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Seven years of embracing the sustainable development goals: perspectives from University of South Africa's academic staff

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As this article was being finalised, the world was left with less than 7 of the 15 years of Sustainable Development Goals (SDGs) implementation to 2030. There were still huge gaps in the attainment of the SDGs in institutions of higher learning globally, especially that COVID-19 brought a barrier leading to a known pushback. However, the pandemic did not imply there was no work done prior, during and after COVID-19. This article investigates the extent to which the University of South Africa's academic staff activated and mainstreamed the SDGs in their core mandates between 2016 and 2022. Data was generated through a survey (n = 121), participatory action research, and document analysis. It emerged there is a greater degree of awareness of the SDGs, with 78% of academic respondents confirming this. However, the percentages drop across the four core mandate areas when it comes to SDGs implementation. About 52.6% of academics indicated they were promoting SDGs in their teaching, research (63.3%), community engagement (55.5%) and academic citizenship (54.5%). Findings further reveal key enabling institutional policies like the SDGS Localisation Declaration, and the Africa-Nuanced SDGs Research Support Programme. Large gaps remain on the publication front, where over 60% of the responding academics had not published an article explicitly on SDGs. There is also bias in publications towards certain SDGs. The work recommends that University of South Africa management continue raising awareness on the SDGs and systematically address barriers identified in the main article to enhance the mainstreaming of the SDGs across all core mandate areas.

KEYWORDS

quality education, SDGs, stakeholders, sustainability, higher education, academic staff

1 Introduction

The fourth Sustainable Development Goal (SDG) makes it clear that there is a need to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations, 2015, p. 14). This brings all education entities, including Higher Education Institutions (HEIs) at the epicentre of the attainment of SDG 4 by 2030 (Filho et al., 2023). Within the HEIs setup, there are mainly three groups of key stakeholders: (1) academic (teaching) staff, (2) non-teaching staff, and (3) the students. Target 4.3 from SDG 4 stipulates that by 2030, the world should ensure that there is "equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university" (United Nations, 2015, p. 17). In their earlier writings,

Filho et al. (2017) portray several challenges to overcome from HEIs in terms of embracing sustainable development. Gaps were identified in the mainstreaming of sustainability across two core mandates including teaching and learning, and research (Filho et al., 2021). However, what was clear was that the SDGs presented clear new opportunities (Filho et al., 2019).

While the 2030 Agenda for Sustainable Development (AfSD) does not exclusively mention academics in the set target of SDG 4, by default, any reference to higher education means they are included. It is important to note that academics fit into the four core mandates of most universities that include: (1) teaching and learning, (2) research, innovation and commercialisation, (3) community engagement (engaged scholarship) or third mission (Fia et al., 2022), and (4) academic citizenship and leadership. While teaching and learning is traditionally a default set-up in many universities, especially those that are less resourced, the other three core mandates have been a challenge to fulfil. Yet global university ranking agencies like Times Higher Education (THE) are including many aspects from all the core mandate areas more and more (Bautista-Puig et al., 2022). After all, HEIs have a pivotal role to play in sustainability (Zaleniene and Pereira, 2021).

Alfirevic et al. (2023) present a bibliometric analysis of productivity and impact of SDGs-related academic research for the years 2017-2022. The work is based on SciVal. The overview shows a sharp growing trend on SDGs publications, from recording only 121 publications in 2017, to a massive 1,511 in 2022. Drawing from the geographical distribution of the publications, the USA takes up the lion's share with 275 publications, followed by the United Kingdom sitting at 230 publications. India, Germany, Australia, China, and Spain all trail at a distance with between 75 and 100 publications. South Africa, Canada, and Italy brings up the last cohort of the top 10 countries with between 60 and 74 publications recorded. When it comes to the top 10 institutions, only the University of Cape Town (South Africa) makes it to the list from Africa. The top five journals hosting the publications include Higher Education (ranked first), Nature Sustainability (second), Nature Energy (third), Marine Policy (fourth), and Politics and Governance (fifth).

There are several publications focusing on how the University of South Africa (UNISA) has been addressing the call by the United Nations to activate the SDGs at the local level, thereby attempting to leave no one behind (United Nations, 2015; University of South Africa [UNISA], 2022a). However, the focus of the publications has not narrowed down to isolating how UNISA's teaching staff have been embracing the SDGs over time. Mawonde and Togo (2019) looked at the UNISA science campus in Florida, Johannesburg (South Africa) and interviewed campus operations managers and sustainability office managers, surveyed environmental science honours students and made observations to determine practices that contributed towards SDG implementation. Key findings were that while UNISA was aligning several practices to SDGs implementation, being an open distance and learning (ODeL) entity made it difficult to involve students in projects. Additional work reached similar conclusions as it was also focused on students (Mawonde and Togo, 2021).

Nhamo (2020), looked at how UNISA was engaging SDG 7 (sustainable energy) with a key finding that the university had embraced solar energy as once of its key interventions. The same author later focused on UNISA's whole institution, all goals and

entire higher education sector approach (Nhamo, 2021a), before narrowing down to how UNISA was involved in sustainability reporting through the Unite Nations Global Compact (UNGC). The work further elaborated on how the UNGC framework presented opportunities for the mainstreaming of the Global Reporting Initiative (GRI) standards and the SDGs (Nhamo, 2021b). Follow-up work by Nhamo and Chikodzi (2021) magnified how UNISA was scaling up its engagement with SDG 6 (water and sanitation) for general environmental conservation and building climate resilience and adaptation. Yet another publication by Nhamo and Malan (2021) investigated the role of the UNISA library in promoting the SDGs. As indicated earlier, all these studies have not exclusively focused on the academic staff. Hence, this research gap justifies the existence of this article. The work, therefore, spells out an objective to investigate the extent to which UNISA's academic staff have activated the SDGs in their core mandates within the 7 years marked from January 2016 to December 2022.

The work brings together methodological combinations including ongoing participatory action research (PAR) that was initiated by one of the authors from 2011, and a survey that was done to gauge the status quo and progress towards SDGs localisation by academic staff. However, this work draws more from the survey that took a diagnostic-evaluative nature, than the PAR. The PAR is a focus in an earlier publication (Nhamo, 2021a). Although some work is emerging globally on how academic staff are getting involved in SDGs localisation, a gap still exists in South African HEIs.

With regards to originality and contribution of the work, the University of South Africa has joined several players to advance the localisation of SDGs. Since we are halfway through the SDGs implementation period, it is novel to reflect on what has been achieved so far. Academic staff at universities play an important role in facilitating the domestication of SDGs through teaching, research, and innovation initiatives. They can be important agents of change within communities in addition to holding the future of the country's economic, social, and environmental fortunes.

The rest of the article outline is highlighted herein. The next section is dedicated to providing a brief literature review. This is followed by a description of the materials and methods used. After the methodology section, the work presents the key findings drawn mainly from a survey of academic staff and lived experiences. A separate section is reserved for the discussion of the findings, interfacing it with additional global and local literature, before concluding the work.

2 Literature review

2.1 SDGs domestication in HEIs: an overview

It will be inadequate to consider SDGs localisation in HEIs without touching on the theory of SDGs domestication and localisation. As the SDGs were pitched at the global level by the United Nations, governments, local authorities and organisations had to drop them to their level. Although the term domestication is at times interchanged with localisation, the former remains

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at the national level, while both imply movement towards implementation (Alcántara-Rubio et al., 2022). For example, in Rwanda, the domestication of the SDGs included translating them into local Kinyarwanda language and integrating them into its national development plans and strategies (Malonza and Brunelli, 2023). Among the key policy documents that mainstreamed the SDGs are National Strategy for Transformation 2017-2024 and Rwanda's Vision 2050. Part of the SDGs domestication involved auditing the global indicators on SDGs and seeing how these could either be adopted as they were or amended to suit national conditions. The same approach was also taken in Zimbabwe (Mutambisi and Chavunduka, 2023), with institutional challenges vivid in the process. The authors picked that there remains "no alignment of policies, structures, and strategies with urban local authorities" as national and urban local authorities are inadequately integrated for the "whole-of-government harmony on SDG implementation" (Mutambisi and Chavunduka, 2023, p. 1). Ndlovu et al. (2021) then focuses on the localisation of the SDGs in the City of Bulawayo and discover that although there is little taking place, the city had potential to embrace the SDGs as it put in place a detailed plan to localise the global agenda.

On considering SDGs localisation in Tanzania, Jönsson and Bexell (2021) find that localisation works well with statistics and indicators. In addition, there is also the need for awareness raising among several actors, including HEIs. Some of the agents of localisation include national government, civil society organisations, the United Nations, and members of parliament. However, the authors pick several challenges to localisation that are relevant to HEIs, including "unclear allocation of responsibility, insufficient co-ordination, high turnaround of people in key positions, a lack of data availability, low awareness of the SDGs among citizens, a shortage of resources and shrinking democratic space" (Jönsson and Bexell, 2021, p. 181).

Sustainable Development Goals localisation has also been taking place at universities and in other organisations as appropriate. Athopheng et al. (2020) consider the implementation of the SDGs at the University of Botswana. It emerged that the university established the SDGs Hub to assist the institution in implementing the SDGs across the core mandates of the university that include teaching and learning, research and innovation, and community engagement. What emerged from the case study is that:

Stakeholders are central to all initiatives – student community, non-academic departments, teaching faculties and their priorities in academic programmes. Research agenda and engagements such as panel discussions, workshops, sensitisation events, are some of the activities undertaken to advocate for SDGs implementation. Collaborations with various stakeholders also play a crucial role in achieving SDGs activities within the university (Atlhopheng et al., 2020, p. 265).

Alcántara-Rubio et al. (2022) articulate that as the universities seek localise the SDGs, there is a need to know and identify what is already in place. This is so because many universities have programmes in place that focus on several SDGs. However, the desire to have quality educational programmes remains a priority across many universities. Zaleniene and Pereira (2021) are of the view that while HEIs contribute significantly contribute towards the attainment of the SDGs implementation, there are selected SDGs that these institutions must focus on for global impact. Kioupi and Voulvoulis (2020) portray HEIs as engines of community transformations. To this end, future citizens can be easily directed and re-directed towards sustainability from programmes offered. Going back to Zaleniene and Pereira (2021), the authors identify six SDGs for global and societal impact namely: SDG 1 (ending poverty everywhere), SDG 3 (health and wellbeing), SDG 5 (gender equality), SDG 8 (decent work), SDG 12 (sustainable consumption and production), SDG 13 (climate action), and SDG 16 (peace and security). Since HEIs have students at their disposal for relatively long periods, following deliberate frameworks to change the culture in terms of the world's view remains in the hands of academics. To this end, many facets of the SDGs should have been, and should be embedded in the curricula.

2.2 The challenges and prospects for SDGs localisation in HEIs

There is no disagreement that the United Nations' 2030 AfSD and its 17 SDGs have placed HEIs as co-partners in resolving the perennial and future societal challenges including poverty eradication, environmental stewardship (Shava et al., 2020), seeking peace and prosperity, and enhancing livelihoods (Franco and McCowan, 2021).

Since publications are at the centre of how academics have rapidly harnessed their energies towards the attainment of the SDGs, it is prudent that space be accorded to deliberate on this. Drawing from the Web of Science (WoS) database, Sianes et al. (2022) undertake a scientometric analysis of the academic production on the SDGs between 2015 and 2020. In the relatively short period of time, scholars are said to have published more than 5,000 research papers. These publications mainly cover the areas of climate change (SDG 13), as well as health and the burden of diseases (SDG 3).

While acknowledging the challenges brought up by the COVID-19 pandemic, Useh (2021) highlights that the SDGs can be utilised as a framework for future postgraduate research. This posturing is proposed as a new norm for developing countries. From the author's perspective, master's and doctoral research projects should be purposefully directed towards addressing the SDGs, thereby making positive contributions to communities. While as authors we partially agree to this proposal, we wish to add that the posturing should be for all HEIs worldwide, regardless of whether institutions are from the developed northern hemisphere, or the developing southern hemisphere. This view is further supported by the fact that many research projects are global, cutting across the binary highlighted herein. Projects remain global in terms of their spatial location, funding, expertise involved and the application of the results. Furthermore, COVID-19 has taught us that nobody is safe, until everyone is safe.

From the Netherlands, Kopnina (2018, p. 1268) looks at how the integration of the SDGs lectures at a vocational college, and at the undergraduate and postgraduate university levels. The results revealed that "the students were able to develop a certain degree of critical, imaginative, and innovative thinking about sustainable development in general and the SDGs in particular." Apart from providing a platform to enhance teaching and learning, Filho et al. (2019) are of the view that the SDGs further provides a link for universities to pursue their mission on engaged scholarship linking them to communities and other stakeholders. While this was possible, the authors reveal that many HEIs had not grabbed the opportunity and were being left behind.

3 Materials and methods

This work was conducted at UNISA, an open distance and e-learning institution based in Pretoria, South Africa. However, the university has campuses across the country and two outside the country in Ethiopia and Ivory Coast. In terms of the executive management, UNISA is led by a Principal and Vice Chancellor. Below this office are eight portfolios, including six Vice Principals. The portfolios for Vice Principals are namely: Teaching, Learning, Community Engagement and Student Support; Research, Postgraduate Studies, Innovation and Commercialisation; Strategy, Risk and Advisory Services; Information and Communication Technology; Institutional Development; and Operations and Facilities. The remaining two portfolios are for the Registrar, and Chief Financial Officer. From the academic programme, there are nine (9) colleges and their equivalent namely¹: Accounting Sciences, Agriculture and Environmental Sciences, Economic and Management Sciences, Education, Graduate Studies, Human Sciences, Law, Graduate School of Business Leadership, as well as Science, Engineering, and Technology. The colleges are headed by Executive Deans and Deputy Deans.

The study design fell within the mixed methods approach that focused on UNISA as a single case study (Yazan, 2015; Dorta-González and Dorta-González, 2023; Tolettini and Di Maria, 2023). As a case study, the boundaries could easily be identified as UNISA academic staff. However, given the nature of case study, findings from this work could not be generalised to apply to other institutions. Within the case study design, the main research method used to generate data was an online survey and this method has been used in similar studies elsewhere globally (Filho et al., 2023). Surveys assist in getting broader perspectives on subject matters, in this case SDGs localisation uptake by UNISA academic staff. This was complemented by document analysis and the ongoing PAR that draws from 15 years of experience at the same institutions by one of the researchers (Nhamo, 2020, 2021a,b). Figure 1 shows the methodological sequence for the study while Figure 2 shows the elements of the PAR applied for over 15 years.

As shown in **Figure 2**, the PAR included long term planning, action, observations and reflections regarding the participation and involvement of teaching staff in the localisation of SDGs within their fourfold mission of teaching and learning; research, innovation, and internationalisation; community engagement (engaged scholarship), and academic citizenship and leadership. Throughout the process, the change evaluation indicators assessed included the number of academics with publications on SDGs, community-based interventions focused on championing SDGs implementation, and changes in the content of the modules to



address SDGs. Several cycles of observations, action and reflections were done over the period. Documents used were obtained from the institution's library guide on SDGs found at: https://libguides. unisa.ac.za/c.php?g=1005449&p=7283895. Other research articles published by staff members were also used as source documents to understand the dynamics of SDGs localisation at the institution. Primary focus was on content dealing with academics' activities aligned with the SDGs. Drawing from one of the author's 15 years of experience within UNISA, including work on the localisation of the SDGs and associated publications, the survey instrument was developed to address gaps identified with regard to academic staff's involvement in the entire process. The questionnaire survey was administered online on the QuestionPro platform. Prior to undertaking the fieldwork, an ethics clearance certificate, as well as an institutional permission letter had to be granted. Further details pertaining to the methodological orientation are presented in Figure 1. What is of interest to the reader is that the survey link was emailed through to all academic staff from UNISA's central saver. A total of 632 academics viewed the survey online and this became our population (N). From this figure, 127 academics started to complete the survey, with 121(n) completing it. This gave a return rate of 19.15%, which is significantly high in terms of surveys. Although the survey did not solicit feedback regarding where the responding academic staff set across the colleges (faculties) in UNISA and the branches of knowledge, as indicated earlier the survey link was emailed to every staff member from the university's central server. There was also a good representation of both males and females in the respondents as will be discussed under the demographics. Regarding the extent the levels of representativeness of the sample by years of experience from the academic staff, it emerged that all the five cohorts in the survey were well represented. Further analysis is done under the demographics section. As for previous experience in working with SDGs, it was one of the main matters investigated by the article.

The survey instrument had two major sections. These included Section A, which focused on the demographics. From this section, questions raised sought to generate data on gender (with an option "wish not to disclose" inserted), age, position held at UNISA, status of employment, and number of years as employee at UNISA. In Section B, the work sought to generate data mainly on SDGs awareness and localisation/implementation. Questions included looked at perceptions on SDGs localisation in HEIs, whether UNISA had localised the SDGs, if the respondents were familiar with the SDGs and the Millennium Development Goals (MDGs), as well as determining frequency of teaching staff participation

¹ In many universities across the world, the colleges are equitant to faculties.



in workshops, seminars, conferences, and other platforms dealing with SDGs localisation prior to answering the survey.

There were other questions from Section B focusing on the promotion of SDGs across the key mandates of UNISA such as teaching and learning; research, innovation, and internationalisation; community engagement (engaged scholarship or service to community); and academic citizenship and leadership. The question probing the number of publications explicitly mentioning SDGs was also raised. A five (5) point Likert scale was used for some of the questions to ease the evaluation of the level of SDGs localisation readiness at UNISA on the scale, from total rejection (Strongly Disagree) to total acceptance (Strongly Agree).

To have academics assess the extent to which UNISA was engaging with the 17 SDGs on a day-to-day basis, a question was also included in the survey with options to select from, "High Engagement," "Moderate Engagement," and "Low Engagement." The "Not Sure" option was also provided for ticking. Before the last question asking for any comments, the teaching staff were asked to rank selected matters in terms of how such were a barrier or not a barrier in terms of SDGs localisation. A scale allocating scores from 1 (Not a Barrier at All) to 10 (A Serious Barrier) was used. To determine the internal consistence and validity of the constructs in the question, the Cronbach alpha was computed in Xlstat. The Cronbach alpha is premised on the following formula:

$$\alpha = \left(\frac{K}{K-1}\right) \left(\frac{S_{y-\sum_{si}^2}^2}{S_y^2}\right)$$

where, α , Cronbach alpha; *K*, number of items; and S^2 , variance between items.

Several data analysis methods were applied. For triangulation purposes, further analysis on SDGs publications was done using data obtained through Elsevier's SciVal platform.²

In earlier publications, three PAR cycles were identified by Nhamo (2021a, p. 63) including "the development of a UNISA Management Policy Brief calling for the SDGs Localisation Indaba in 2017 (Cycle 1); the development of an SDGs for Society Research Stream as part of the UNISA Annual Interdisciplinary Academy and Summer School in 2018 (Cycle 2); and the SDGs Localisation Indaba in 2019 (Cycle 3)." Effectively, the current cycle under which this work is falling was triggered in 2020 as the SDGs Localisation Indaba took place on 29 November 2019. As is now common knowledge, COVID-19 hit and disrupted everything. The findings from this process are now presented in the next section.

Regarding the survey instrument, pilot testing was done prior to rolling it out. This included internal and external expertise going through the instrument before it was forwarded to academic staff from non-participating universities in South Africa. Furthermore, the survey instrument as also rolled out in seven universities in Zimbabwe with additional pilot testing and the incorporation of any observations made requiring clarity on questions and the removal of any online glitches.

The emerging data were analysed through in-built capabilities in QuestionPro, including such capabilities on word cloud. Furthermore, generic qualitative data analysis protocols were applied, with some data imported to Excel for further processing.

4 Presentation of findings

This section is dedicated to presenting the key findings from the study. It is structured in five sub-sections namely: presentation on demographics, awareness of the SDGS, promotion of SDGs work across core mandates, SDGs localisation Barriers, and institutional engagements. Further details will now be considered in the next sub-sections.

4.1 Demographic setup

From the 121 respondents, 42.99% indicated they were males, 53.27% were female, while 3.74% wished not to disclose their gender. These data shows there was a good balance between gender from the respondents. As for the age groups, the majority (29.51%) came from those between 55 and 64 years. Further details are shown in **Figure 3**. What also emerges from the data is a potential challenge with research staff pipeline, with only 20.49% of the academics that responded aged between 18 and 34 years.

The respondents were asked to indicate the positions they held at UNISA. The majority (28.69%) were at Senior Lecturer position, followed by those at Lecturer grade (26.23%), and Full Professors (13.93%). Associate Professors comprised 11.48%, with Junior Lecturers sitting at 4.92%. There were also postdoctoral/research fellows (0.82%), Teaching Assistants (3.28%) and those that indicated other, to include associates, at 10.66%). Given that globally, academics at Senior Lecturer grade and above are expected to undertake serious research work, an estimated 54.1% of those surveyed fell into this bigger group. This remains particularly interesting given that a question specifically asking research outputs on SDGs was pitched in the survey.

On status of employment, the bulk of those surveyed (78.23%) were permanently employed. This was followed by 5.65% that indicated they were part-time, while 8.87% were temporary full-time. The remaining category of "other" had 7.26%. This category

² https://www.scival.com/overview/sdg?uri=Institution/716596

possibly includes research associates and postdoctoral fellows used by UNISA. As for the number of years employed at UNISA, the majority were in the cohort 6–10 years. Further details are shown in **Figure 4**.

What is encouraging from the respondents' data and the number of years employed at UNISA is that all of them have been employed in the time of the SDGs. In fact, 70.16% had been in their posts for six or more years. This posture presents the majority of UNISA academics as having a chance to engage with the SDGs from their inception in 2015. The next sub-sections now focus on the materiality of SDGs localisation at UNISA.

4.2 Awareness of the SDGs

A question was raised seeking responses as to whether the concept of SDGs localisation in higher education was one that all institutions in Southern Africa and worldwide should implement. The majority of the academics responding (47.15%) indicated they were in agreement. This was followed by 30.89% that strongly agreed with the notion. While 11.38% remained neutral, 8.13% strongly disagreed with the proposal, with the remaining 2.44% in disagreement. Overall, 78.04% of the respondents either agreed or strongly agreed with the sentiment. Coming closer home, the teaching staff had to indicate if UNISA had localised the SDGs. The results were a bit shocking, as 60.66% revealed they were not sure. Up to 31.97% indicated the institution had localised the SDGs, with 7.38% indicating to the contrary.

Requested to share if they were (1) familiar with, and (2) have read the United Nations document "Transforming Our World: The 2030 Agenda for Sustainable Development" that embeds the 17 intertwined SDGs, 55.74% of the responding academics indicated "Yes." While 9.84% indicated they were not sure, the other 34.43% were clear to say "No." Having this high percentage of academics not having read the 2030 Agenda for Sustainable Development makes an interesting finding and further discussions will follow. A similar question was raised regarding the MDGs. Up to 66.94% of the respondents indicated they were familiar, and they had time to read the MDGs. This was 11.2% points higher compared to the SDGs. Effectively, fewer respondents (25.81%) indicated "No," while the remaining 7.26% indicated not sure.

The academics were also asked to indicate their participation in such awareness raising platforms that included workshops, seminars, conferences, symposiums, and other. The bulk of the academic staff (47.97%) had not done so since the inception of the SDGs in 2015. This is a worrying discovery. Further results are shown in **Figure 5**. While less than 6% of the respondents indicated having attended six or more platforms, 41.46% indicated they had been to at least 1–5 SDGs localisation platforms.

To conclude the awareness probing, the respondents were requested to reveal their awareness of the SDGs prior to the survey. The bulk (69.17%) revealed that they were aware. Up to 18.33% indicated they were not aware, while 12.5% had a rough idea on the SDGs. A percentage of 30.83% of academics not being aware of the SDGs 7 years down the road to 2030 is worrying. This question was included as a similar earlier question asked about familiarity and having read about the SDGs. Being aware of the SDGs does not necessarily include having read about them. This probably explains the higher percentage of respondents indicating "Yes."

4.3 Promotion of SDGs work across core mandates

The promotion of SDGs across the core mandates of the academics remains paramount. To this end, the respondents were asked to indicate the extent to which they promoted the SDGs in four core mandate areas namely: (1) Teaching and Learning, (2) Research, Innovation, and Internationalisation, (3) Community Engagement (Engaged Scholarship/Service to Community³), and (4) Academic Citizenship and Leadership. Generally, there was more engagement in the research, innovation and internationalisation, mandate compared to the other three. This was followed by teaching and learning, with the least engagement under the academic citizenship and leadership mandate. More details are provided in Figure 6.

What is emerging from Figure 6 is that the majority of respondents agreed with the notion that they promoted SDGs in all their four core mandate areas. Up to 63.25% of the academics revealed they promoted SDGs in their research, innovation, and commercialisation work, compared to 55.45% on community engagement, 54.47% on academic citizenship and leadership, and 52.63% on teaching and learning. However, there was a disturbing trend of 23% or more of respondents across the mandate areas indicating they were "neutral," meaning they could not evaluate their promotion of SDGs. Drawing from the Intercultural University of Veracruz in Mexico, the authors find that the university has been addressing SDG 4 through enabling access for marginalised communities. This is done through the university's engaged teaching, research and community engagement. Such activities have resulted in improved environmental stewardship (SDGs 13-15), health (SDG 3), livelihoods (SDG 1), gender equality (SDG 5), and a range of additional SDGs. These are all activities academic staff, and their students are engaged in.

A follow-up question on research and innovation was included. Academics were asked to indicate the number of publications they had that explicitly mention SDGs. A disturbing majority (63.56%) indicated they had no single publication to that effect. In a way, the findings shows that the promotion of SDGs in the research and innovation areas did not translate into significant publications. The 1–3 publications category attracted 26.27% of the respondents, while 6.78% had between four and six publications. A mere 2.54% of those surveyed had 7–9 publications, while only 0.85% of the respondents had 10 or more publications. With a focus on business academics, Christ and Burritt (2019) content that achieving the SDGs by 2030 remains a grand challenge. This is so because this special cohort of academics must work with business and their executives in reorienting corporate visions and missions to warmup to the new global realities.

SciVal is a commonly used platform to analyse and measure publishing metrics. The results from Elsevier's SciVal show that, by the year 2022, academic staff at UNISA had written a total of 9,854 publications that directly mention SDGs. From the SciVal records, only SDG 17 is not explicitly mentioned in the publications. The other 16 are directly stated in the publications. Table 1 presents the statistical information on the publications with regards to the

³ Referred to as the third mission in other global environments.









scholar outputs, the field-weighted impact of citations, and the total number of citations for each SDG.

As shown in **Table 1** the top five SDGs with regards to scholarly outputs include SDG 3 (good health and wellbeing), which has 1,262 publications, SDG 4 (quality education) with 1,087, SDG 8 (decent work and economic growth) with 907, SDG 10 (reduced inequality) sitting at 851, and SDG 16 (peace, justice, and strong institutions) with 798 scholarly outputs. The least number of publications are on SDG 14 (life below water). SDGs 2 (zero hunger), 13 (climate action), and 15 (life on land) are receiving almost similar levels of attention from academics at UNISA, with 329, 333, and 335 scholarly outputs, respectively.

Surprisingly, the SDG with the least number of publications (SDG 14) is the one with the highest field weighted citation impact of more than 1.7. This SDG has also been included in UNISA's Principal and Vice Chancellor's 10 catalytic niche areas of 2020.

UNISA's publications on SDG 3, SDG 6, SDG 9, and SDG 12 appear to generally have similar impact in academia with citation impact of 1.38, 1.38, 1.28, and 1.22, respectively. SDG 4 and SDG 16 have the least field weighted citation impact. The only SDG that has not explicitly received scholarly attention is SDG 17 (partnerships).

4.4 Institutional engagements

The institution's strategy can have an impact on the degree of participation of university academic staff in initiatives connected to the localisation of SDGs. Academics can participate and progress the localisation of SDGs based on the institution's ideology and strategies. As a result, top management must play a crucial part in creating an enabling environment for academics. Lack of support from senior management may stifle individual academics' attempts to further the SDGs. Results for the teaching staff's perceptions of UNISA's level of engagement with each SDG are shown in Figure 7.

As shown in **Figure 7**, for each SDG, there are several academics who feel that the institution is highly engaged with its implementation. SDG 4 (quality education) is the leading SDG with more than 50% of the respondents opining that the university's level of engagement with this SDG is high. This is followed by SDG 5 (gender equality), with more than 40% of the respondents indicating that the university is highly engaged with the implementation of the SDG. SDG 10 (reduced inequality) is the third highest SDG with regards to perceived high level of localisation at UNISA, with slightly above 30% of the respondents confirming so. The rest of the SDGs have less than 30% of the academics with the opinion that they are highly implemented. SDG 14 (life below water) has the least percentage (<10%), showing that it has not been highly prioritised by the institution. Other SDGs

Name	Scholarly output	Field-weighted citation impact	Citation count
SDG 1: no poverty	503	0.94	3,381
SDG 2: zero hunger	329	0.9	3,220
SDG 3: good health and wellbeing	1,262	1.38	19,022
SDG 4: quality education	1,087	0.82	6,026
SDG 5: gender equality	532	0.99	3,861
SDG 6: clean water and sanitation	697	1.38	13,670
SDG 7: affordable and clean energy	615	1.06	8,092
SDG 8: decent work and economic growth	907	1.12	7,657
SDG 9: industry, innovation, and infrastructure	726	1.28	6,713
SDG 10: reduced inequality	851	1.07	6,511
SDG 11: sustainable cities and communities	329	1.22	3,169
SDG 12: responsible consumption and production	454	1.08	4,456
SDG 13: climate action	333	1.2	3,763
SDG 14: life below water	96	1.76	2,272
SDG 15: life on land	335	0.86	3,291
SDG 16: peace, justice, and strong institutions	798	0.77	4,129
Total	9,854	1.1	99,233

TABLE 1 Publication metrics for UNISA academic staff by 2022.

Source: authors, data from SciVal 2023.



with the lowest percentage of respondents regarding them as highly localised include SDG 2 (zero hunger), SDG 7 (affordable and clean energy), and SDG 15 (life on land), respectively, all with less than 15%.

On average, most (29.26) of the respondents opined that the level of SDGs implementation by the institution is moderate. About 25.88% are of the view that the level of implementation is low while 22.65% aver that there is high level of localisation and implementation. However, 22.21% indicated that they are not sure. If the principle of majority rule is applied, one would conclude that the level of engagement with SDGs at UNISA is moderate.

4.5 SDGs localisation barriers

The respondents reported on a number of barriers which they think are affecting their commitment and determination in the localisation of SDGs. Some barriers are hinged on governance issues, others on institutional strategic direction, while others are linked with access to resources. Figure 8 shows the computed mean scores for each barrier as presented by the respondents.

As shown in **Figure 8**, the leading barriers include insufficiently trained staff (mean = 6.71), the perception that SDGs bring extra work (mean = 6.68), lack of SDGs champions and buyin from top management (mean = 6.64), SDGs not part of key performance indicators (KPIs) (mean = 6.62) and lack of funding (mean = 6.59). The Kruskal–Wallis test reveal that the computed p-value (0.0001) is lower than the significance level alpha (0.05), meaning that there are significant differences in the impact of the stated barriers, with lack of training, extra work that comes with SDGs, lack of management buy-in, and SDGs being not part of the KPIs as the leading factors inhibiting effective localisation of SDGs by academics. Hence, each barrier requires a unique level of attention and strategies in order to improve the level of SDGs localisation.

Examining the major terms that emerged from the general comments was one method to reflect on important concerns regarding academics' engagement with the SDGs. Word clouds were employed to identify the prominent terms that might refer to some important localisation trends and dynamics. Figure 9 shows a word cloud developed from the additional comments made by the respondents.

The prominent terms, as shown in **Figure 9** include SDGs, research, awareness, teaching, champions, training, Africanisation among others. The terms reflect on the trends, dynamics, divergencies, and intricacies associated with the localisation of SDGs at the institution. The following excerpts from the study participants capture the diversity of views as well as the main issues around SDGs at UNISA.

"There is a growing desire, appetite and commitment to see SDGs integrated in all teaching and learning materials in the institution."

"I regard the SDGs and MDGs as part of the socialist agenda that seeks to undermine the values that I find important. As such, they are to be resisted, not encouraged."

"Training, development and awareness forums must be more visible."



"The SDGs are forced on research staff in an unnuanced and unhelpful way by university management teams that have no clue how different fields work."

The above extracts reveal the diversity of academic opinions based on one's ideological position, exposure and probably academic background or discipline. An approach that bridges the ideological divide and advances the understanding of SDGs has potential to bring academics to the same level of understanding and sharing of similar philosophical positions that can help to spur the implementation of SDGs at the institution. The next section is devoted to the discussion of the key findings.

5 Discussion

When asked about awareness of the SDGs, up to 78.04% of the respondents from the survey either agreed or strongly agreed with the sentiment. This figure is almost the same from the findings by Filho et al. (2019) who surveyed 167 respondents from 17 countries probing SDGs and sustainability teaching at universities. Asked if the academics promoted the SDGs in their teaching, 52.63% indicated they did, with 27.19% remaining neutral, while 20.18% did not. Once more, the results for those that indicated they did not promote SDGs in their teaching mirror similar findings by Filho et al. (2019) who had an 18% of respondents indicating a "not really" response on the application of SDGs in university teaching. In follow-up work, Filho et al. (2021) bring up a framework for the implementation of the SDGs in university programmes. The

authors believe there should be a systematic and suitable way of mainstreaming the SDGs into HEIs teaching and learning, and research programmes.

While access to resources was highlighted among the main barriers by the academics surveyed, there has been great movement in addressing this by UNISA. In 2022, the Research Directorate ratified a policy exclusively focusing on promoting SDGs research across the UNISA in partnership with external researchers across the African continent. The policy is entitled "Africa-Nuanced Sustainable Development Goals Research Support Programme (ASDG-RSP)" (University of South Africa [UNISA], 2022b). The ASDG-RSP provides the basis for research collaboration aimed at promoting transdisciplinary and transcultural work. Prior to the ASDG-RSP, UNISA ratified the Declaration on SDGs Localisation in November 2019 following a 1-day awareness raising workshop (Nhamo, 2021a). The workshop was attended by staff members drawn across all departments in UNISA, as well as other guest from other universities in South Africa. The objectives of the ASDG-RSP, which acknowledge progress made in having the SDGS localisation declaration, are presented in Box 1. The objectives also touch on community engagement in drawing up research projects.

As this article was being finalised, the call for applications had gone out with a deadline of 17 July 2023. This cohort covered January 2024 to 31 December 2026. Part of the call indicated the expected outputs for a 3-year project duration that included: (1) at least 18 accredited research output units, (2) 3 articles published in The Conversation, (3) 5 graduated master's students, and (4) 5 graduated doctoral students (University of South Africa [UNISA], 2023). In terms of eligibility, among other criteria, there should



FIGURE 9

Prominent terms emerging from the respondents (source: authors, fieldwork 2022).

BOX 1 Objectives of the ASDG-RSP

• Accelerate the development of collaborative research projects on the SDGs and build capacity for conducting cross-cultural research within the SDG Framework.

• Respond to the UNISA November 2019 commitment to get involved in localising the SDGs.

Increase public engagement and participation in addressing the SDGs through initiating and facilitating cross-sectoral dialogue and activities that are most commonly associated with service based on community engagement, but additional to work carried out in the research process.
Facilitate and grow a network of researchers for knowledge exchange, scholarly visibility, and cross-sector partnerships for addressing common

SDG challenges at local and global level.

Provide collaborative structures and forums to encourage interaction, idea generation, and interdisciplinary and transdisciplinary research on SDGs.
Improve UNISA's rating as a significant African institution partner on SDGs.

Source: University of South Africa [UNISA] (2022b, p. 10).

be a principal researcher who is a permanent UNISA academic staff, with a doctoral degree and SDGs expertise. The principal researcher needs to have identified an appropriate team composed of a co-investigator, co-researchers, and collaborators. Among the collaborators could be postgraduate students and postdoctoral fellows. There should also be at least an international or regional established scholar from a recognised university or research entity. Five grants of three million Rand⁴ will be offered.

Another development towards the localisation of the SDGs came in 2020 with the arrival of the new Principal and Vice Chancellor. The Vice Chancellor introduced 10 catalytic niche areas that speak to the SDGs. Academic staff are now required to report progress in terms of their research's response to the catalytic niche areas twice annually in their Key Performance Areas (KPAs). Some of the niche areas include Marine Studies (SDG 14), Aviation and Aeronautical Studies (SDG 9), Energy (SDG 7), and Health Studies (SDG 3). While Filho et al. (2017) identified the lack of support from top management as the top barrier in SDGs localisation out of 25 that emerged, this seems not to be an issue with UNISA (Nhamo, 2021a). The other prominent barriers identified include the lack

of appropriate technology, the lack of awareness and concern, the lack of an environmental committee, and the lack of buildings with sustainable performance (Filho et al., 2017). Again, all these barriers seem to have been addressed at UNISA drawing from both the survey and earlier work. For example, the SDGs Liaison Committee (Nhamo, 2021a) is in place and capacity building of SDGs Champions has been ongoing since 2022.

To check the response of the UNISA curricula to the SDGs, a case study was performed in the college-equivalent, the Graduate School of Business Leadership (GSBL). The GSBL was selected based on prior work by Nhamo and Nhamo (2014) that had revealed the GSBL lagging behind its South African peers in terms of integrating sustainable development and sustainability issues through the United Nations Principles of Responsible Management Education (PRME) in its programmes. As of 2022, the GSBL was offering seven programmes namely: Executive Education (Short Learning Programmes), Postgraduate Diploma in Business Administration, Master of Business Leadership degree, Postgraduate Diploma in Project Management, and Postgraduate Diploma in Supply Chain Management. The positives since 2014

⁴ US\$1 was ZAR17.60 as of 29 July 2023.

include the fact that the entire Postgraduate Diploma in Supply Chain Management and the Postgraduate Diploma in Project Management both have been re-oriented to include sustainability matters in the context of the SDGs. A course focusing on Strategic Sustainable Marketing (MBA5910) has also been included in both the Master's programmes. The reorientation of the GSBL curriculum is supported by the earlier findings by Miotto et al. (2020). Through such moves, the GSBL is likely to acquire the legitimacy it requires as it is now operating in an appropriate and desirable manner that fulfils its key stakeholders' needs and expectations. The SDGs were becoming the most cited in annual reports of 50 top business schools studied by the said authors worldwide (Miotto et al., 2020).

The survey also looked at the third mission (community engagement). Up to 55.45% of the responding academics at UNISA promoted SDGs in their engaged scholarship work, with 24.55% indicating they remained neutral, while 20% indicated they did not. Fia et al. (2022), highlight that universities cannot effectively address their third mission without society and the co-creation of both the teaching and research agendas. Knowledge transfers, professional short courses and other extension services remain fundamental spaces of engagement for third mission mandates. However, lived experiences of the authors of this article reveal that community engagement came to a standstill during the COVID-19 pandemic as hard lockdowns meant no body moved. In some way, COVID-19 had a severe pushback of HEIs' engagement with communities. One could easily talk of three "wasted" years of the universities' third mission mandate. Possibly, this could be the reason why Filho et al. (2023) find many HEIs still battling with the localisation of SDGs in the core mandate areas.

6 Conclusion

Based on the findings from this work, one may conclude that there exists a high level of awareness of the SDGs among UNISA academics. Although academics seem to be mainstreaming SDGs in the four core mandates, there is no visible systematic and sustainable way of doing so. Regarding the main barriers that include funding, UNISA seem to have addressed this to some extent. The Africa-Nuanced Sustainable Development Goals Research Support Programme stands out in this regard. The main drawback comes from the failure by UNISA academics to publish more work with SDGs focus. While the newly instituted 10 catalytic niche remain relevant, there is a need to align them to the SDGs to complement ongoing work. Although academics would have wished to get into the communities and engage them, this was not possible for a while due to the COVID-19 pandemic.

The work recommends that UNISA management institute a systematic framework to mainstream SDGs into its four coremandate areas. In doing so, the top SDGs localisation barriers including insufficiently trained staff on SDGs, perceptions that SDGs bring extra work, engagement with SDGs not part of staff Key Performance Indicators, lack of champions and top management by-ins on SDGs, and lack of or poor funding should be addressed. While the SDGs champions have been inaugurated in 2021, their work has not filtered through to a level where academics can get more help. Overall, UNISA is on the right track as has been witnessed by its continued improved ranking on the Times Higher Educations platform.

This work has implications for potential replication of the survey instruments to study other similar set-ups across the higher education both within and outside South Africa. In fact, eight other universities have been identified in Zimbabwe, with the same survey rolled out. One university from Zimbabwe send a delegation to understand how the localisation of the SDGs and the entire research process to feed into the system has been implemented at UNISA. Some of the documents including the SDGs Localisation Declaration have already been shared, with one of the authors to this work being invited to present the PAR process that has been taking place at UNISA. Four other universities in South Africa have agreed to have the survey and similar research rolled out. Overall, there is a potential to repeat the survey after 2030 when the SDGs first commitment period comes to an end.

Data availability statement

The raw data supporting the conclusions of this article may be made available by the authors, on condition that the user keeps them secured and not for onward third party use.

Ethics statement

Ethical approval was granted by the University of South Africa's College of Economic and Management Science Research Ethics Review Committee, reference number 2021_CREC_032 (FA). Approval to collect data from the institution's academic staff was also granted and Informed consent was obtained from each participant who completed the survey.

Author contributions

GN: Conceptualization, Project administration, Supervision, Writing – original draft, Writing – review & editing. LC: Investigation, Methodology, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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