males see cooking as a secondary task. This indicates that, in the face of conflicting duties, cooking could be delegated to the subjugated woman. Nonetheless, the aforementioned findings appear to concur with Callaghan (2016:2), who discovered that ISI and/or IBSS journal article publishing is negatively associated with dependent

children, but only for male academics, and is negatively associated with female gender regardless of the influence of family life factors in testing.

5.2.2 Work-related workload

Academic personnel at Unisa are often required to teach, do research, and participate in administrative duties, community outreach, and academic citizenship.

5.2.2.1 Teaching workload

Following interviews with a sample of Unisa academic staff, the following workloads were reported in terms of teaching or lecturing:

Well, typically, tuition and learning is the biggest portion of my work, which is about 60% and then second is research which is at around 20%, and then academic citizenship 15%. There other five is for the level Cs. (Participant 6)

Another lecturer was reported saying:

“So I have four KPAs, its teaching and tuition, research, community engagement and academic citizenship.” (Participant 1)

When probed about the amount of teaching they are expected to do, one lecturer responded as follows:

It depends on ... per year how I actually decide to put percentage on them. For example, if I have two modules, then the tuition key performance area [*KPA*] ... [*baby cries*] ... sorry for the distraction, it depends on how many modules I am coordinating on that particular year. So it all depends on the workload. So if the workload for teaching and learning is a bit high, then the weight for teaching and learning will be high. But the University proposes that teaching should be from 60%. (Participant 1)

In terms of explaining what their role in teaching entails, one participant stated the following: “I set, I write tutorial letters. I set exam papers and assignment papers. I mark and I answer to student queries in anything that relates to the module and oh, I also revise study material”. (Participant 1)

At Unisa, it appears as though the lecturer's workload is decided by agreement with their management. Lecturers do have a say in the distribution of the amount of teaching workload assigned to them.

5.2.2.2 Administrative workload

ODL teaching is mainly defined by increased administration. In most ODL institutions, lecturers are required to do research in addition to managing a plethora of teaching and administrative tasks. Regarding their administrative duties, the Unisa academics interviewed stated the following:

Being a lecturer in an open distance institution requires me to be [pause], to work after hours as well. I have to constantly be working in order to catch up. There's a lot of work that needs to be done. There is a lot of admin-related work with regard to teaching and learning, uploading announcements on myUnisa, responding to e-mails, marking. The marking especially takes a lot of time. And that's when I ended up taking work home, having to mark when I'm home, when the kids are sleeping, I'm not well rested and I have to wake up in the morning, prepare everything for them. (Participant 1)

Another lecturer within the institution mentioned that, and I quote:

I do a lot of things. I, I, I prepare tutorial letters. We also re-develop modules. And what else do we do? We engage with students on myUnisa platform, and we do a lot of things. Okay, tuition, we mark papers, assignments and mark exams. And, yeah, and we keep, we engage with students, we do a lot of things. (Participant 3)

Clearly, the nature of teaching and learning in an ODL setting is distinct from that in a residential one. Regardless of the form of instruction, timely and high-quality feedback is the most critical characteristics of teaching. This indicates that academics at ODL institutions will have to employ some extraordinary methods of communicating with their students. In the case of Unisa, this entailed dedicating significant time to engaging students via platforms such as myUnisa.

5.2.2.3 Research workload

Along with teaching and other duties, universities are responsible for producing high-quality research through publications in accredited scholarly journals. This function is bolstered by the fact that the majority of government funding for universities is contingent upon the quantity of research outputs generated by the institution. As a result, higher education institutions in South Africa are being obliged to exert pressure on academic staff to publish research outputs in DHET-accredited publications. With reference to the research burden of Unisa academics, the following emerged.

One lecturer who is also a master's student indicated that at their level, they are "... expected to do *[their]* studies and *[they are]* expected to publish articles". (Participant 1)

Another master's student who is also a lecturer reaffirmed the above stating, that expectations in terms of their research workload included them "...making progress *[with their Master's]*. I'm expected to complete at the end of this year". (Participant 2)

A Doctoral candidate and lecturer at Unisa mentioned the following:

I'm expected to progress with my studies. There has to be progress. If I'm not progressing, then yeah, then that's going to be a problem. So I'm expected to register every year. I'm expected to at least secure some funding. I think that was one of the reasons why I applied for NRF because I wanted to fulfil that part. I think, at my level, they don't really expect you to, to publish articles, that's not the main focus, the main focus is for you to complete your PhD. (Participant 3)

Some senior academics, such as the chair in one of the institution's departments, mentioned the following:

Okay, the research KPA goes according to your job description and as I'm currently at an Associate Professor level, I'm expected to produce two outputs in accredited journals, you know. I'm stressing that because of obviously, the university is fussy about the outputs being accredited so that they are able to also get a subsidy. So I'm expected to produce two outputs. But I know you might find it a bit funny and I've always challenged myself to actually do more than that. I must say that so far, it's been going well because they expect two

each year. If you include also the completion of M & Ds, I think I've always given them at least four or 3.5. So I've always, like challenged myself to do more than that. (Participant 5)

A Unisa employee with a researcher designation stated the following:

So my old KPAs were centred primarily around research. My research KPA had a weight of 55%. So it was quite enjoyable in the sense that I could spend over half a week working on research-related activities. Also then, I had the community engagement which I believe was about 5%, and academic citizenship. Then there was another, scholarly development, which I think had a weight of about 35%. As much as I enjoyed that, it has not fallen away, but because my PhD was completed last year and a lot of that KPA weight is now moved over to my research activities, which I enjoy. But I am also, I am supposed to be taking on different learning tasks and smaller learning activities, not so much a formal qualification, but learning smaller things, especially around learning analytics, and the software they have. But like I said, the majority of it has moved to the research KPA where I find myself doing more research-related activities, which is what I enjoy a lot more to be honest with you. (Participant 8)

From the above, it appears as though there are little expectations about the production of research outputs from the standpoint of employees pursuing master's and doctorate degrees. Rather than that, academics in these groups identified the primary challenge as obtaining their qualifications. This indicates that Unisa values expanding the number of employees with postgraduate degrees, which may have a beneficial effect on securing the future generation of academics (Ngibe 2015:12).

5.2.2.4 Community engagement and academic citizenship workload

Along with teaching and research, universities in South Africa are encouraged to engage in community engagement initiatives and academic citizenship. Academics' workloads in relation to the aforementioned, as stated by participants, comprised the following roles:

With community engagement, we used to travel like to Hammanskraal over the weekend. So that would affect the time obviously to research and write. But now with the pandemic and all, the CoD mentioned last year, yeah, it was last year, she said I should stop with the community engagement stuff and focus on my studies. So I can say from last year, it hasn't really affected me that much because I am no longer involved in the community engagement and academic citizenship stuff. (Participant 2)

Another lecturer mentioned that in terms of community engagement:

I'm not doing much in terms of that one. There is a project that I was included in, but I was not actively involved. You know, my name is there, but we haven't really done that. I haven't been involved like actively in it. But in academic citizenship, remember that involves a lot of things. It involves attending your departmental meetings, attending College Board meetings and these are things that we are expected to do as academics, we are expected to attend those meetings. (Participant 3)

As a result of the above, it is evident that while academics are required to engage in community engagement and academic citizenship activities, Unisa is flexible in terms of the extent to which these academics contribute.

5.3 RESEARCH SUPPORT NEEDS OF UNISA ACADEMICS

The first objective of this study sought to determine academic staff perceptions of their research support needs in order to determine if the support provided meets those needs. The idea was that if support is offered in accordance with staff needs, such interventions may result in academic staff's research development. The preceding argument is founded on the notion that employees are more knowledgeable about the problems they confront in academia and are thus better equipped to decide the type of support they require.

5.3.1 Appointment of research assistance

When asked what kind of support they required that prompted their application for the research support programmes, academics indicated funds for the recruitment of research assistants. Some senior academics specifically mentioned that their research support requirements pertain to the supply of research assistant staff. One participant, who is also the department's chair, was cited as stating:

There is kind of support that I need in my present position, if I would get a research assistant, that's one. That implies funding. I need funding with which to secure the services of a research assistant who I can then use for various research activities that will facilitate my research. This is what I need more than anything else. (Participant 7)

It is obvious that a requirement for research support such as the one indicated above is a result of the administrative workload that Unisa's department chairs are dealing with. Because department chairs are also academic professors, they are compelled to publish despite their administrative responsibilities. As a result, they have a legitimate need for research assistants.

5.3.2 Funding for research resources

The participants in the study indicated that they enrolled in the respective Unisa research support programmes in response to their need for specific research resources. For instance, one academic was quoted as saying that their requirements were "... mostly based on finances. Yeah, and for the grant to be able to pay for my studies, the resources that I need for my studies, like recorder, petrol to go and conduct the interviews, printing and editing fees. Yeah". (Participant 1)

Participant 3, a lecturer in one of the academic departments, stated the following:

Remember, money does things. So we want funding so that we can do what we want to do, like to pay for our statistician, to attend conferences, you know, to, to buy equipment, especially research equipment. We need a lot of things. It's not like we want money, we don't really want the money per se, but we just want things done with the money-if they were to buy us the laptops and pay

directly to our statisticians, or our editors and so on. That would be fine because that's what we want money for. (Participant 3)

In accordance with the above, another staff member mentioned that:

My needs and expectations were also to get funds which I could use for statistical analysis. So yeah, that's pretty much what I was looking for. It's also for, obviously other technical things like your language editing, and printing, to print and bind thesis for examination. (Participant 7)

Furthermore, another participant said:

Well, for me, it was a financial need. My needs were primarily around the financial aspects of the research and then obviously, the finances of finishing up a PhD and getting it printed and bound, and the editing which can cost anywhere between nine and R15,000. So for me, my needs from there was primarily financial in nature, I didn't expect them to train me in any aspects, or to assist with anything in the research field other than the finances to complete my studies. (Participant 13)

As a result of the foregoing, it can be concluded that typical researcher support needs in terms of research resources include study fees, research equipment, such as laptops and tape recorders, travel expenses for conducting interviews, as well as printing and editing fees.

5.3.3 Access to research infrastructure

As Wood *et al.* (2013:3) observed, research infrastructure acts as a catalyst for scientific advancement. It becomes critical tools for conducting experimental research (for example in the fields of astronomy, oceanography, particle physics, and material sciences) because it speeds up or even enables the generation or confirmation of scientific information in a particular field. This is why some participants referred to RI as their primary source of research support. Regarding RI, one participant stated the following:

I needed access to emerging technologies and support software. That's now coming out to assist researchers, particularly quantitative researchers who

have an interest in learning analytics. It would be nice to have support initiatives that are centred around training such researchers in the use of these platforms and the software so that they can effectively not only use the software, but to effectively implement or retrieve, you know, data that is meaningful, and they can serve a bigger agenda. If such platforms could be used, not only like I said, not only to effectively understand the software, but to put in meaningful data so that meaningful patterns can be extracted from the software, and used going forward to fix some of the problems in higher education, particularly in distance education, like the throughput and retention of our students. But to look at these aspects, again, like the LMS usage, and see which points, a student engages with the LMS system, or they're more likely to be successful. (Participant 8)

Although participants did not express much in terms of support for access to research infrastructure, the aforementioned view does place some emphasis on accessible research infrastructure as a significant area of research support.

5.3.4 Adequate time for research

Reduced teaching loads, proper time allocation, and fewer teaching preceptors were the most widely accepted solutions to the literature-reported issues of research output and productivity (Balakrishnan 2013:8; Buchheit *et al.* 2001:17; Erkut 2002:115; Fowler *et al.* 2009:174; Rosentreter *et al.* 2013:24; Wills *et al.* 2013:4). These were said to address the undesirable situation in which teaching loads affect research adversely, given that the majority of universities are teaching institutions, resulting in universities struggling to manage their strategic goals (Balakrishnan 2013:8). Participants in this study concur that their participation in Unisa research support programmes was influenced by their desire for additional time to conduct research.

One participant emphasised the importance of research time by stating that: “So obviously, the funding and workshops can also guide one in terms of the proposal and all the stuff, which is required for a PhD. And yeah, obviously, if one can be able to have more time”. (Participant 2)

Another participant said: “I couldn’t find time to study due to the workload. By going to AQIP leave, I wanted more time to focus on my studies.” (Participant 14)

Academics such as participant thirteen confirmed the above by stating that: “The aspects I considered to be important for a research support programme was funding, time off from teaching and administrative duties in order to focus on conducting the research”. (Participant 13)

Similarly, a senior lecturer from CHS who took part on the AQIP programme mentioned that: “The support has to enable the incumbent time to study, free from academic activities of teaching and learning, be able to get a substitute lecturer in my absence and allow me to have funding for research activities”. (Participant 15)

Clearly, time is critical for academics to engage in research activities. This is not surprising, given that conducting research requires one to think critically, frequently without any distractions, which is probably possible in an isolated space.

5.4 ASSESSING THE OUTCOMES AND CONTRIBUTION OF THE RESEARCH SUPPORT PROGRAMMES

One of the objectives of this study was to assess the contribution of the examined research support programmes towards the participants’ completion of postgraduate studies and towards their ability to publish research articles. Therefore, the next section examined the AQIP’s and the MDSP’s contribution to the completion of postgraduate studies as perceived by staff. This is followed by staff’s perceptions about the perceived contributions of the MDSP and the ODL-RSP programmes towards improving research output publications by Unisa academics.

5.4.1 Contribution towards completion of postgraduate studies

As demonstrated in the programme theories for the AQIP and MDSP, the anticipated outputs from participation in the programmes are that, with the mechanisms implemented, academics should be able to complete their postgraduate qualifications within the prescribed minimum periods or less. Therefore, the perceptions of staff in the respective programmes were tested against these assumptions.

5.4.1.1 *Participants from AQIP*

As observed in the literature (Balakrishnan 2013:8; Buchheit *et al.* 2001:17; Erkut 2002:115; Fowler *et al.* 2009:174; Rosentreter *et al.* 2013:24; Wills *et al.* 2013:4), the time available for academics to conduct research is arguably the primary determinant of research output and productivity. This notion has been emphasised by participants in the AQIP programme.

In highlighting the contribution of AQIP towards the completion of their postgraduate studies, some participants stated the following:

“The programme relieved me from other duties, as a result, I was able to allocate more time to my studies.” (Participant 14)

With AQIP, they found a replacement lecturer to do my tuition and other KPAs and I am at home focusing on my studies and research. So that for me is a programme I have been dying for because in the two years I was at Unisa, while having four KPAs and being section head and sitting on this committee, I only was able to do two chapters. Because of that initiative, I have pushed so much more on my studies. (Participant 16)

“I registered for the first time on the qualification in 2016 and I was unable to complete any chapter. I started writing when I went on AQIP leave, but now I have completed my qualification.” (Participant 14)

“The programme was for my master’s studies and I attribute the completion of the degree specifically to my participation in the programme because of the time it allowed me to focus on my own studies rather than teaching.” (Participant 15)

I think AQIP is relevant because it affords one time to focus on his PhD. You would understand that PhD requires one to spend time religiously on it, because now if you focus on your duties as a lecturer and also having to focus on your PhD, it’s impossible for one to complete his PhD on time. So what AQIP does at least, it sort of steps in, and ensures that you only focus on the PhD itself. Because most of us we, I was teaching quiet a number of modules and also I was a subject head in our group, so at least that workload was reduced when I was afforded AQIP. But not only that, what AQIP does also, it exposes you to the University, how it operates in as far as management. But not only that, it

also gives you an opportunity to interact with other colleagues in different departments and we had an opportunity also to go for training. I remember we were in Cape Town, we went for a training on how to publish some of your articles that you want to write on. So AQIP also assists you financially because you are able to now use that money to do editing of your dissertation when you finish it, because it's quite expensive normally to send a dissertation or thesis for editing. So I used AQIP for that purpose and also with regard to binding the thesis also, it was very much helpful. (Participant 20)

Participants in the AQIP agree that the programme enabled them time to focus solely on their studies and that such mechanism, together with the accompanied funding, really contributed positively. In addition to reaffirming the literature about time availability to conduct research as a significant determinant of research productivity, such views further suggest that the AQIP is adequately designed to address the issues of workload and the research support needs of Unisa academics, as they have been stated earlier.

However, the realist approach to evaluation using programme theory goes beyond eliciting participants' views about the programme's contribution towards anticipated outputs or outcomes, to establishing what works, for whom, and under what conditions (Craig 2020:6). It was therefore prudent to further probe how the programme mechanisms worked to ensure that the anticipated outputs are realised. In this respect, the beneficiaries of the programmes answered as follows:

But by and large, AQIP is a good system. I think the only thing that needs to be fixed is to really ensure that there is a monitoring of candidates who complete the AQIP to ensure that at least it also benefits them, whilst also opening opportunities for other candidates who want to go through the system. So I think monitoring should be improved in as far as AQIP is concerned. But generally the programme AQIP is beneficial, especially when you look into the access to education, because you would recall that access to postgraduate qualification is very expensive. So those who come from disadvantaged groups will have at least access to education in as far as their master's is concerned. But not only that, remember also it exposes you to so many areas of research because normally a person who is appointed to mentor that group is a scholar and that

person will share with you his views as to how to grow in academia. I remember in my case, we had a Professor at Unisa, a retired Professor who was appointed to head our group. We gained a lot from him because he always shared with us his experiences as to how you can become a better academic. So AQIP is a very good system. I think Unisa should be applauded for coming up with such a system. But now like I said, the downfall of the system is the issue of monitoring because what it does, AQIP, it sort of prepares you to go along the ranks of management within the Unisa system. Because it is a good investment on the University to retain its future academics who will then take the role of managers, but now unfortunately there is no monitoring of how these candidates after the AQIP fare in as far as them growing in the system or even exiting the system. If you can check, the University is spending a lot of money on AQIP, so hence I am saying, monitoring is very critical so that you have value for money as an institution when you invest in those persons. (Participant 20)

I saw AQIP as an opportunity to spend more time on my thesis, especially the writing aspect of AQIP. That was the primary reason for me to apply for AQIP. But also remember what AQIP does, it gives you leverage or it gives you time off from your work station. In other words, you would go to the programme and, in that programme, you will find that the University has lined up different speakers who would take time to intrinsically and extrinsically, share with you useful information as to how you can better yourself as an individual. In other words, you will find that you get colleagues who are role models, colleagues who are motivational speakers, colleagues who are psychological experts especially in an occupation like this, career wise. So who would come and devote their time in ensuring that you become a holistic individual at the end of the day. Some will even go to an extent of teaching you what to do to acquire emotional intelligence. So AQIP is sort of, if you may, concoction or a mixture of different field of studies involved which in my view are multi, intra, transdisciplinary in nature, because from it now you distil that there are different information you get, from Social Sciences, Law and from other Sciences as well, that you can take as an individual and use them for your benefit. So that is very critical. (Participant 20)

“I attended research conferences and workshops for empowerment without restriction of time nor funds.” (Participant 10)

Based on the above views, it seems that making time and funding available for the beneficiaries were not the only contribution through which AQIP helped them. The above views stress that research support by means of workload reduction and funding, alongside mentorship and access to research networks, contributed positively to their research development, thereby affirming the relevance of the proposed framework.

To a large extent, the above data support Buchheit *et al.*'s (2001:17) observation at Texas University that proper time allocation and little instructional preparation result in a considerable boost in research productivity.

5.4.1.2 *Participants from the MDSP*

Another programme whose intention is to assist its beneficiaries towards completion of their postgraduate qualifications within the prescribed period or less is the MDSP. In contrast with the previously examined programme, namely AQIP, the MDSP does not exempt its participants from their normal teaching and administrative workload. This has led to a sharp contrast in terms of how beneficiaries of the MDSP perceive its contribution compared to those of AQIP. In particular, participants from the MDSP found the programme to have a minimal contribution towards their studies, other than the funding it provided.

“I wish I was given time off from teaching duties to conduct research and complete my studies.” (Participant 13)

If the initiative, I think if maybe if I was awarded time, if it was linked with my duties at the university, and maybe if there was an arrangement so that I can have time off and be relieved from my teaching duties, so that I can be able to focus on my on my studies and on publications. (Participant 1)

The above views reaffirm the importance of workload reduction and making time available for academics to focus on research as a significant determinant of research productivity. The participants' views suggest that because of their high workload, as also demonstrated earlier, it remained difficult to realise the anticipated outputs of the MDSP. However, the reasons given for the MDSP's inadequate contribution were not

limited to its inability to afford beneficiaries more time to engage solely on their studies, but also to some administrative challenges associated with participation in the programme.

My expectations were not met because I have not reached that point since I was not able to finish on time. I could only use the money at the end of MDSP for my annual fees. But the rest, I could not because the process ... Well, I can say the process of claiming those funds is not clear or is not made clear on how do you claim the funds. You need to send an e-mail and ask what's the procedure when you want to claim and also my progress was not as, as I had expected. (Participant 1)

Another participant calls on the University to simplify the application process, arguably because of reasons related to the above view. They call on the University:

... to make the application processes of getting the funds easier, especially for M & D students, especially if you're an academic staff member or you're a staff member and you are applying for these support programmes, it should be easier. There shouldn't be so much red tape. We know what we want. We are busy people, we cannot get stuck in red tape, you know. So I think if the university can make that process easier for us, then it will be less stress for most of us, we will have less stress. (Participant 3)

I was successful and everything, they went very smoothly, that application process was fairly smooth, although the communication was not clear. Not that there was a problem with the communication, but the time between receiving responses, you know, the application and stuff was a backlog. The chain of events, the chain of people rather, that it has to go through before it reaches the director. There may be bottlenecks along those paths. (Participant 8)

The research support needs raised by Unisa academic staff involved reduced teaching and administrative responsibilities in order to enhance their research output. Therefore, the concerns raised by the MDSP beneficiaries regarding the complicated administration associated with participation in the research support programme somewhat undermined the point of attempting to increase their research productivity. Seemingly, participation in the MDSP indirectly posed the same problems of excessive administrative responsibilities. As a result, staff members likely view participation in

the programme as an added burden, which probably accounts for the poor uptake of the initiative. Nevertheless, some beneficiaries do acknowledge the positive contribution MDSP had towards the completion of their studies.

“Without MDSP, which is provided by Unisa, I would not have had my master’s, you know. Without the AQIP, I would not be able to focus totally, completely on my studies right now. You know ...” (Participant 13)

“The programme enabled me to complete my thesis within the required timeframe.” (Participant 18)

Although the data provided so far suggests that participants value the funding associated with the MDSP, it is axiomatic that funding alone does not suffice. This is especially true when one compares the MDSP support with that provided by AQIP and which goes beyond funding, but incorporates a variety of support mechanisms.

5.4.2 Contribution towards improving research publication output

In addition to assessing contributions towards improving Unisa staff credentials, the programmes were examined against their anticipated outputs of improving beneficiaries’ research output publications. Two relevant programmes, namely the MDSP and ODL-RSP, were examined under this theme.

5.4.2.1 Participants from the MDSP

The programme theory for the MDSP implies that the anticipated output of the programme is not only staff’s completion of the qualifications for which they registered, but also to assist them in submitting manuscripts to DHET-accredited journals. In particular, the MDSP funding framework (Unisa 2021a) anticipates the submission of one and two articles for master’s and doctoral graduates respectively, after completion of the programme. Following interviews with the participants, it appears that this is either not a much emphasised outcome by Unisa or there is no follow-up to ascertain whether the beneficiaries eventually submit articles. The worst-case scenario could be that although this can be regarded as an anticipated outcome by the University, it is not clear how the support mechanisms through the MDSP are meant to achieve it.

Nevertheless, participants in the MDSP reported the contribution of the programme as follows:

“I was able to go to the conference to disseminate the research findings and received relevant and constructive feedback that aided in the production of those outputs”.
(Participant 6)

So far, I have not been able to do it. The progress with my studies is a bit slow. Yeah, and when it comes to my articles ... my progress is slow since I struggle to meet the submission deadline. (Participant 1)

Arguably, the reasons for the inability of the MDSP beneficiaries to report much on the programme's contribution towards them submitting articles is probably related to the challenges already associated with the MDSP. In fact, not many participants have reported making progress through support from the MDSP, even on their studies. Therefore, since submission of an article is an output anticipated after completion of studies, it could be expected that beneficiaries in the MDSP spend a lot of time battling with their studies before they can start thinking about articles.

In order to achieve the anticipated output as required in the MDSP programme theory, participants have once again reaffirmed the need for the programme to address issues of workload and making time available for them to conduct research.

I feel I could have been supported better. I think the University could have devised mechanisms, innovative mechanisms to support us as academics. For instance, if I may make an example, just maybe two alternate days to say Monday we are in the office, you're working, you're focusing on your three KPAs. On Tuesday, focus on your research and every Wednesday you go back to teaching and learning, your other three KPAs on Thursday, I think, I think the university could have supported us better in that way. (Participant 9)

The above findings substantiate the argument made earlier that none of the programmes work in a vacuum. The higher education system is a complex apparatus, and increased research capacity results from a combination of multiple dynamics, including inputs and support through various mechanisms.

5.4.2.2 *Participants from the ODL-RSP*

The ODL-RSP, through various support mechanisms, is anticipated to lead to the following outputs: completion of the 3-year research project, produce at least four (4) accredited research outputs over a 3-year period, submit at least two (2) articles to the Conversation Africa, mentor at least one (1) developing scholar, and create a profile on the NRF online system., The perceptions of staff regarding this programme's contribution towards their research output publications were therefore examined. This study, however, examined the perceptions of staff against the programme's anticipated output of producing at least four (4) accredited research outputs over a 3-year period. The following was discovered:

"The ODL-RSP project that I was involved in provided data which I use in the outputs. Therefore, it generates data that I use for producing future research outputs."
(Participant 5)

"The ODL-RSP was funding predominantly where we had to go out to conduct research with students with disabilities. It provided with flights and accommodation. Yeah, I think that was mainly it." (Participant 5)

My challenge is the workload and time I have to complete my research while still having other responsibilities. Juggling duties and responsibilities is a key factor here. Participation in the programme has decreased my level of satisfaction with my job. I realised that I needed time off to complete my research. Instead, I also had teaching duties, that is setting papers, mark scripts, review study material among others that I still had to carry out while I was participating in the programme. I am just grateful for the funding provided.
(Participant 4)

There are a variety of reasons why academics associate their research outputs with their participation in specific programmes. To begin, in South Africa, a conference proceeding is considered half of a research output. By allowing them to attend a conference and subsequently publish a conference proceeding or journal article, the support programme makes a significant contribution. Secondly, the support given by a programme such as the ODL-RSP enabled participants to collect significant amounts of data, which members may utilise to produce several research publications. Finally, programmes such as the ODL-RSP emphasise mentorship and collaboration, with a

co-authored research publication also indicating a successful collaboration endeavour.

5.5 CHAPTER SUMMARY

This chapter discussed the findings from a study of Unisa academic employees about their perceptions of the university's research support programmes. Their typical workloads and a barrier to research productivity included household responsibilities, particularly for female academics, and a heavy teaching and administrative workload. Typically, academic participation in the programmes was motivated by support needs in the form of decreased teaching and administrative workload. Support mechanisms, such as research funding and time to do research, enabled them to access research-related resources such as laptops and other technical equipment, as well as research networks and mentoring, and to devote more time to research activities. Participants in Unisa's research support programmes do wish that there were less complicated administrative processes for applying for and claiming funds from the programmes. Participation in the programmes clearly results in positive effects, such as improved employee research output and productivity, as well as obtaining postgraduate qualifications, especially the AQIP programme. However, some programmes had little effect, particularly if employees continued to have a heavy teaching and administrative responsibility during their participation in the programme. In the next chapter, I will discuss how these findings address the study's research objectives.

CHAPTER 6

DISCUSSION, IMPLICATIONS FOR PRACTICE AND RECOMMENDATIONS

6.1 INTRODUCTION

The purpose of this study was to establish the contribution of Unisa's research support programmes towards academic personnel's research development. To accomplish the aforementioned, this study sought to determine academic employees' perceptions about the institution's research support programmes in order to ascertain their research support needs; secondly, to determine the potential contribution of Unisa's research support efforts to their research development; and thirdly, to develop and apply a tool in order to gain an understanding of the potential contribution of Unisa's research support efforts to staff development. The previous chapter presented empirical findings from an exploratory case study conducted at Unisa. This chapter discusses the findings in connection to the broader body of knowledge, their practical implications, and the chapter's recommendations and conclusion. The chapter is divided into four sections. The key findings are summarised in section 6.2. Section 6.3 examines the key issues that emerged from the findings, their relevance, and their link to the wider body of knowledge. The lessons learned from the application of the evaluation tool are discussed in section 6.4. The study relies on emergent issues and lessons gained to improve and propose a framework for understanding research support at Unisa in section 6.4, which is also viewed as the main and original contribution of this study. Finally, the study offers recommendations for policy, practice, and for further research in sections 6.6 and 6.7 respectively.

6.2 SUMMARY OF FINDINGS

Before examining the study's actual findings, it is critical to explain the framework that enabled these findings to be obtained. Chapters 3 and 4 discussed the development of the analytical framework and the programme theories for evaluating research support respectively. By outlining the contextual backdrop, mechanisms, and

outcomes that have an impact on research support, these chapters lay the basis for the subsequent chapter. Four historical and contextual issues, including the transformation of South African higher education, redressing apartheid legacies, socioeconomic disparities, and a lack of capacity in higher education institutions, provide the backdrop for the context for research support. As a result, the framework suggests that various mechanisms, such as research funding, equity and access to infrastructure, time available for research, access to research networks and mentorship, should be provided with the goal of increasing research output and increasing the percentage of academic staff with postgraduate qualifications.

The research support mechanisms found in the case study, Unisa, were consistent with those reported in the literature in which Unisa, as in other institutions, appear to provide research support through research funding (Arora and Gambardella 2005:91; Chudnovsky *et al.* 2008:86; Gush *et al.* 2018:227; Jacob and Lefgren 2011:1168; Jaffe 2002:22; Wills *et al.* 2013:4), research infrastructure (Gamade *et al.*, 2020:3), making time available for academics to conduct research (Balakrishnan 2013:8; Buchheit *et al.* 2001:17; Erkut 2002:115; Fowler *et al.* 2009:174; Rosentreter *et al.* 2013:24; Wills *et al.* 2013:4) and providing access to research networks and mentorship (Buchheit *et al.* 2001:17; Wills *et al.* 2013:4). However, certain specific characteristics, such as domestic obligations of Unisa academic staff and the distinctive environment of South African academics, particularly those at Unisa, have received scant attention in the literature. Thus, in the case examined, the influence of domestic obligations, particularly on female academics, emerged as a critical cross-cutting concern. Additionally, it was shown that when assessing research support programmes, the existing circumstances of academics might have a detrimental impact on their perceptions of the programme's effects. For example, while the Unisa research support programmes were intended to increase staff research development, among other things, the perceived contribution of the studied programmes were reversed as a result of the programme's continued imposition of excessive teaching and administrative burdens on employees.

In addition to exposing the workload confronting Unisa academics, the preceding chapter's findings addressed Objective 1 of this study and identified areas of interest for the case study given in Chapters 4 and 5. By eliciting academic employees' perceptions of the institution's research support programmes in order to determine

their support needs (Objective 1), it was discovered that Unisa academics' research support needs included the following: appointment of research assistants, funding for research resources, access to research infrastructure, and adequate time to engage in research activities. This reinforces the literature that, with the exception of research assistant personnel, the aforementioned are the typical research support needs of academic staff in higher education institutions. The demand for research assistant personnel was identified exclusively among senior academic staff members with the titles of Professor and Chair of Department.

Participants' perceptions show that their support requirements affected their choice of programme in which to participate, for some academic staff members. The findings demonstrate that employees who required additional time to focus solely on their postgraduate qualifications chose the AQIP programme, while those who primarily required research funding for their studies chose the MDSP, and those who required funding to produce research articles chose the ODL-RSP. When asked about their perceptions of the programmes' financial assistance for research, participants acknowledged getting funds for course fees, laptops, professional services such as statistics and editing, and other technical services. They did, however, mention difficulties with administrative processes connected with participation in the programmes, such as complex application processes and lengthy response times, which resulted in some research money being forfeited. Academics such as those who participated in AQIP were taken aback by the amount of time allotted to them for study. This significance of time to focus exclusively on research was highlighted by participants in the MDSP, where time away from teaching to focus exclusively on research was not a provision, resulting in them making little progress despite the support.

Based on the findings, it is axiomatic that research support through funding alone does not suffice. It was evident from the interviews that supporting researchers without granting them enough time to do research work would negate the benefits of the support efforts. This was demonstrated by participants' demands for reduced teaching and administrative workloads, more research and development leave concessions, and work-from-home alternatives that allow for at least one day per week for research and another for teaching and learning.

Nonetheless, it was found that involvement in research support programmes has a range of consequences for individuals. The findings and effect of Objective 3 were presented. This objective was to determine the possible contribution of Unisa's research support programmes to staff research development, specifically towards the completion of their postgraduate studies and producing research articles. A few participants from the MDSP reported increased research outputs via publications published in reputable journals and conference proceedings, whilst participants in the ODL-RSP reported a positive contribution by the programme as they managed to produce quite a few articles following the support received. These were accomplished by co-authoring or single publishing. Chapter 5 also contains proof that a number of individuals completed their postgraduate degrees in record time as a result of the assistance they received from AQIP. This finding corroborates the literature that indicates that financial assistance, time allocation, and mentorship are the primary drivers of increased research output and productivity, especially when provided as a package.

While it is expected that Unisa's support through the programmes will result in beneficial outcomes, this study contends that this may not always be the case. Some Unisa academics may be unmotivated because their age precludes them from participating in programmes like AQIP, which exclusively accepts academic staff aged 50 and under. This could lead to employee dissatisfaction and, as a result, poorer productivity. In this light, our research uncovered a slew of significant issues with consequences for policy on work allocation management and research support. The first emphasises the necessity of academic workload standardisation. This is critical since some academics saw participation in the programmes as pointless because they were still swamped with teaching and administrative tasks, which hampered their research progress. As a result, many academics appeared dissatisfied rather than motivated.

6.3 KEY EMERGING ISSUES

Some of the issue emerging from the previous chapter are discussed.

6.3.1 Academics have domestic obligations

It has become clear that the emergence of academics' domestic duties is a critical component of managing workload in order to offer research support to academics. The influence of domestic obligations on women academics has been explored in the literature (Msimanga 2014:2013), albeit sparsely. Male academics, like female academics, have domestic responsibilities that influence their research output and productivity, but less intensely than female academics. Typical household responsibilities for female academics include child care, cleaning, and cooking. These activities have an effect on women academics' productivity because the majority of research activities, such as publishing papers and doing postgraduate research, takes place outside of normal working hours.

6.3.2 The need to work from home

The analytical framework for this study established that time available for research activities is a critical element of research support. Research time was stated to be made accessible through support mechanisms such as research and development leave, and reduced teaching and administrative duties. However, as previously said, academics prefer a method that permits them to work from home on a temporary or permanent basis. Participants in this study requested that the subject institution creates a method that would enable them to take a day off, work from home on research, and then spend another day in the office focusing on teaching and learning. This was also verified by academics who took part in the AQIP, who lauded the initiative's value of allowing them to conduct research activities from home during the duration of the programme. Additionally, because this study was conducted during the COVID-19 pandemic, when the majority of Unisa academics worked from home, it was revealed that these academics preferred working from home to going to the office.

6.3.3 Academics need a fair chance of participation in research support programmes

It was discovered that participation in the AQIP programme was restricted to academic employees under the age of 50. This means that only these academic groups will be

permitted to work from home and focus on their studies as a result of their participation in the programme. However, there is a danger that they would not be embraced warmly when they return to work. Staff who believe they have been unfairly refused the opportunity to participate in the programmes, for example, due to age restrictions, may harass the participants on the grounds that they have been privileged. This may cause conflict among employees and have a negative impact on productivity. Meanwhile, because growth is a continuous process, this study proposes that all academics, regardless of age, should be provided an equal opportunity to participate in research support programmes. Given South Africa's historical context, in which some groups, such as Blacks, were previously denied opportunities, it is unjust to continue to exclude them based on their age, as their inability to participate during their youth may have been due to limiting circumstances.

6.4 LESSONS LEARNED FROM THE APPLICATION OF THE EVALUATION FRAMEWORK

Apart from the significant findings from the empirical work done in this research, this concluding chapter addresses the research questions raised in Chapter 1 and discusses the experience and lessons learned in implementing the analytical framework in Unisa's research support programmes. This section summarises the framework's major characteristics, discusses its strengths and limits, as well as its link to the literature and the contribution it provides to the field of programme evaluation knowledge. The study's experiences and lessons learned enable future research and other follow-up assessments in various situations to modify and enhance the framework.

One of the study's strengths was its utilisation of existing literature, documents such as policies, and interviews, which resulted in superior evidence. The integration of these disparate techniques in the development of the evaluation tool aided in reducing potential bias and enhancing trustworthiness. Chapters 3, 4, and 5 demonstrate how the combination of reviewing the literature, analysing policies, and doing qualitative fieldwork aided in building, explaining, refining, and reinforcing a framework and the evidence generated in the case study. Interviews with participants in various research support programmes at Unisa aided in explaining the causal links between the setting,

interventions, and outcomes of a research support programme theory. Thus, incorporating interviews within the assessment framework was critical to avoiding a “black box” approach (Stame 2004:58). Additionally, the inclusion of documents and interviews added depth, context, and insight to the review, elucidating why and how certain events occurred.

Despite its many merits, the framework's shortcoming or restriction is that it emphasises the importance of context in evaluation. This has a detrimental effect on the framework's transferability, as circumstances are likely to differ. With caution, however, the evaluation framework may be used to comparable contexts.

6.5 MY ORIGINAL CONTRIBUTION TO THE BODY OF KNOWLEDGE IN THE FIELD: AN ANALYTICAL FRAMEWORK

The study offered an analytical framework for research support in South African higher education in Chapter 3, drawing on the reviewed literature to elicit the background, interventions, and serving as a guide for the study. I propose a reconstructed framework in this section that incorporates the important issues raised by this study's empirical findings as well as the literature discussed throughout this thesis. This framework differs slightly to the framework presented in chapter 3 by integrating research incentive as a support mechanism which emerged from the empirical data. Nevertheless, this is a normative framework for assisting in the decision-making process about research support. While the new framework retains the essential mechanisms and their potential outcomes, it places a larger focus on the context and purpose, as well as on the “how” academics manage their workload, rather than on the “what” programmes to provide.

The framework outlines the factors to consider while providing research support with the goal of increasing research output and developing staff credentials. It is critical, however, to begin by defining the goal of staff development, since this will serve as the fulcrum for determining what programmes to provide. This should be accomplished through the collaborative design of programme objectives based on a holistic definition of research development, as well as the framework for evaluating programme success against these objectives. Thus, while establishing research support goals, it is critical to examine the many levels (individual, institutional, and environmental) and aspects

(physical and intangible) of research development. Additionally, decisions on research support must be informed by the legislation and policies that underlie transformation in South African higher education.

Additionally to the foregoing, the objective of research support programmes should be determined by an assessment of support needs. For example, programme objectives should be need-based and take into account strategies for achieving equal research support benefits across all programmes. While implementing the selected programmes, Unisa may be required to monitor the programmes' outcomes and their impact on the specified objectives in order to maximise the resultant impact. Tracking both intended and unexpected outcomes, as well as openly and implicitly communicated consequences of the different programmes' implementation is critical during this process.

As stated in Chapter 1, the framework given below is expected to serve as a thinking tool for a comprehensive understanding of research support, as well as for planning and evaluating research support programmes comparable to those offered by Unisa. Table 6.1 depicts a refined framework for Unisa's research support.

Table 6.1: Revised programme theory of research support at Unisa

| A programme theory of research support at Unisa | | | | | |
|---|---|--|--|--|---|
| Impact | Staff motivation and retention Staff professional development | | | | |
| | ↑ | ↑ | ↑ | ↑ | ↑ |
| Outcomes | Enhanced research output (journal articles, technical reports, books, chapters in a book, supervision of postgraduate students) Increased number of staff holding master's and doctoral qualifications | | | | |
| | ↑ | ↑ | ↑ | ↑ | ↑ |
| Research support interventions | Course fees Laptops Professional services Technical services | ICT Laboratory | Reduced lecturing Reduced administration R & D leave Work from home | Research workshops Conferences | Research output subsidy Ad hominem promotion |
| | ↑ | ↑ | ↑ | ↑ | ↑ |
| | → | | | | |
| | Research funding | Infrastructure, equity and access | Time available for research | Access to research network and mentorship | Research incentives |
| ↑ | ↑ | ↑ | ↑ | ↑ | |
| Context | Transformation of South African higher education Redressing the apartheid legacies Socioeconomic inequalities | | | | |

Defining the interactions between the various variables that make up the realism framework is one of the most significant aspects of it. In terms of the framework described above, it has been determined from the literature review and findings chapter that research support mechanisms such as research funding trigger particular activities that allow the anticipated outcomes to be realised. For example, according to the framework above, research funding allows recipients to buy computers, pay course fees, and access professional and technical services, all of which assist academics complete their studies and publish research articles. In the long run, this has a favourable impact on academic staff motivation and retention, as well as professional development.

Similarly, and in line with the literature and empirical findings from this study, the mechanism of allowing academics to engage in research results in reduced teaching and administrative workload, as well as the ability for staff to take R & D leave or work from home. This allows academics to devote their whole attention to their studies and publications. Meanwhile, the framework recognises that the research incentive mechanism will encourage and motivate academics to complete their studies and publish research articles. It's also crucial to recognise the interconnections among the framework's research support mechanisms, such as research funding, research infrastructure, time available for research, access to research networks and mentorship, and research incentives. All of the foregoing mechanisms, with the exception of research funding, are dependent on research funding to thrive. As a result, research funding is recognised as the pillar of research support in this framework.

6.6 IMPLICATIONS FOR POLICY AND PRACTICE

As the study progressed, an evaluation framework emerged that could assist research support managers and higher education policy-makers in gathering empirical evidence about what works and what does not, assessing the impact of interventions, and determining the most effective programmatic options for achieving a specific capacity development objective.

The policy environment for research support, particularly regarding research funders, has a considerable impact on the design of research support programmes. A paradigm shift toward higher and more sustained outcomes and impact from support programmes will necessitate policy reforms that are consistent with emerging evidence. To begin, this study demonstrated how domestic duties, in addition to teaching and administrative responsibilities, have a significant influence on the research development of female academics. This presents a challenge for policy-makers in terms of adopting an ecological systems approach to setting policy agendas, which would take into account issues outside the research or work environment, but which have a significant impact on academics' research productivity, such as household responsibilities. The objective is to develop policies that will govern the provision of research support in response to academics' research development challenges. Additionally, there is a requirement for agreement among the parties involved, such as government, universities, and external donors, on what research capacity and development entail. This will contribute to the establishment of standardised performance metrics for all research support programmes in South African higher education.

The above remark is based on the notion that evaluating the performance of research support programmes requires additional attention. Through the literature reviewed and analysis of Unisa programmes, evaluation indicators were mainly research products, such as publications and the number of staff awarded postgraduate qualifications. Thus, the intention is to evaluate programmes based on the attainment of the previously mentioned research product (number of publications and/or number of staff holding postgraduate qualifications), rather than the goals of the programmes (transformation of South African higher education, redress and research capacity development). As a result, it is critical that the Research Support Unit's mandate matches what is measured, and this aim must be recognised and promoted at the policy level.

6.7 RECOMMENDATIONS

This study suggests that evaluations of research support programmes' success, including the tools and indicators used, be designed to track changes in the many

aspects of research development at both the individual and institutional levels. When analysing development changes, it is necessary to consider the contextual setting of South African higher education. The evaluation of research support programmes must consider a variety of factors, including quantifiable and intangible changes, technical and managerial changes, strategic and operational changes, programme and institution-oriented changes, short and long-term changes, and changes that are entirely or partially attributable to the programme.

Additionally, this study proposes that the anticipated influence of programmes on employee motivation, retention, and professional growth, as reflected in the suggested framework, should be planned for, monitored, and evaluated. This recommendation implies that policies and procedures should fully explain the processes necessary and their implications in order to guarantee that management practices are aligned with development objectives. One approach to do this is to standardise teaching and learning workloads in order to ensure that academics have an equal chance to meet their research development requirements. Several recommendations to consider in addition to those addressed in this part are included in the preceding section.

In terms of future research, it is recommended that similar studies include a diverse range of stakeholders, including funders, research support managers, policy-makers, and beneficiaries of such interventions, in order to further refine our understanding of the causal relationships between contexts, interventions, outcomes, and impact. Stakeholders such as funders and policy-makers may contribute to our growing understanding of pertinent settings unique to research in South African higher education, therefore improving our insights into the outcomes and effect of particular initiatives. Additionally, future research should attempt to validate and expand upon the provided programme theory by empirical testing with comparable programmes in similar contexts. This would include applying the conceptual insights gained from this study and embodied in the programme theory to other instances with similar contexts. Thus, the framework may be utilised to understand and assess Unisa's research support programmes, as well as related programmes within similar context.

6.8 CONCLUSION

A single case study research design was used to investigate academic staff' perceptions of Unisa's research support programmes. Through a review of the literature, analysis of higher education policies, and interviews with participants in various programmes, a framework for evaluating research support programmes was produced. This framework describes the setting in which research support is offered, as well as the mechanisms required to accomplish specified development outcomes and impacts. The aforementioned framework is intended to serve as a thinking tool for developing a more comprehensive and nuanced knowledge of research support, as well as for planning and evaluating comparable research support programmes.

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APPENDIX A: ETHICAL CLEARANCE



UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2020/06/10

Ref: **2020/06/10/50785532/26/AM**

Name: Mr JN Zongozzi

Student No.: 50785532

Dear Mr JN Zongozzi

Decision: Ethics Approval from
2020/06/10 to 2025/06/10

Researcher(s): Name: Mr JN Zongozzi
E-mail address: zongojn@unisa.ac.za
Telephone: 060 506 7898

Supervisor(s): Name: Prof. SA Ngubane-Mokiwa
E-mail address: mokiwsa@unisa.ac.za
Telephone: 012 337 6188

Title of research:

Research support initiatives in a South African Open and Distance Learning institution

Qualification: PhD ODL

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2020/06/10 to 2025/06/10.

The low risk application was reviewed by the Ethics Review Committee on 2020/06/10 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.



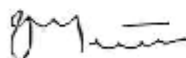
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3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. 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.
6. 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, if 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.
7. 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.
8. No field work activities may continue after the expiry date **2025/06/10**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number 2020/06/10/50785532/26/AM should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,



Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
 motthat@unisa.ac.za

Prof PM Sebate
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APPENDIX B: RESEARCH PERMISSION



RESEARCH PERMISSION SUB-COMMITTEE (RPSC) OF THE SENATE RESEARCH, INNOVATION, POSTGRADUATE DEGREES AND COMMERCIALISATION COMMITTEE (SRIPCC)

28 August 2020

**Decision: Research Permission
Approval from 28 August 2020 until
27 August 2025.**

**Ref #: 2020_RPSC_032
Mr. Nkosinathi Zongozzi
Student #: 36482285
Staff #: N/A**

Principal Investigator:
Mr. Nkosinathi Zongozzi
Institute of Open Distance Learning
School of Educational Studies
College of Education
zonqojn@unisa.ac.za; +27 60 506 7898

Supervisor: Prof Sindile Ngubane-Mokiwa, mokiwsa@unisa.ac.za

Research support initiatives in a South African Open and Distance Learning institution.

Your application regarding permission to conduct research involving UNISA employees, students and data in respect of the above study has been received and was considered by the Research Permission Subcommittee (RPSC) of the UNISA Senate, Research, Innovation, Postgraduate Degrees and Commercialisation Committee (SRIPCC) on 21 August 2020.

It is my pleasure to inform you that permission has been granted for the study. You may:

1. Select the desired sample with the gatekeeping assistance of the Research Manager: Programmes & Projects.
2. Consult the departments/college websites to draw out a list of researchers who opted not to apply for research support programmes.
3. Invite the selected sampled Unisa employees to participate in online interviews.
4. Gain access to The Research and Innovation Policy and the current Unisa Strategic Plan.



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You are requested to submit a report of the study to the Research Permission Subcommittee (RPSC@unisa.ac.za) within 3 months of completion of the study.

The personal information made available to the researcher(s)/gatekeeper(s) will only be used for the advancement of this research project as indicated and for the purpose as described in this permission letter. The researcher(s)/gatekeeper(s) must take all appropriate precautionary measures to protect the personal information given to him/her/them in good faith and it must not be passed on to third parties. The dissemination of research instruments through the use of electronic mail should strictly be through blind copying, so as to protect the participants' right of privacy. The researcher hereby indemnifies UNISA from any claim or action arising from or due to the researcher's breach of his/her information protection obligations.

Note:

The reference number 2020_RPSC_032 should be clearly indicated on all forms of communication with the intended research participants and the Research Permission Subcommittee.

We would like to wish you well in your research undertaking.

Kind regards,



Dr Retha Visagie – Deputy Chairperson

Email: visagrg@unisa.ac.za, Tel: (012) 429-2478

Prof Lessing Labuschagne – Chairperson

Email: labus@unisa.ac.za, Tel: (012) 429-6368



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APPENDIX C: INFORMED CONSENT



RESEARCH SUPPORT INITIATIVES IN A SOUTH AFRICAN OPEN DISTANCE LEARNING INSTITUTION

INFORMED CONSENT

Date:

DEAR PROSPECTIVE PARTICIPANT

My name is Nathi Zongozzi, I am doing my PhD in Education (ODL) at the University of South Africa, College of Education under the supervision of Prof. S. Ngubane and Dr. A. Nsamba. We are inviting you to participate in a study entitled: ***Research Support Initiatives in a South African Open Distance Learning Institution.***

The study explores the perceptions of Unisa academic staff members about research support initiatives at the university. It aims to establish if these initiatives can contribute to the national development plan. Subsequently, the study seeks to develop a framework to be used as a tool for an integrated and deepened understanding of research support, as well as for planning and evaluating similar research support initiatives.

You were selected to participate in this study because you are an academic staff member at Unisa. The views of the academics who participated and those who never took part in the above-mentioned initiatives are crucial in this study. Thus, your invitation is based on your theoretical relevance to the studied problem, that is, your participation or non-participation in research support initiatives.

The study is qualitative in nature wherein interviews will be conducted through MS Teams as a result of the guidelines set out in the Unisa Covid-19 position statement on research ethics. The expected duration of your participation is approximately 30 minutes. Since the interview questions are open ended, the researcher may probe further in order to get an in-depth understanding of the phenomenon under study.

Participating in this study is voluntary and you are under no obligation to consent to participate. If you decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time, without giving a reason.

If you have any questions about this study you are welcome to contact me via email: zongojn@unisa.ac.za, or my supervisor(s) Prof. S. Ngubane-Mokiwa: mokiwsa@unisa.ac.za or Dr. A. Nsamba: nsamban@unisa.ac.za

There are no foreseeable risks associated with your participation in this study except inconvenience related to your time. You have the right to insist that your name be not recorded anywhere and that no one, apart from the researcher, will know about your involvement in this research. Therefore, your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number only.

The researcher will use the services of a gate keeper in the form of a transcriber. In this instance, the transcriber will not be provided your name and will be made to sign a confidentiality agreement.

Your answers will be stored by the researcher in an electronic format for a period of five years in a password protected drive for future research or academic purposes. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Electronic data will be destroyed, if necessary, from the computer through the use of a relevant software program.

Please also note that there will be no incentive for your participation. Thus your participation is voluntary.

This study received ethical clearance from the Unisa College of Education Ethics Review Committee (**Ref: 2020/06/10/50785532/26/AM**), and the Research Permission Subcommittee (RPSC) of the UNISA Senate, Research, Innovation, Postgraduate Degrees and Commercialisation Committee (SRIPCC) (**Ref #: 2020_RPSC_032**). A copy of the approval letter can be obtained from the researcher if you so wish.

If you would like to be informed of the final research findings, please contact me on the above-mentioned email address.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

CONSENT/ASSENT TO PARTICIPATE IN THIS STUDY (Return slip)

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname _____

Participant Signature _____ Date

Researcher's Name & Surname _____

Researcher's signature _____ Date

APPENDIX D: INTERVIEW INSTRUMENT



INTERVIEWS: RESEARCH SUPPORT INITIATIVES IN A SOUTH AFRICAN OPEN DISTANCE LEARNING INSTITUTION

Section A: Biographic information

- a. Gender
- b. Age
- c. Race
- d. Qualification
- e. Academic department
- f. Did you benefit from any research support programme offered by UNISA? If yes, which year(s)?

Researcher's perceptions about research support

- a. Briefly tell me about yourself and your role at home.
- b. Briefly describe the nature of your work? (e.g. different KPAs and their weights)
- c. Are you part of any research community or communities?
- d. In terms of your research KPA, what is expected from you?
- e. Describe the influence of other KPAs (teaching and learning, community engagement and academic citizenship) on your research KPA.
- f. In light of the above expectation(s), what would you say are your research support needs, if any?
- g. What were your expectations from the research support initiative provided to you by Unisa in relation to your research output and productivity (e.g. enhanced research output and productivity, obtaining postgraduate qualification, etc.)?
- h. In terms of your support needs mentioned in section f, and expectations mentioned in section g above, how would you judge the effectiveness of the intervention, and why?
- i. Are there any research skills or competencies that you attribute to the support offered through the initiative?
- j. How do you wish you could have been supported better by the research support initiative?

APPENDIX E: DECLARATION OF LANGUAGE EDITOR



Monica Botha
T/a I'Avenir Consulting
PO Box 32945
WAVERLEY
0135

Cellular: 083 269 0757
E-mail: monicabo@lantic.net

TO WHOM IT MAY CONCERN

This serves to confirm that I have edited and proofread the thesis entitled

**EXAMINING RESEARCH SUPPORT PROGRAMMES FOR ACADEMIC STAFF
AT A SOUTH AFRICAN OPEN AND DISTANCE LEARNING INSTITUTION**

prepared by Mr Johannes Nkosinathi Zongozzi in accordance with the requirements for the PhD degree in Education (Open Distance Learning) at the University of South Africa, according to the prescribed specifications, where available, and the latest standards for language editing and technical (computer-based) layout.

Editing was restricted to language usage and spelling, consistency, formatting and the style of referencing. No structural writing of any content was undertaken.

As an editor I am not responsible for detecting any content that may constitute plagiarism.

All references have been provided in the prescribed format.

I am not accountable for any changes made to this dissertation by the author or any other party after the date of my edit.

(Electronically signed – actual signature withheld for security reasons)

MONICA BOTHA

10 January 2022

Sole Proprietor: Monica Botha

*Business Planning Corporate Systems Engineering Corporate Document Standards
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APPENDIX F: TURNITIN ORIGINALITY REPORT

ORIGINALITY REPORT

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