Chapter 19:

ODL Research in South Africa: An Analysis of Research Levels and Publication Vehicles towards the Development of a Context-Specific ODL Research Framework

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Introduction

The aim of this chapter is to investigate the levels and numbers of distance education (DE) research articles that South African authors have published in both local and international journals. This aligns with the goals of The United Nations Educational, Scientific, and Cultural Organisation (UNESCO) Chair on Open Distance Learning (ODL) at the University of South Africa (Unisa) (Unisa 2018). The UNESCO chair aims to establish a strong research presence in this specialised field (Letseka 2021). The number of research articles published in international journals for all South African authors is relatively low, and this chapter investigates possible reasons. The chapter's data was compiled using the SCOPUS and SABINET research databases and contains all ODL-related articles authored by South African researchers that have been published since 2010. To classify the research levels of the articles, the chapter uses Zawacki-Richter's (2009) DE research framework.

An analysis of the trends in journal choice for these publications is also included. The reason for this investigation is to address the overarching question of whether the low number of South African authored ODL publications in international journals is due to research that is not contextually relevant, whether the academic standard is not high enough, or if there is editor bias towards research from developing nations. The need for developing a context-specific ODL research framework for South Africa and other developing countries is argued.

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Background to the study

The primary roles of academic staff in Higher Education (HE) can be categorised into three distinct areas: teaching, service, and scholarship (Hunt 2017). The role of academic scholarship, as evidenced by research papers, is discussed in this chapter. According to Koul (2009), higher education institutions (HEIs) can only address their population's socio-educational demands through contextually appropriate and systematic research.

Unisa is the largest DE institution in Africa, and it is classified as a mega-university. A mega-university is defined as 'a distance teaching institution with over 100,000 active students in degree level courses' (Daniel 1996: 29). According to the International Monetary Fund (IMF) (IMF 2018), South Africa is classified as a developing country. Other developing countries according to the IMF classification (IMF 2018) include, but are not limited to Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria, Pakistan, Russia, and Turkey. Mega distance education universities can be found in all these countries (Roberts 2018). The importance of research originating from developing countries can be highlighted by the fact that more than 80 per cent of the world's population live in developing countries, which includes Africa, most of Asia and Latin America, as well as Russia. In addition, over 50 per cent of HE students in the world hail from developing countries (World Bank 2000).

Unisa's Research and Innovation Strategy (2016–2020) (Unisa 2016) emphasises the importance of the development of Unisa as a leading research institution in Africa. UNESCO established a chair on Open Distance Learning (ODL) at Unisa to increase ODL research and build capacity for ODL scholars in Southern Africa. Although many research articles are written and published by Unisa academics, Letseka (2021: 138) argues that because Unisa is a mega-university, the ODL research presences internationally is not 'visible nor impactful enough'.

The primary research questions for this study relate to the reasons for the low number of ODL research articles from South Africa and other developing countries that have been published in international journals. Three hypotheses are presented. First, the reason for the low number of international journal publications could relate to the context of the research bearing little interest to an international community. Second, we need to investigate whether the quality of the South African ODL articles is of a high enough standard, and finally we address the question of editorial bias towards research emanating from developing countries.

Most research originating from developing countries is context specific and centres on the unique challenges of these countries. Many developing countries face challenges with regard to broadband connectivity, access to Wi-Fi, lack of funding for hardware, an inconsistent electricity

supply, as well as insufficient levels of digital literacy skills (Daya 2020). Quality of research could also be seen as a barrier to international publications. There is a perception that the quality of research originating from developing countries is below the accepted standard for international publication (Salager-Meyer 2008; Harris et al. 2015). The final proposition put forward in this chapter is that editorial bias exists and that some journal editors have an inherent cognitive bias towards researchers from 'other' countries. This is called the availability heuristic, and it is the tendency for someone to estimate the probability of something happening based on past examples that come to mind (Giblin and Stefaniak 2021; Yamashiro and Roediger 2021). It could also fall under the guise of confirmation bias where the editor possesses an existing or previous belief that research from developing countries is inferior (Schuum 2021). The author of this chapter has anecdotal evidence to confirm this scenario. At an international ODL conference in 2016, a research article based on a successful presentation at the conference was offered to the editor of an influential DE journal. On hearing that the author was from South Africa, his immediate response was that he does not look at any articles from South Africa and simply bins them.

At this stage these three hypotheses are posed as the starting point to understand some of the reasons for the low international publication record of developing country academic authors. To provide evidence to support these propositions, this chapter collected and statistically analysed South African authored ODL SCOPUS and SABINET journal publications over a ten-year period.

Aim of the research

The aim of this chapter is to empirically investigate the numbers and levels of ODL articles that have been published in SCOPUS and SABINET journals by South African authors. The justification for carrying out this research is to understand some of the reasons for the low number of academic publications by South Africans, particularly in internationally published journals. This is in line with Letseka's (2021) argument that ODL research in South Africa is neither sufficient nor impactful enough. It is beyond the scope of this chapter to investigate the quality of South African research and the extent of editorial bias, but what is possible is to scrutinise, through a content analysis, the levels of research according to the Zawacki-Richter framework (2009). In addition to analysing the levels and sub-levels of South African ODL research, a further aim of this study is to investigate the publication vehicles being used by South African authors, with specific emphasis on the levels of research published in these various journals.

Table 1 provides evidence to support the notion of low numbers of ODL articles authored by South African researchers. Most journals that are listed on the SCOPUS database are international journals. The data for this table was extracted from the SCOPUS database and the search criteria for the articles were:

- keywords: ODL OR distance education OR online learning OR e-Learning;
- authors: affiliation to a South African HEI
- language of publication: English

Table 1: Scopus ODL publications 2018–2020

Year	Number of SA authored articles	Total number of articles	SA % of articles
2018	27	680	3.97
2019	39	769	5.07
2020	26	1 364	1.90
Total	92	2 813	3.27

Table 1 clearly indicates the low number of South African authored ODL publications in SCOPUS listed journals. What is particularly worrying is the figure for 2020. The world was affected by the COVID-19 pandemic which hurtled all education into an online format, for which many were ill prepared (Bozkurt et al. 2020). Most contact HEIs found themselves thrust into the world of online teaching and learning, and this would account for the marked increase in the number of ODL publications internationally in 2020, which nearly doubled in one year. Table 1 also indicates that in South Africa this trend was reversed, and our publication numbers decreased from 39 in 2019 to only 26 in 2020.

Various interpretations could be put forward for this decrease. I would speculate that academic scholars might have been underprepared to work in the challenging situation of home-based working (due to lockdown work restrictions, which mandated staff to work at home). The reason for this could be that ICT infrastructure posed challenges and problems when working away from the office environment, staff experienced data and connectivity challenges, and that the immediate attention needed to be focused on teaching in an online environment rather than on

research outputs. In addition, the very specific academic field of DE, particularly online learning, was thrown open to a far wider pool of researchers and many new entrants entered the field (Verma and Gustafsson 2020).

Universities in South Africa actively encourage their academic scholars to publish research in international journals. This can be seen against the background of the Department of Higher Education (DHET) research grant policy according to which HEIs are rewarded for international publications at double the rate of reward for publication in South African journals. Research in South Africa is guided by the DHET Research Outputs Policy (2015). This policy (DHET 2015: 3) aims 'to sustain current research strengths and to promote the kinds of research and other knowledge outputs required to meet national development needs'. The purpose of the policy is to encourage research outputs through a reward system which is paid to the public institutions of higher education. In order to qualify for the research subsidy that is paid by the DHET an article must be published in one of the journals that appears on their accredited list. An updated list is distributed every year and South African journals as well as international journals are included in this accredited list.

Before 2021 the DHET accredited list included only three international journals where the focus is entirely on ODL research. These journals are Distance Education (DE), which is published by Taylor and Francis under the auspices of the Open and Distance Learning Association of Australia (ODLAA); the International Review of Research in Open and Distributed Learning (IRRODL), which is published by Athabasca University; and Progressio, a local South African journal published by Unisa Press.

Progressio is a South African journal concentrating on ODL practice and is a vehicle for researchers and practitioners to publish their articles on open, distance, and e-learning. The journal has an international editorial board and is supported by the Commonwealth of Learning (COL) as well as the National Association for Distance Education and Open Learning in South Africa (NADEOSA) (Roberts 2016). The journal has been available online since 1990, starting with Volume 21 and Issue 2. Progressio received accreditation from the DHET in 2010, the result of which was the limiting of the number of articles that could be published by Unisa authors in any one issue. Historically most of the articles that were published in this journal were authored by Unisa staff members; this is not surprising as Unisa is the largest DE institution in South Africa and employs the greatest number of academic staff of all the South African universities (CHET 2013). The DHET accreditation, however, meant that in future 75 per cent of articles in Progressio had to be authored by researchers outside of Unisa. Because of the restriction on publications from Unisa since Progressio received its accreditation status, authors from other universities are starting to publish in this vehicle, most

notably from the North-West University in South Africa (SABINET 2019).

Once restrictions were placed on the number of articles that could be published in Progressio by Unisa authors, there was a marked reduction in ODL outputs from South Africa. This was partially set off by a sharp increase in the number of ODL articles published in the Mediterranean Journal of Social Sciences in 2013 and 2014. This journal has subsequently been taken off the accredited journal list, which has led to the decrease in ODL publications from South Africa.

Theoretical background

In order to address the criticisms of the relatively new academic field of DE in the 1980s (Perraton 2000; Bernard et al. 2004), Zawacki-Richter (2009) developed a framework for classifying ODL research. This framework has been used as the standard guide for classifying ODL research in many studies (Bozkurt et al. 2015; Roberts and Gous 2016; Gaskell 2016; Hakan et al. 2019).

This framework classifies ODL research according to three different levels which are termed the macro, the meso, and the micro levels. The macro level relates to research that is carried out on DE systems and theories and consists of five sub-levels. Meso-level research addresses management, organisational and technology issues in DE, and encompasses seven different sub-levels. The third level according to this framework is the micro level, which concentrates on context-specific teaching and learning within DE institutions. The micro level is divided into three sub-levels of research. Table 2 below depicts each of these levels and sub-levels of DE research. Lionarakis et al. (2018) refer to the three levels as societal (macro), institutional (meso), and individual (micro).

Table 2: Distance education research levels according to the Zawacki-Richter (2009) framework

Level	Scope	Research areas
Macro (Societal)	Distance education systems and theories	Access, equity, and ethics
		Globalisation of education and cross-cultural aspects
		Distance teaching systems and institutions
		Theories and models
		Research methods in distance education and knowledge transfer
Meso (Institutional)	Management, organisation, and technology	Management and organisation
		Costs and benefits
		Educational technology
		Innovation and change
		Professional development and faculty support
		Learner support services
		Quality assurance
Micro (Individual)	Teaching and learning in distance education	Instructional design
		Interaction and communication in learning communities
		Learner characteristics

Although the academic field of DE has been around since the 1980s, it is prudent to observe the different generations of DE delivery over the years and how they have evolved. Taylor (1995) proposed five different models of DE delivery, which is presented in Table 3.

Table 3: Five generations of distance education delivery modes (adapted from Taylor 2001)

Generation	Model	Mode of delivery	Flexibility	Interaction
1st Generation	Correspondence model	Single medium: print	Yes	Low interaction
2nd Generation	Multimedia model	Print, audio, and videotapes	Yes	Low interaction
3rd Generation	Telelearning model	Tele-conferencing, television, and radio broadcasting	No	Possible interaction
4th Generation	Flexible Learning model	Interactive multimedia online, Internet-based access to WWW, computer-mediated communication	Yes	Mainly interactive
5th Generation	The Intelligent Flexible Learning Model	Interactive multimedia online, Internet-based access to WWW, computer-mediated using automated response systems, learner management systems	Yes	Highly interactive

Many DE universities in developing nations serve a significant number of students and were founded to meet the demands of non-traditional students (Oblinger 2003). In 1946 Unisa was designated as the first totally DE university and is also Africa's largest remote learning university. With about four million students, Indira Ghandi Open University (IGNOU) is the largest university in the world, with its main campus in New Delhi, India. IGNOU was founded in 1990, just over 30 years ago (IGNOU 2022). The first-generation model of correspondence was used by these older DE universities, which means that print media and postal services were used for all communication. Many of these HEIs have progressed through the generations of DE delivery modes, and in many cases their teaching models now combine generations of delivery modes.

Other universities, on the other hand, have only recently expanded their operations to include a component of DE and have moved straight into online learning. With the advent of online learning, based on the intelligent flexible learning model, many existing full-contact universities were able

to enter the field of DE. As a result, these universities did not need to migrate through the many generations of DE delivery, resulting in a different historical and scientific trajectory. Consequently, many international journals headquartered in affluent countries may overlook the significance of context-specific research for other developing countries.

Research that is context specific to the South African environment, in my opinion, is critical and should be prioritised. However, South African HEIs, as well as the DHET, encourage overseas publishing through their incentive scheme, which presents a conundrum for South African scholars. According to the Zawacki-Richter (2009) framework and Figure 5, South African researchers prioritise instructional design, interaction and communication, and learner characteristics, which is directed at the micro level of research.

Research methodology

When analysing textual material, content analysis is thought to be the best method (Hsieh and Shannon 2005). Content analysis, according to Stemler (2001), is a valuable approach for examining trends and patterns that exist in documents. For the purposes of this research, a content analysis of all South African-authored ODL journal publications between 2010 and 2019 was conducted. Journal articles that were published in both the SCOPUS and SABINET databases were extracted. This is an extension of previous research carried out by Roberts and Gous (2016) when they analysed the state of DE research in South Africa according to trends, research areas, and publication vehicles.

Data for this study was gathered from the SCOPUS database of academic literature (SCOPUS 2019), as well as SABINET, the South African Bibliographic and Information Network (SABINET 2019). The Unisa library's online service was used to access both databases. Because the SCOPUS database lists all the main international DE journals, it was thought that this database would give reliable information for the purposes of this study. Many South African-published journals are not included in the SCOPUS database although they can be found on SABINET. As mentioned earlier, only journals that are accredited by the DHET are eligible for a subsidy, therefore only DHET approved journals were considered for this study.

The variables—open and distance education, ODL, distance learning, open education, e-learning, and online learning—were used as the search variables in each of these databases. The search was limited to journal publications only, using South Africa as the affiliation nation. After the data were extracted, it was cleaned by two different coders. Some articles were eliminated because

they did not meet the research criteria. There was also some overlap between the SCOPUS and SABINET listings, such as the African Education Review (AER) and Perspectives in Education, for example, which appear in both databases. As a result, the duplicates were eliminated. The final list was compiled and consisted of 142 articles for the period 2010–2014 and 316 articles for the period 2015–2019, where the main research topic was DE. Each article was first coded according to the research level (for the levels of research, the macro level was coded as a1, the meso level as a2, and the micro level as a3). Subsequently, the research areas were coded according to the Zawacki-Richter framework (2009) as depicted in Table 2. Pre-set codes, sometimes known as 'a priori codes', were used in the coding. Two coders separately coded the articles according to the 'a priori' codes to ensure the veracity of the coding. Both coders are senior Unisa academics with extensive DE research experience.

Research results

The results are organised first, to situate the position of both South African authors, as well as authors from developing countries, in the international field of DE publications. Thereafter, the South African authored articles are presented according to the Zawacki-Richter (2009) framework and discussed according to the levels of macro, meso, and micro research and sub-levels within each of these levels. Finally, an analysis of the publication vehicles used by South African ODL authors is presented and discussed. Figure 1 indicates the number of ODL articles published in SCOPUS-registered journals, highlighting the position that developing countries have in relation to more developed countries. The reason for including this figure is to mainly indicate the number of international publications since most international DE journals are curated by this database.
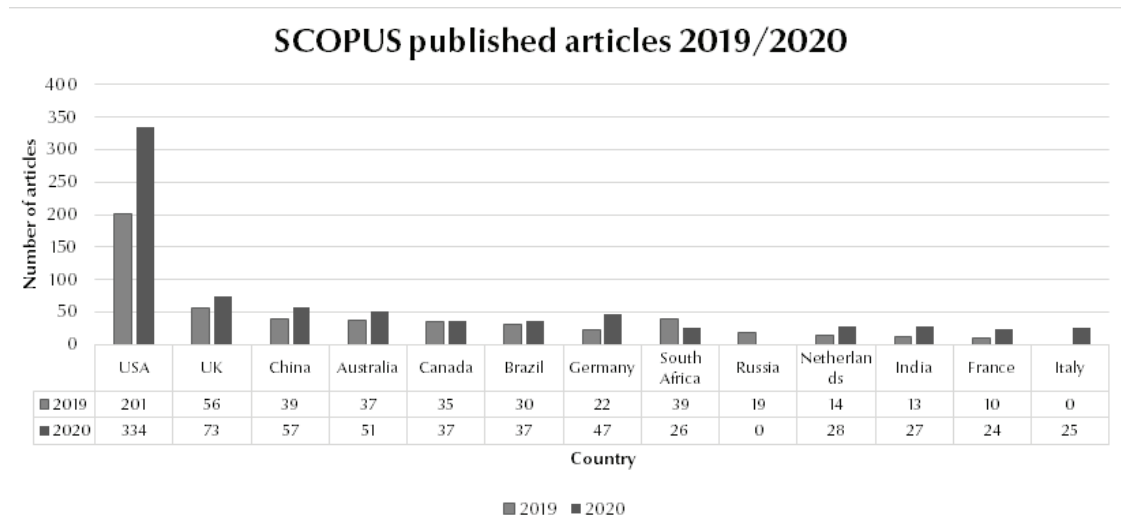
SCOPUS published articles 2019/2020

	USA	UK	China	Australia	Canada	Brazil	Germany	South Africa	Russia	Netherlands	India	France	Italy
■ 2019	201	56	39	37	35	30	22	39	19	14	13	10	0
■ 2020	334	73	57	51	37	37	47	26	0	28	27	24	25

Figure 1: SCOPUS-published ODL journal articles 2019 and 2020 by country

Figure 1 demonstrates that the United States of America (USA) is by far the most prolific generator of SCOPUS-published ODL papers, increasing their quantity by 40 per cent between 2019 and 2020. The United Kingdom (UK), Australia, Germany, the Netherlands, France, and Italy are among the developed countries that have seen a significant growth in ODL publications. Due to the COVID-19 epidemic, these countries are thought to have advanced quickly into the niche specialty area of online learning. After producing no ODL publications in 2019, Italy published 25 papers in 2020. This has been the situation in some developing countries as well.

China has increased its publications from 39 to 57, Brazil has shown a small increase in publications, and India has more than doubled its ODL publications. It is disheartening to see that South African ODL articles dropped in numbers, from 39 to 26, during this period. I would contend that the main reason for this is that we were possibly underprepared for emergency remote teaching (Bozkurt et al. 2020) and all efforts were put into the management of, and technological challenges presented by online teaching and learning. In this situation of an almost overnight change to our teaching models, the concept of triage took over and precedence was placed on teaching and learning, with research and engaged scholarship being pushed further down the scale of importance. Academic staff needed to concentrate on reimagining their teaching, adapting to working from home, online examinations, and addressing the associated technological challenges.

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The hope is that once the new systems and teaching model are fine-tuned and staff are comfortable working in this environment, they will be able to continue their ODL research projects and increase their publication outputs.

The following analysis explores the levels of ODL research in two five-year time periods (2010–2014 and 2015–2019). The efforts that were made by both national government in South Africa, as well as HEIs towards increasing ODL research has borne fruit, which can be seen in Figure 2—the total number of ODL publications in the two five-year time periods.

NUMBER OF SOUTH AFRICAN PUBLISHED ODL ARTICLES BY 5-YEAR TIME PERIODS

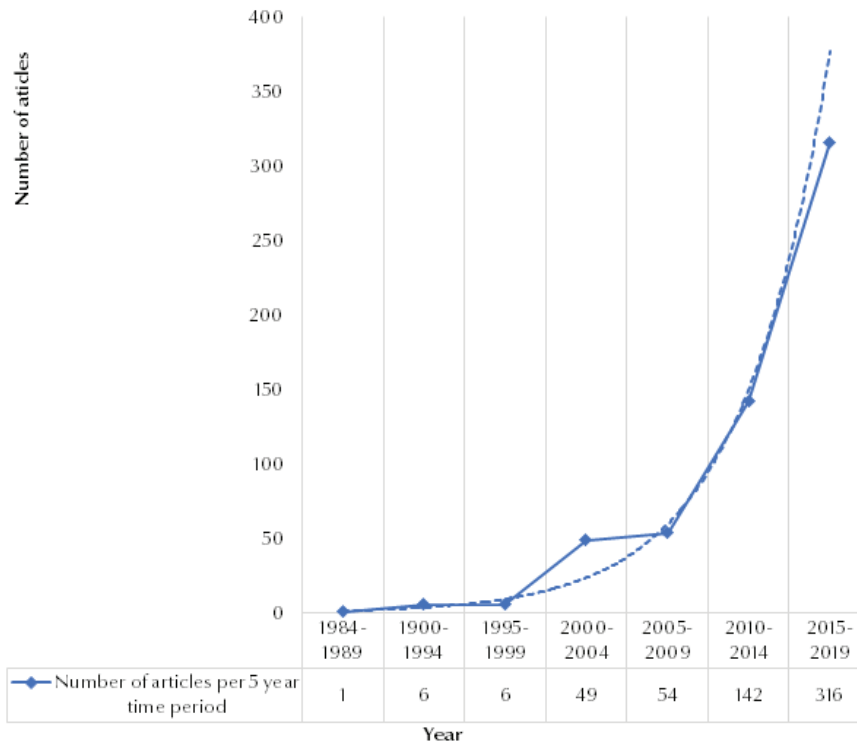|	1984–1989	1900–1994	1995–1999	2000–2004	2005–2009	2010–2014	2015–2019
Number of articles per 5 year time period	1	6	6	49	54	142	316

Figure 2: Total number of South African-authored ODL publications

Figure 2 shows that the number of South African-authored ODL research publications has expanded exponentially since the initial publication in 1984. In 2014 the South African government issued a White Paper on post-secondary education that allowed all HEIs in the country to offer DE courses. Prior to this date Unisa was the only HEI authorised to provide DE courses. As a result, several additional South African HEIs encouraged their academic staff to conduct research in ODL, resulting in a surge in journal articles. Between 2014 and 2019, there was a more than 100 per cent increase in ODL publications compared to the preceding five-year period.

Figures 3, 4, and 5 show the ODL research levels and sub-levels within each level, that South African authors have published on over two five-year periods (2010–2014 and 2015–2019). This is presented in order to address the hypotheses posed earlier in this chapter that research from developing countries is not seen as interesting to the international community, since its perspective is context specific of the environment of developing countries. The data was extracted from both the SCOPUS and SABINET databases.
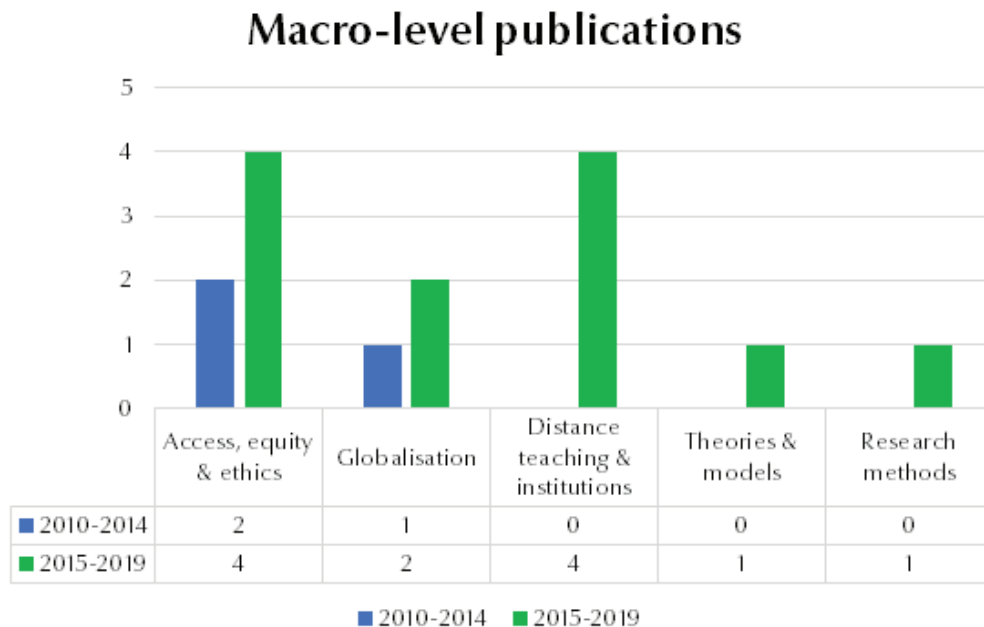
	Access, equity & ethics	Globalisation	Distance teaching & institutions	Theories & models	Research methods
2010-2014	2	1	0	0	0
2015-2019	4	2	4	1	1

Figure 3: Macro-level South African-published articles

Macro-level research is separated into five sub-levels, as shown in Figure 1, and focuses on international DE systems and theories. According to Lionarakis et al. (2018), macro-level research spotlights societal challenges and embraces the globalisation theme. According to Zawacki-Richter et al. (2009), nearly 17 per cent of articles published in five DE journals between 2000 and 2008 (Open Learning [OL], Distance Education [DE], American Journal of Distance Education [AJDE], Journal of Distance [JDE], and International Review of Research in Open and Distance Learning [IRRODL]), addressed the macro-level theme.

Figure 2 shows that only three articles by South African authors between 2010 and 2014 focused on the macro level. In the timespan 2015–2019, this increased to twelve articles. These 2015–2019 numbers translate to little under four per cent of all ODL articles, which is significantly lower than the international average for macro-level research. Furthermore, all these macro-level publications were published in international journals.

Meso-level publications

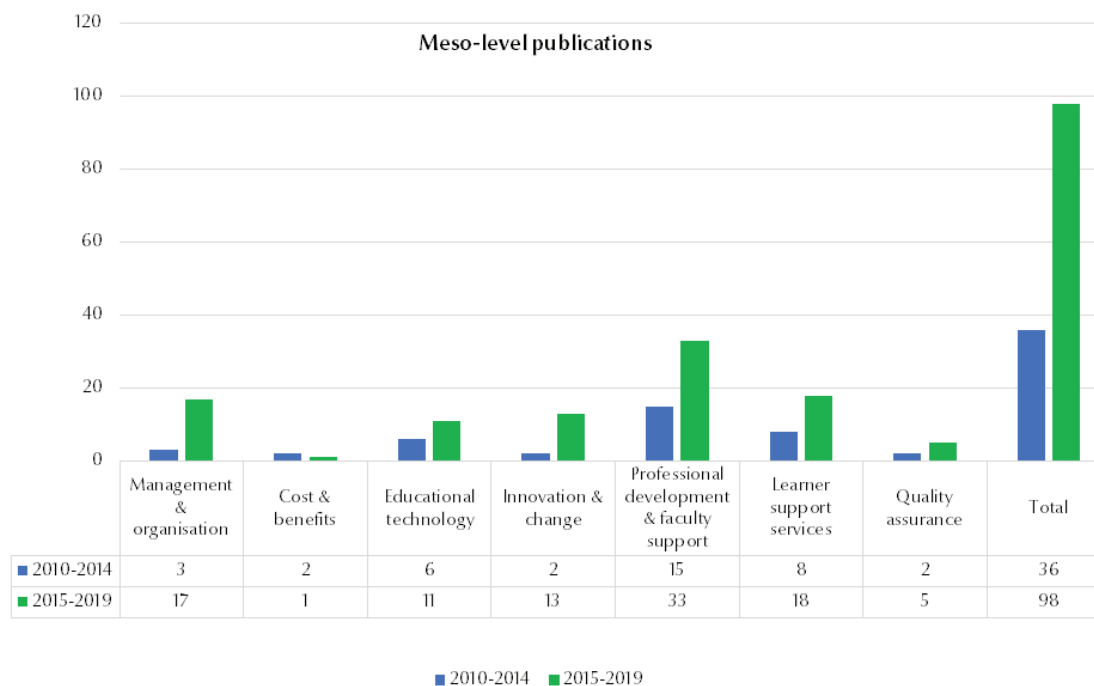|	Management & organisation	Cost & benefits	Educational technology	Innovation & change	Professional development & faculty support	Learner support services	Quality assurance	Total
■ 2010-2014	3	2	6	2	15	8	2	36
■ 2015-2019	17	1	11	13	33	18	5	98

■ 2010-2014   ■ 2015-2019

Figure 4: Meso-level South African-published articles

As indicated in Figure 4, the meso level of research has seen a large growth in article publication since the period 2010–2014. Meso-level ODL research is divided into seven sub-levels and focuses on research related to institutional studies. Figure 4 shows that since 2010, the meso level of research has seen a significant increase in article publication. This level of research accounted for roughly 26 per cent of all ODL publications from 2010 to 2014, and this figure has climbed slightly to 31 per cent from 2015 to 2019.

ODL researchers in South Africa have typically focused on the meso sub-level of professional development and faculty assistance, and this pattern has been maintained. It still accounts for over a third of all publications at the meso level and ten per cent of all ODL articles. Open Learning (OL), Distance Education (DE), American Journal of Distance Education (AJDE), Journal of Distance (JDE), and International Review of Research in Open and Distance Learning (IRRODL) were among ODL journals studied by Zawacki-Richter et al. (2009). They looked at all the articles published between 2000 and 2008 (N=695) in these five journals and discovered that around six per cent of the articles focused on professional development for ODL teaching staff.

According to Roberts (2017), Indian scholars have published fewer articles in professional development than South African writers but have published more articles in the sub-level of educational technology than South African authors. Between 2010 and 2016, 11.2 per cent of Indian publications dealt with educational technology, but South Africans only produced 4.7 per cent of their total ODL papers in this category.

Management and organisation in ODL contexts are another sub-level that has seen increased expansion. From 2010 to 2014, there were just three publications at this sub-level, however from 2015 to 2019, there were seventeen publications. When compared to Indian authors, South African authors have consistently outperformed their Indian colleagues (Roberts 2017) in this area. South African authors published 5.4 per cent of their contributions on management and organisation between 2010 and 2016, while India only published 1.7 per cent of their work in this sub-level.

An area of research that seems to be neglected is that of costs and benefits in DE. From Figure 4 it can be noted that there has only been one publication since 2015. This area of research was spearheaded by a visiting professor from Germany at Unisa, who investigated the cost structure of the fully online modules offered by Unisa as part of their signature modules. Since his return to Germany, this sub-level has remained under-researched.

There is also a glaring lack of research on quality within DE institutions. Since 2015 there have only been five articles published on this important sub-level. Distance education institutions are

increasingly committed to implementing quality assurance procedures (Belawati and Zuhairi 2007; Jung and Latchem 2007). According to Jung (2004) and Martin and Stella (2007), several organisations, including the Asian Association of Open Universities and Commonwealth of Learning, have developed principles and criteria for ensuring quality in DE. It is, however, pleasing to note the overall increase in meso-level publications by South African authors, although some sub-levels remain under-researched.

Figure showing Micro-level publications bar chart.

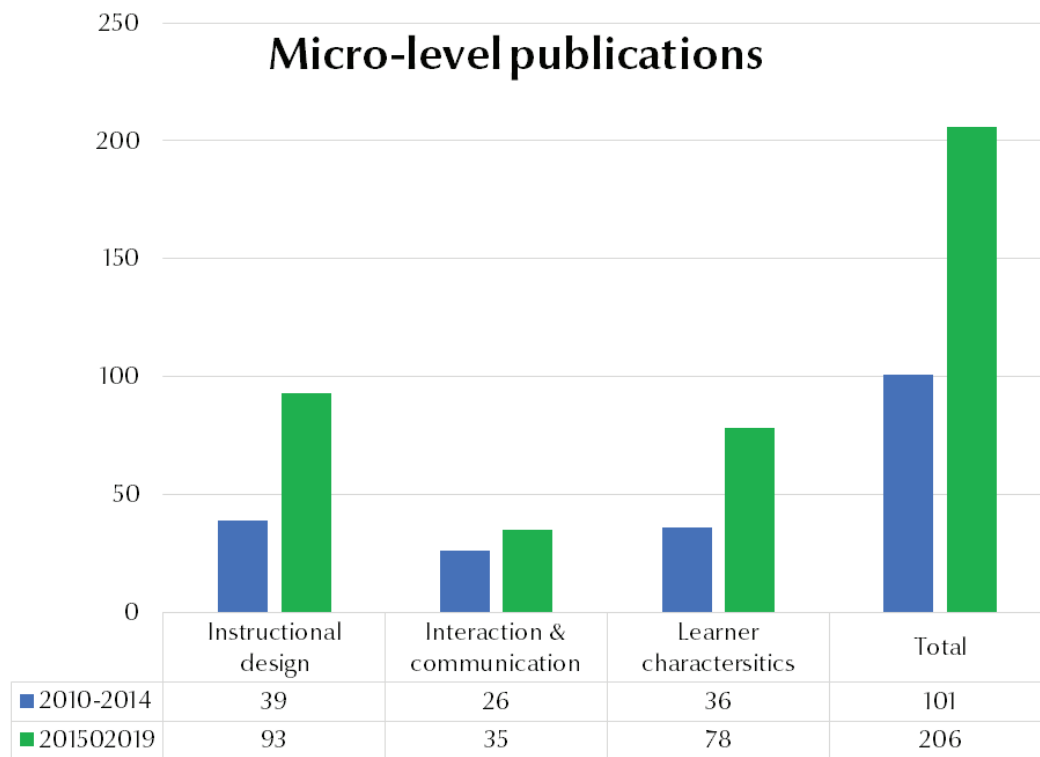|	Instructional design	Interaction & communication	Learner charactersitics	Total
■ 2010-2014	39	26	36	101
■ 201502019	93	35	78	206

Figure 5: Micro-level South African-published articles

In both the 2010–2014 and 2015–2019 time periods, Figure 5 indicates that the micro level of publication remains the most popular among South African researchers. This category encompasses over 65 per cent of all ODL research articles. However, this is in line with research from other countries (Zawacki-Richter 2009). Roberts (2020) investigated Russian-authored ODL publications, and her findings showed that 60 per cent of their SCOPUS-published articles for the

period 2015–2020 were also directed towards the micro level research field.

The sub-level of interaction and communication, however, has only shown a relatively small increase from 25 to 35 articles during the COVID-19 pandemic when most teaching migrated to an online format. Instructional design has, however, risen to be a more focused area of research, although interaction and communication were anticipated to dominate during the COVID-19 epidemic. Interaction and communication in the online space poses one of the largest challenges to online distance education. South African researchers continue to concentrate on the sub-levels of learner characteristics, which is an area that is possibly saturated and not currently of interest to a larger audience.

SCOPUS vs SABINET journals

The majority of the international DE journals are listed on the SCOPUS database, except for a few South African journals that are listed on both the SCOPUS and SABINET databases. Many South African journals published under SABINET are not available on the Scopus database. There are, however, a few exceptions and these include African Education Review, the South African Journal of Education (SAJE), the South African Computer Journal (SACJ), and HTS: Theological studies. However, the journal that features the highest number of ODL articles written by South African authors is Progressio, which is a South African-based journal and not listed on SCOPUS. Figure 6 depicts the total number of South African authored journal articles according to the journal in which they were published. It only includes those journals with the highest number of ODL publications— there are many other journals with fewer articles from South African authors.

Number of articles published in journals

	Progressio	Mediterranean	SAJHE	IRRODL	Distance Education	TOJDE	SAJE	HTS	AER	SA Computer Journal	Journal for New Generation Sciences	SA Journal of Information & Management
2010-2014	63	21	17	8	4	3	1	1	1	1	0	0
2015-219	37	0	25	21	10	10	10	9	10	7	7	6
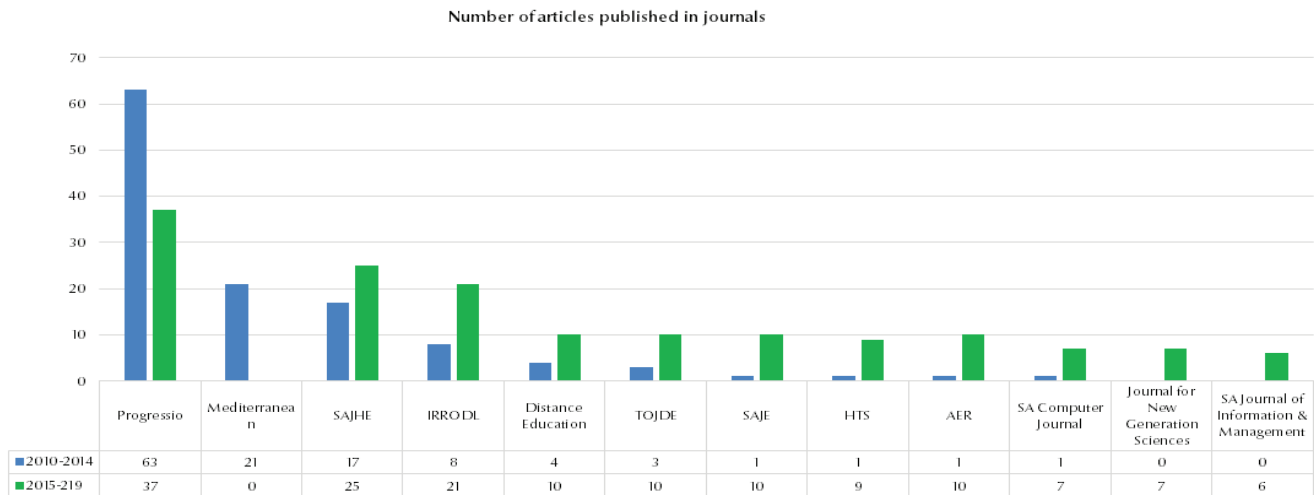
Figure 6: Journals with highest number of South African-authored ODL articles

Two interesting trends are indicated in Figure 6. First, the number of articles published in Progressio, the only dedicated South African ODL journal, has declined from 63 in the period 2010–2014 to 27 in the period 2015–2019, and second, there were no publications in the Mediterranean Journal of Social Sciences after 2014. Progressio is a South African journal published by the Unisa Press that focuses on ODL practice, open, distance, and e-learning. As mentioned previously, the DHET certification of this journal limits the number of articles written by authors from a single university to 25 per cent of the total number of articles published in a single issue. Traditionally Progressio used to publish three issues every year, but this has reduced in recent years. This restriction might adversely affect the pool of research articles available to be published in Progressio due to Unisa employing the highest number of ODL practitioners and researchers in South Africa (CHET 2013). Unisa researchers traditionally authored most of the articles published in Progressio, and as a result, these authors are driven to seek publication in other journals. A noticeable increase in the number of ODL articles published in the Mediterranean Journal of Social Sciences in 2013 and 2014 partially compensated for the reduction in access to Progressio by Unisa authors. The Mediterranean Journal of Social Sciences was, however, removed from the DHET list of accredited journals in 2016, which is the reason for zero publications in the 2015–2019 period.

It's encouraging to see a significant increase in the number of South African-authored ODL

articles published in the journals Distance Education and IRRODL. South African academics are making inroads into these journals, both of which are regarded as influential publications in ODL research (Bozkurt et al. 2015). From 2010 to 2014, the number of South African-authored journal articles published in IRRODL increased from eight to 21. Over the same period, the number of articles in Distance Education grew from four to ten.

Other journals have stepped in to fill the void left by the restrictions on Unisa writers' publications in Progressio and the withdrawal of the Mediterranean Journal of Social Sciences from the DHET authorised list, as seen in Figure 6. Traditional ODL publications have found new homes in different disciplines, demonstrating the transdisciplinary nature of ODL research. Table 4 shows how the field of ODL has been incorporated into other subject-based journals.

Table 4: Top ranking of published papers in distance education based on subject area (1890–2016)

Rank	Subject area	Number of articles
1	Education and educational research	6 107
2	Computer science	1 769
3	Engineering	352
4	Information and library science	214
5	Social sciences	143
6	Health care	126
7	Business economics	125
8	Psychology	101
9	Social issues	88
10	Telecommunications	65

Table 4 is adapted from Amoozegar et al. (2018). These authors explored the trends in distance education publications from 1980–2016 and identified the most prominent subject areas of published papers. As can be expected, the subject of education and educational research is most prominent, followed by computer science, engineering, and information and library sciences. When comparing the results in Figure 6 and the findings presented in Table 4, a certain amount of

synergy can be observed. There has been a move towards other subject specialist journals for DE publications—for example, amongst others, The South African Computer Journal, the South African Journal of Information and Management, as well as the theological journal HTS: Theological Studies which has devoted entire special issues to teaching theology at a distance.

Figure 7 presents the research levels—macro, meso, and micro—found in the articles of four prominent DE journals: Progressio (SABINET), IRRODL (SCOPUS), AER (SABINET and SCPOPUS), and Distance Education (SCOPUS).

Research levels of 4 distance education journals

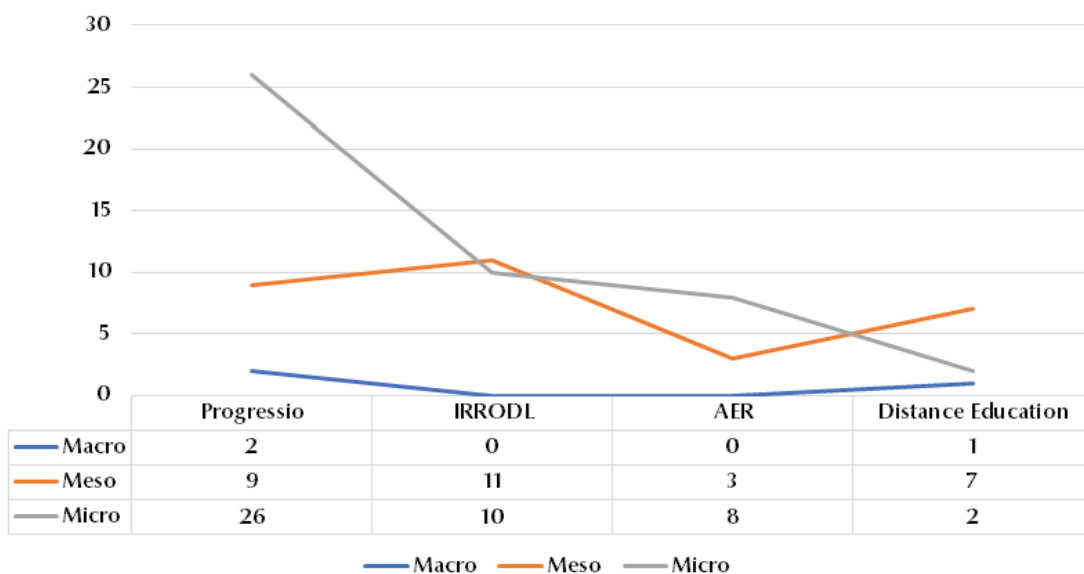|	Progressio	IRRODL	AER	Distance Education
Macro	2	0	0	1
Meso	9	11	3	7
Micro	26	10	8	2

Figure 7: Levels of research in four distance education journals

As previously noted, the journal Progressio is published in South Africa, and most of the articles are produced by South African authors. Figure 7 demonstrates that of the 37 papers published in Progressio between 2015 and 2019, only one is focused on the macro level and nine reflect meso-level research. Most of the publications involve micro-level research. This supports the earlier observation that South Africa should prioritise contextually specific research. However, due to the limitations on the number of articles accepted from a single institution, there is an urgent need for

additional journals devoted to distance/online learning to be developed in South Africa and other developing countries.

African Education Review is a SCOPUS and SABINET listed publication that focuses on research in Africa's developing countries. Most of the papers follow the same trend as Progressio in that they are based on micro-level research. IRRODL is an ODL publication headquartered in Canada that welcomes submissions from all countries. The South African publication success in IRRODL, which shows an even split of publications at the meso and micro levels, could be due to IRRODL's willingness to publish micro-level research in their journal.

The journal Distance Education follows the general trajectory of publishing articles that are focused on the macro and meso levels. Of the nine articles published in this journal since 2015, only two of the ten published articles are micro-level based.

Conclusion

South African-published ODL articles have increased significantly between 2015 and 2019. However, there has been a slowdown in published articles in 2020 and 2021 in SCOPUS-published journals. This is concerning, as most other countries, including developing ones, have increased their research outputs in SCOPUS journals during this period. We need to be mindful that the South African efforts might well have been concentrated on practical teaching and online pedagogies, rather than empirical research.

At the beginning of this chapter, three scenarios were posited to provide possible explanations for the low number of South African-authored ODL articles published in international journals. The question of quality has not been addressed in this research and should be the topic of future research. Editorial bias against research emanating from developing countries was briefly touched upon. This cognitive bias towards South African publications can be compared to the recent COVID situation where a new variant of the virus was discovered by eminent medical researchers in South Africa (Malan 2021). Instead of hailing the expertise and achievement of the discovery, many countries imposed an immediate travel ban on all South Africans.

What was investigated in this chapter are the levels of ODL research as measured against the framework of Zawacki-Richter (2009). This analysis was carried out on articles that were published between 2010 and 2019 and should provide a guideline to research managers regarding the levels of research that South African authors produce.

Figure 5 showed that the number of micro-level ODL publications has more than doubled between 2015 and 2019. Figure 4 indicates that the number of published articles at the meso level increased almost threefold, from 36 to 98. Therefore, the growth in meso-level articles is to be welcomed as it shows that South African researchers are including additional research aimed at the meso level, which could draw the attention of an international audience.

Research at the micro level remains predominant, comprising 65 per cent of all ODL publications. As stated earlier, micro-level research is concerned about contextually specific teaching and learning and, as such should feature prominently in our research publications. The conundrum here is that the DHET incentivises staff to publish in international journals through a higher subsidy. The results from this research indicate that international journals rarely consider micro-level research as the context is not of interest to their readers. This is exacerbated by the perceived biases of some editors who do not consider South African authors for their journals. It is imperative for the development of education in South Africa to provide relevant, contextual research, but there are very few dedicated journals in which to disseminate this research. An opportunity exists, and indeed is very necessary, for additional journals for distance/online research publications in South Africa and other developing countries.

The macro level of research is an area that is under-researched in Africa. In the light of the Africanisation and decolonisation of higher education, context-specific theories, teaching systems, and knowledge transfer, equity and access should be a priority for our researchers. The theoretical framework used in this research is based on the Eurocentric framework developed by Zawacki-Richter (2009). It is now time for our respected and well-qualified academic researchers to lead the way forward.

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