

SOUTH AFRICAN NATIONAL SURVEY OF
RESEARCH AND EXPERIMENTAL DEVELOPMENT

SECTOR RESULTS AND TRENDS

**HIGHER EDUCATION PERSONNEL
ENGAGED IN R&D
AT A GLANCE 2020/21**

Research and development (R&D) in South Africa is dependent on the human resources that are available within the national system of innovation (NSI). The higher education sector hosts the majority of the country's R&D personnel, making it instrumental to the research performed across the NSI. This fact sheet shows how the number of R&D personnel in higher education declined in 2020/21 for the first time in ten years.

FACT SHEET NO. 49



Science and Innovation
Statistics South Africa



Investment • Insight • Impact

THE BIG PICTURE



South Africa's
GDP in
2020/21 was



**R 5 521.075
BILLION**

In **2020/21, 0.61%**
of **GDP** was spent
on **R&D**

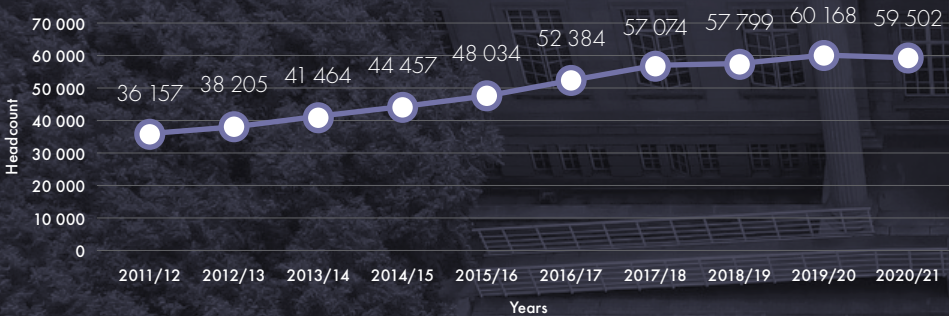
0.61%
**R 33.541
BILLION**

HIGHER EDUCATION R&D PERSONNEL



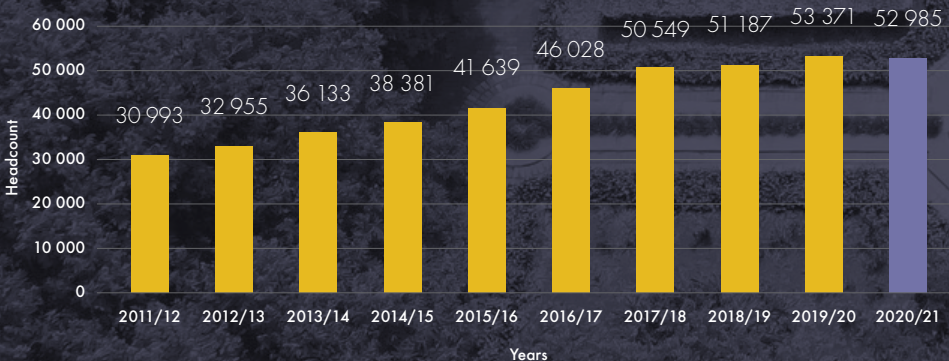
The number of higher education personnel (researchers, technicians and other support staff) has grown steadily over the years, but decreased in 2020/21 by 666 people.

Higher education personnel, 2011/12 to 2020/21



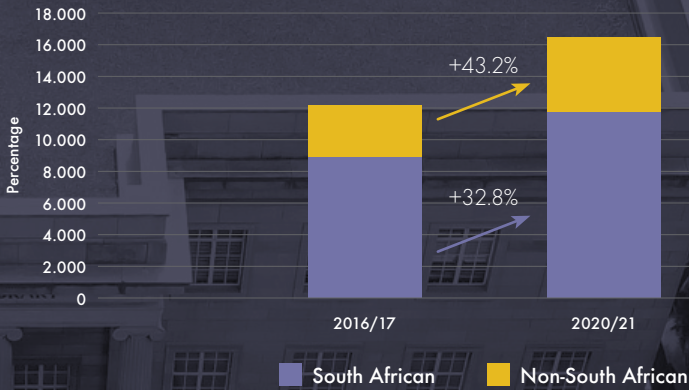
89% of higher education R&D personnel were researchers (research staff, current post-doctoral research fellows and enrolled doctoral students) in 2020/21. For the first time since 2011/12, there was a decline in researcher headcounts.

Researchers in higher education, 2011/12 to 2020/21



The number of researchers with a PhD increased by 35.6% between 2016/17 and 2020/21. This increase was more strongly driven by non-South Africans (43.2%) than South Africans (32.8%).

Researchers with PhDs, 2016/17 and 2020/21

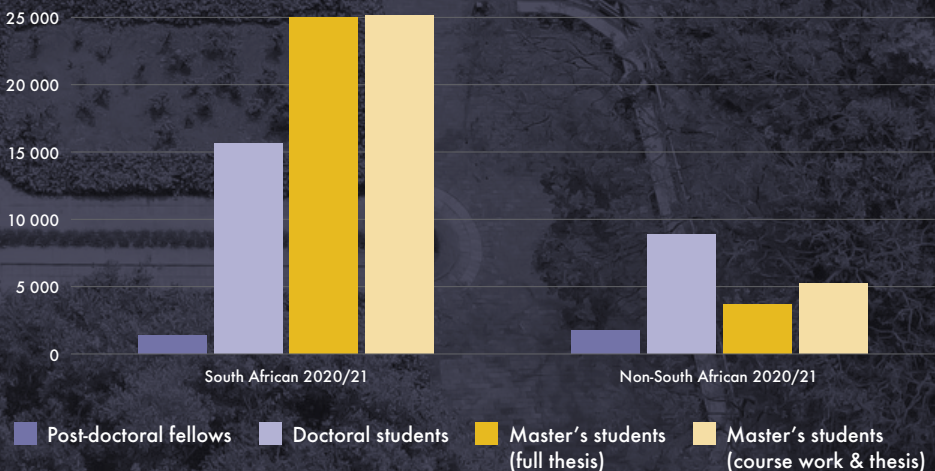


HIGHER EDUCATION ENROLMENTS



The majority (75.2%) of South African students conducting research in higher education institutions in 2020/21 were master's students. In contrast, just over half of non-South African higher degree students were at the level of PhD and post-doctoral research fellows (54.3%).

Higher education enrolment, master's degree and above, 2020/21



BEHIND THE NUMBERS

The annual South African National Survey of Research and Experimental Development (R&D Survey) is conducted by the Centre for Science, Technology and Innovation Indicators (CeSTII) at the Human Sciences Research Council (HSRC), on behalf of the Department of Science and Innovation (DSI). R&D statistics are collected in terms of the Statistics Act No. 6 of 1999, and are quality assured by Statistics South Africa. Data collected through the Survey, and its historic data series, helps to inform decision-makers on investment planning, policy-making, advocacy, and research in South Africa. Data also adds to benchmarking and performance comparisons with our international counterparts.

Access previous survey reports:

<https://hsrc.ac.za/divisions/centre-for-science-technology-and-innovation-indicators/>

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