



OCTOBER/NOVEMBER 2018

MID TERM EVALUATION

CENTRE OF EXCELLENCE IN
HUMAN DEVELOPMENT

22-24 OCTOBER 2018

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LIST OF ACRONYMS

| | |
|--------|---------------------------------------------|
| AG | Accelerator Grants |
| ASSAf | Academy of Science in South Africa |
| CoE | Centre of Excellence |
| CoE HD | Centre of Excellence in Human Development |
| DBE | Department of Basic Education |
| DHET | Department of Higher Education and Training |
| DoH | Department of Health |
| DSD | Department of Social Development |
| DST | Department of Science and Technology |
| DVC | Deputy Vice-Chancellor |
| ECD | Early Childhood Development |
| HDI | Historically Disadvantaged Institution |
| HSD | Human and Social Development |
| HSRC | Human Sciences Research Council |
| KPA | Key Performance Area |
| MoU | Memorandum of Understanding |
| NGO | Non-governmental Organisation |
| NRF | National Research Foundation |
| OG | Opportunity Grants |
| SG | Strategic Grants |
| Wits | University of the Witwatersrand |

Acknowledgements

The panel thanks all the participants who made time in their busy schedules to talk to us about their experiences of the Centre of Excellence in Human Development (CoE HD). The list of people is contained in an appendix. We thank members of the CoE HD and National Research Foundation (NRF), who were gracious hosts. In particular, we thank Nathan Sassman, Nnyambeni Golele and Lethu Kapueja, who responded admirably to our multiple requests for information. Thank you to Sarah-Ann Moore, who copy edited the document.

Executive summary

The National Research Foundation (NRF) and Department of Science and Technology (DST) appointed a panel of four to conduct a mid-term evaluation of the Centre of Excellence in Human Development (henceforth the CoE HD). The purpose of the retrospective evaluation was to assess the performance and progress of the CoE since inception to the date of the evaluation.

The evaluation consisted of the following: briefing meeting with the NRF; perusal of provided documents; presentation by the former and acting Directors; in-depth discussions with the former and acting Directors; and conversations with representatives from a range of stakeholders (including students, Post-Doctoral fellows, research partners, government partners, national and international organisations). The NRF's five key performance areas (KPIs), as well as governance and sustainability, formed the basis for the evaluation.

Our overarching impression of the CoE HD is that it is doing a sterling job on all fronts. We highly commend the team, researchers, and students. The investment by the NRF and DST has been very productive, and funding for the core functions of the CoE HD should continue until the need for and utility of the CoE HD diminishes. In the report we outline the many strengths, but also note some challenges (some of which are external to the CoE HD) and make recommendations for the way forward. We see these recommendations as **points of discussion** between the CoE HD, the University of the Witwatersrand (Wits), NRF and DST. The main report more fully explains and elaborates on the recommendations and provides additional recommendations as well.

Research/knowledge production

Strengths

The CoE is to be warmly congratulated on its research outputs, which have been outstanding in terms of both quantity and quality. In addition, there is excellent variety in avenues and types of publication, methodologies employed, and audiences reached. The topics addressed are on diverse aspects of human development of relevance to the South African context. The CoE HD has capitalised on existing resources and pockets of excellence. CoE HD has made strides in the establishing of coherent and effective procedures for soliciting and selecting research grants. CoE HD funding has often served as catalyst funding for researchers to leverage additional funding. Student researchers are well mentored, such that many students first-authored and co-authored papers.

Challenges and areas for growth

The study of "human development" is quite broad, which is an opportunity but also a challenge, specifically in terms of bringing strands together to form the 'bigger picture' so that the CoE HD does not produce a body of work that appears to be loosely tied together. Research grants are received disproportionately by Whites and females, and few individuals from historically disadvantaged institutions (HDIs) have received grants. The NRF indicator of publishing in journals with an impact factor above 5 potentially forces the CoE HD researchers

to publish in Public Health journals to the detriment of Social Science journals. The third thematic area - socio-economic development - seemed less developed and visible in publications than the other thematic research strands.

Recommendations

1. Retain a primary focus on Social Science research questions and methods.
2. Retain the good balance of types of projects and methodologies.
3. Retain the same broad themes to ensure continuity of research endeavours.
4. Encourage the budding projects in the third area (socio-economic development) particularly in terms of publications.
5. Encourage efforts to develop applied research (e.g. intervention development).
6. Identify and nurture one or more coherent interdisciplinary areas of focus, and synthesize the endeavours by different disciplines.
7. In developing a coherent research agenda, gain external feedback from the CoE HD Scientific Advisory Committee, other expert scholars, and/or utilisers of data to identify gaps and priorities for areas of focus.
8. Employ a full-time researcher in the CoE HD who can, *inter alia*, perform collation and synthesis of research conducted under the auspices of the CoE.
9. Current plans to reach HDIs and Black researchers to be continued.
10. Continue supporting projects of multiple collaborators and students working together.
11. The NRF should reconsider its indicator of publishing in journals with an impact factor above 5 in the Social Sciences. A nuanced approach should be adopted that encourages researchers to publish: (1) where possible and suitable, in the top journals *in their field*; and (2) in a suitable balance of journals.

Education and training

Strengths

The CoE HD has established a bursaries system that is efficient and effective. The selection process is straightforward and well-organised. Analysis of students' race and gender showed a trend that complies well with the CoE HD's commitment to building the capacity of under-represented groups. Analysis of students' disciplines showed an impressive diversity of specialisations. The Centre incentivises students' completion of their degrees and publication of their research work. The flexibility in terms of how funding may be used allows students to tailor spending according to personal and academic needs. The bursaries enhanced students' commitment to a research career. The CoE HD furthermore actively provides support for research capacity development in a number of ways. Networking with other students as well as professionals at the annual conferences and other events was mentioned by most of the students to be one of the main benefits of their affiliation with CoE HD. The CoE HD also engages in personalised interactions with the students that go above and beyond the normal activities of funding organisations.

Challenges and areas for growth

The primary challenges faced by the CoE HD regarding bursaries are consequences of the designated amounts of bursary support that are insufficient and not on a par with the amounts awarded by other funders. Students who do not have access to running expenses from other research projects have to use their bursary money to collect data. There are relatively few Post-Doctoral applicants, and many are from outside South Africa. The restriction of the number of bursaries that can be allocated to international students may mean that some top students are unable to conduct their studies in South Africa. Psychology is the single most represented discipline in bursary funding at both Masters and Doctoral levels. Interviewees indicated that many Economics graduates are not interested in Social Economics, and that this specialisation has to be developed over time through close interaction with students. The awarding of bursaries to students in Paediatrics, Medicine, and Clinical Medicine raised some debate within the panel. Despite the CoE HD's diverse advertising strategies, some students heard about the bursaries via their supervisors, and some were unclear whether they could apply as non-Wits students. The NRF requires the CoE HD to fully re-contract students each year, which creates an unnecessary administrative burden and a potential disruption in funding payment. The proposed centralisation of bursary applications by the NRF would add unnecessary bureaucracy and could have multiple negative consequences. Students mentioned a need for mentors over and above their supervisors, which is difficult given human resource constraints. Some Post-Doctoral fellows felt that the events organised by CoE HD were more aimed at graduate students than postdocs. Students also mentioned that they would benefit from support regarding transitioning from their current status to the next step in their career.

Recommendations

1. The amount of bursary support needs to be increased by NRF to be in line with the prevailing market for similar support and for conducting research in South Africa.
2. The centralising of bursary applications at the NRF is not recommended. If the NRF is concerned about standardising application and/or selection procedures, generic guidelines or criteria could be developed for application across CoEs.
3. It would be more efficient for students to be automatically renewed each year based on demonstration of satisfactory progress, rather than be re-contracted annually.
4. To complement Psychology research, it would be advantageous to strengthen the contributions of other Social Science perspectives as well.
5. CoE HD is encouraged to conduct ongoing monitoring and evaluation of how it is reaching potential applicants.
6. It would be important for CoE HD to thoughtfully consider the trends and target aims regarding the characteristics of students supported (examples provided in main report).
7. The current model of encouraging multiple students and collaborators to work together should be continued.

8. The impact of instituting the incentivising rewards should be monitored and evaluated over time.
9. It is worth including student research progress and outcomes in the newsletter.
10. Students' professional knowledge-base and preparation for a successful career in research and academia could be enhanced.
11. The CoE HD could develop a handbook for supervisors.
12. Mentorship could be enhanced in a range of innovative ways (see suggestions in main body of the report).
13. Student and alumni networking set-ups could be considered.

Information brokerage

Strengths

The CoE HD encourages the open sharing of data and the repackaging of information in forms that are useful to various professional audiences. Collaborators commended the CoE HD for presenting research briefs and open access reports in a way that was palatable to those working in policy settings. The CoE HD has also demonstrated social responsibility in relaying critical findings to lay audiences through active dissemination of results via a variety of media. Opinion pieces including articles in *The Conversation* are useful because the content is directly written by the person most informed on the topic. The nuggets were seen as effective ways to summarise data. Both professional and lay audiences benefitted from public presentations. Stakeholders are enthusiastic about the upcoming interdisciplinary thematic conference. Social media is a particular strength, with CoE HD Twitter and Facebook accounts highlighting events conducted by the CoE HD, recent research reports, and announcements. The CoE HD has a comprehensive website, a well-functioning mailing list that is regularly updated, and produces a regular newsletter. The hiring of a full-time Communications Officer in 2017 and recent hiring of a part-time journalist have been very beneficial. The Centre does not own or host major datasets that can be shared with others, but it does encourage the use of datasets housed elsewhere (e.g. DataFirst).

Challenges and areas for growth

The costs of publishing in Open Access venues are often prohibitive. There did not appear to be a clear plan in place for what specific research outputs to disseminate via which particular media venues. It can be challenging to balance and coordinate the different media options. Given the digital divide in South Africa, diversifying media presence is useful. The majority of media outlets have been limited to South African audiences, with few reports reaching international audiences. At the moment, a large proportion of media appearances do not explicitly mention affiliation to the CoE HD. While free participation in the CoE HD conference is in line with its mandate to disseminate data without restrictions, it does mean that fewer people can attend. Bursary recipients have not been very involved in the information brokerage efforts.

Recommendations

1. An explicit communications plan that aligns with the research plan could be developed.
2. Varying methods of delivering information in order to target diverse audiences could be encouraged (examples laid out in main body of document).
3. Strategies can be used to establish and nurture relationships with the media outlets (see suggestions in main body of document).
4. Those who are interviewed for news and feature articles should mention their affiliation with the CoE HD.
5. The newsletter's impact can be capitalised more effectively with small effort (see suggestions in main body of document).
6. Nuggets would benefit from more effective distribution by the NRF, in particular to relevant users such as schools, libraries, and clinics.
7. Bursary recipients should be actively encouraged to publicise their research beyond scientific venues.
8. The upcoming November conference should be optimised as a key avenue for disseminating information related to human development particularly if replicated on an annual basis (see suggestions in main body of document).
9. It would be valuable for more of the CoE HD journal articles to be Open Access, but currently it is financially prohibitive. The NRF should explore ways to increase capacity for Open Access publishing and both NRF and CoE HD can consider establishing an online repository of articles .

Networking

Strengths

The CoE HD has an impressive array of partner institutions and organisations. The extensive connections that Prof Linda Richter and Prof Shane Norris had prior to the CoE HD being established have been extended and built upon in a very useful way. Most students and Post-Doctoral fellows interviewed mentioned networking as key to their positive experience with the CoE HD funding.

Challenges and areas for growth

Networking seems to occur mostly with South African and global North institutions. A major area for growth is the low number of collaborative agreements between the CoE HD and HDIs. Some networks with government departments are established on a need or ad-hoc basis, rather than a formal Memorandum of Understanding (MoU). There are shared and complementary interests in the mandates of the CoE HD and the Human and Social Development (HSD) unit of the Human Sciences Research Council (HSRC). Not all students/postdocs found the networking opportunities useful or accessible.

Recommendations

1. Networking with universities, research institutes, and organisations from the global South could be encouraged.
2. Substantial effort should be invested in building collaborative relationships with HDIs.
3. Focused MoUs with relevant government departments (e.g. Department of Health (DoH), Department of Social Development (DSD), and Department of Basic Education (DBE)), and with the HSD of the HSRC may assist in extending the good work being done in influencing and supporting policy development and interventions.
4. Focused local events could be organised so that students not located in Gauteng may benefit from the face-to-face networking and learning opportunities (see suggestions in main body of the document).
5. With the former Director's departure, the new Director will have to ensure that existing networks are retained as well as new ones created.

Service rendering

Strengths

The CoE HD lead researchers recognise the importance of service rendering. The policy impact of research conducted under the auspices of the CoE HD has been impressive. The collaboration with the non-governmental organisation (NGO), Sonke Gender Justice, is to be commended. The CoE HD has capitalised on the opportunity created by the Square Kilometre Array to investigate the implications of this large scientific project for human development. Affiliates and lead investigators render a rich array of services. Added to this has been the CoE HD's capacity to translate research outputs into service. Less visible and yet influential has been the CoE HD's in kind support to government. The CoE HD has linked the DoH to the WHO Nurture and Care Framework.

Challenges and areas for growth

Lack of consensus and clarity for the Centres of Excellence around the concept of service rendering may lead to context specific meaning and outcomes expectations that are not mutually shared by both the CoEs and NRF. Budget constraints may negatively impact efforts to extend the service mandate reach. Interviewees from the Departments of Health and Basic Education indicated that they would be interested in having formal agreements with the CoE HD.

Recommendations

1. Consensus should be sought from the NRF on the vision and expectations of how service rendering is defined.
2. The CoE HD should consider establishing formal MoUs with relevant departments (including Departments of Social Development, Basic Education, Higher Education and Health) as well as working organically with these departments. The CoE could assist in building and catalysing overlapping relationships between government departments through pointing out the implications of the CoE HD research across sectors.

3. The NRF could be a crucial intermediary that links CoE HD with other government departments and civil society.
4. It would be helpful for CoE HD to consider ways to reach diverse organisations (e.g. multilateral organisations and NGOs) both nationally and internationally.
5. With the departure of Prof Richter, purposeful efforts should be made to retain and nurture the relationships she established through the various service rendering efforts.

Governance

Strengths

The “hub and spokes” model of the CoE HD works well. The systems within Wits are supportive of the functioning of the CoE HD. The Director and Financial Manager have ensured that the CoE HD is well managed financially. They have met their targets for spending, even with the backlog created at the beginning of the funding cycle. The Scientific Advisory Committee consists of a good mix of national and international scholars with a strong inter- and multidisciplinarity focus. The quality and experience of the Management Committee of the CoE HD is high. The CoE HD was established from two competing bids, creating grounds for possible tension. Instead the merging of the two bids has been a strength. The CoE HD has fostered collaboration across institutions despite the competitive climate set up through funding mechanisms in Higher Education in South Africa. The support of the Wits Deputy Vice-Chancellor (DVC) of Research has been important in this. The CoE HD leadership style of delegating and sharing responsibilities has the beneficial effect of involving many people in a project. Many of the people interviewed spoke very highly of the current CoE HD Manager, Lethu Kapueja. The governance structures and reporting requirements ensure good accountability and transparency, and provide a sound basis for quality assurance.

Challenges and areas for growth

The CoE HD is physically located within the Wits School of Public Health. There may be a potential danger of others associating the Centre with the discipline of Public Health. Much of the success of the CoE HD has been owing to Director Prof Richter’s leadership and networks. Her departure, therefore, is naturally likely to lead to some instability and readjustment for the CoE HD. The process of appointing a new Director is an area of contention between the CoE HD and the NRF. The contestation around the appointment has clearly caused some ructions, and has resulted in the CoE HD going through a transitional phase with an Acting Director who is not in a position to launch any long terms plans. In addition, the NRF is proposing that Steering Committee members must be formally appointed by their institution. There could be ways to improve the contributions of the different organisational structures in the CoE HD. The Scientific Advisory Committee was also seen to have untapped potential that could be enhanced through engaging the committee on other substantial issues of guidance, even through virtual correspondence and meetings.

Recommendations

1. The roles of the steering committee, the University, and the NRF/DST in the appointment of Directors need to be made crystal clear.
2. It is imperative to appoint, as rapidly as possible, a strong, credible Director who knows the field well and has the proven capacity to manage a large enterprise.
3. Appointment of a Deputy Director could support the envisioning, implementation, and sustainability of the strategic objectives of the CoE HD.
4. The advisory structures could possibly be more effectively utilised (although the profile and workload responsibilities of lead researchers may limit this).
5. The CoE HD will need to remain vigilant about its Social Science mandate in order to ensure that it is not, in the perception of others, too closely aligned with Public Health.

Financial sustainability

The NRF requires the CoEs to become financially sustainable. However, funding from government departments and other leveraged research funding will in all likelihood fund specific projects, but NOT the “hub and spokes” governance structure or the multi-level, multi-institutional, and multi-disciplinary nature of the CoE HD. The CoE HD is not a primary producer, but rather a catalyst and an accelerator or facilitator in the production of research and academic goods in the field of Social Sciences. On the basis of this, the panel believes that the CoE HD, at least in its current form, is not financially sustainable without core funding from the NRF/DST. It is recommended that the NRF and DST base their future decision on discontinuation of funding on the utility, relevance, contributions, and performance of the CoE HD rather than the completion of the time cycle. While funding of the core catalysing or facilitating function may be reduced or increased (depending on what other funds are leveraged) the NRF and DST should, in this panel’s view, commit themselves to a long-term plan of support. The DST should continue to enhance its facilitation of funding from other relevant government agencies. While it is clear that CoE HD will continue to explore all possible pathways to obtain longer term funding support, the NRF and DST should understand that conflicts of interest may arise, and should be avoided, if they expect the CoE HD to raise private enterprise and industry funding.

Overarching recommendations

The CoE has met and exceeded its mandate in all areas. Continued funding and support is strongly recommended. A range of recommendations have been made in order to improve upon an already excellent programme.

Given the deep concern expressed nationally regarding the state of the Social Sciences and Humanities in South Africa, the NRF/DST is congratulated on allocating a non-predetermined CoE to the Social Sciences and Humanities. It is recommended that the NRF/DST consider establishing another, complementary CoE in the Humanities and Social Sciences, as there is plenty proof of concept in the functioning and success of this CoE HD. If such a CoE were to

be considered, it would be useful to consult the leadership of CoE HD regarding its ambit so as to ensure complementarity rather than competition.

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Background

Centres of Excellence (CoEs), established by the National Research Foundation (NRF) and Department of Science and Technology (DST), are “physical or virtual entities of research that concentrate existing capacity and resources to enable researchers to collaborate across disciplines and institutions on long-term projects that are locally relevant and internationally

competitive in order to enhance the pursuit of research excellence and capacity development."¹ This description points to the following fundamental principles:

- Existing capacity and resources should be strengthened;
- Collaboration across institutions should be fostered;
- Inter- and multi-disciplinary research should be encouraged;
- Multiple institutions should benefit;
- Long-term projects should be supported;
- Locally relevant research should be complemented by international recognition;
- Excellence should be maintained through good quality assurance mechanisms;
- There should be capacity development of researchers throughout stages of their career (i.e., from Masters students to established researchers).

The Centre of Excellence in Human Development (CoE HD) was established following a call for proposals in 2013. In its Review Framework for Centres of Excellence published in 2013, the NRF indicated the following:

Although proposals for hosting the CoEs in the non-predetermined disciplines and or themes will be accepted from any discipline, at least one of the CoEs will be awarded in the Social Sciences and or the Humanities. In this regard, such the CoE should aim at addressing some of or the majority of the issues emanating from the Department of Higher Education and Training's (DHET's) *Report Commissioned by the Minister of Higher Education and Training for the Charter for Humanities and Social Sciences*; and the Academy of Science of South Africa's (ASSAf's) *Consensus Study on the state of the Humanities in South Africa: status, prospects and strategies*, and ASSAf's *The State of Science in South Africa* among others (p. 11).

The concentration on the Social Sciences and Humanities was justified as follows: "This is in consideration of the important role that both the social sciences and the humanities play in development and the need to strengthen both human and research capacity in those fields (p. 11)."

The ASSAf *Consensus Study on the state of the Humanities in South Africa* indicated that Social Sciences and Humanities were in a crisis. Deep concerns were expressed about: declining student enrolments; falling graduation rates; decreasing government funding; government policy in the post-apartheid period systematically benefitting Science, Technology, Engineering and Mathematics to the exclusion, and even detriment, of Social Science and Humanities disciplines; and the weight of scholarship lacking international status and standing.

The CoE HD was established in January 2015 through a formal Memorandum of Agreement between the NRF and the University of the Witwatersrand (Wits), following the merging of

¹ Review Framework for Centres of Excellence (CoE) Programme, April 2013, p. 5

two proposals from the Universities of Witwatersrand and KwaZulu-Natal. The focus was on life course and intergenerational development.

The evaluation

The panel was tasked with evaluating the CoE HD for the period 25 March 2014 to 30 December 2017. The CoE HD did not actually begin to be functional until 2015, and some of the review documents extend into the year 2018. Thus, overall this evaluation reviews about 3.5 years of activity.

The members of the panel are:

- Catriona Macleod, Distinguished Professor of Psychology and SARChI Chair of Critical Studies in Sexualities and Reproduction, Rhodes University, South Africa (panel chair);
- Mona M. Amer, Associate Professor of Psychology and Department Chair, The American University in Cairo, Egypt;
- Abul Barkat, Professor of Economics and of Japanese Studies, University of Dhaka, Bangladesh;
- Thomas Mathukhu Mogale, Professor of Public Administration and Management and Dean of College of Economics and Management Sciences, University of South Africa, South Africa.

A briefing session, in which the parameters of the evaluation were outlined by the NRF and DST, was held with the panel on 4 October, 2018. The panel visited the CoE HD from 22 October to 24 October to gain input from various stakeholders. A list of stakeholders interviewed is contained in the agenda attached in Appendix 1.

A scribe, who recorded the proceedings electronically and in text form, attended the meetings. An assessor was present throughout the process to ensure consistency across CoE evaluations.

The NRF and CoE HD provided the panel with numerous documents to review. These included the NRF call for proposals and 12 May 2014 revised proposal for the CoE in Human Development, annual reports, annual business plans, 2018 Self-Assessment Report, and other documents. The full list of documents reviewed is contained in Appendix 2.

This report is the result of extensive discussion amongst the panel members. It is important to note that the panel's recommendations may apply to CoE HD going forward and/or to the NRF and DST in thinking through the possibilities and challenges relating to this CoE in particular, and CoEs in general, specifically in the Social Sciences and Humanities.

Evaluation questions that were addressed

The panel used the five key performance areas (KPAs) identified by NRF, as well as governance and sustainability, as a framework within which to consider the inputs from the various sources. The NRF's description of the KPA (where applicable) is followed by a brief background discussion in each section. The observed strengths of the CoE HD are outlined, followed by

identified challenges and areas for growth. Recommendations for CoE or NRF/DST pertinent to that area conclude each section. In the recommendations sections, it was **taken as read that actions leading to the identified strengths should be continued**, and thus the strengths were not, for the most part, repeated in the recommendations sections. We see these recommendations as **points of discussion** between the CoE HD, the University of the Witwatersrand (Wits), NRF and DST.

KPA1: Research/knowledge production

Description from NRF terms of reference

The work should be focused on the creation and development of new knowledge and/or technology.

Discussion

The CoE HD was established through the amalgamation of two proposals presented in response to the NRF's call for proposals. As such the ambit of the CoE was expanded beyond what was originally proposed by each of the initial proposal writers. Consequently, there are four broad themes within which the research work of the CoE HD is conducted:

- life-course development (the study of human development from conception to death, including studies of children, adolescents, adults, and older adults)
- intergenerational development (the study of human development across generations, including families and parental influences)
- socio-economic development (the study of material and social development, and its intersections with participation, health, education, social security, and employment)
- transformational development (the study of human identities, values, hopes, and aspirations, as influenced by individual and group identities such as gender and race)

These four themes are brought together through a foundational commitment to understanding and enhancing human development, referring to Alkire's definition of human development as "the bio-psychosocial processes, on an individual and social level, towards fulfillment, not only of basic needs but of values including freedom, security, achievement and belonging."²

The CoE HD awards three types of research grants: Opportunity Grants (OG), Accelerator Grants (AG), and Strategic Grants (SG). The OG, amounting to R150 000 over 18 months, is awarded for collaborations, writing workshops, and special journal issues. The AG, amounting to R300 000 (up to R500 000, if justified) over 24 months, is awarded to expand current research and increase outputs. The SG, amounting to R1 000 000 per year for 3 years, is

² L. M. Richter, Self-Assessment Report of the Centre of Excellence in Human Development, 2018 CoE HD Self-Assessment Report

awarded to the longitudinal work and other research complying with the core CoE agenda. The pattern of grants awarded thus far by type is 59.1% OG, 36.2% AG, and 4.7% SG.

Strengths

The research and knowledge production output by the CoE HD has been outstanding in terms of quantity, quality, diversity, and relevance.

The sheer **quantity** of outputs (research articles, books, journal special issues) is impressive. The CoE HD's publications average about 38 per year, for a total of 190 refereed journal articles at the time of the 2018 Self-Assessment Report, in addition to four books. Collaboration was moreover shown with seven journal thematic issues and contribution to four annual *Child Gauge* reports. This, according to interviewees, places CoE HD among the most productive of the 15 CoE's, although CoE HD has had a much shorter time frame in which to develop a cycle of publication outputs compared to other CoEs.

A high rate of productivity is matched by **quality** in terms of publications in high impact and relevant venues. This includes prestigious and well-established refereed journals, with 34 publications in journals with impact factors greater than 4, including the world's leading medical journal *The Lancet*. Unlike in the sciences, for topics related to human development and Social Sciences, multiple publications in high-impact venues is unusual and designates the work of the CoE HD as internationally competitive with high scholarly rigor.

There is **variety** in the content and types of scholarly publications supported by the CoE HD, which extends the Centre's impact by reaching readership of different audiences. Work is published in venues appealing to multiple disciplines including Child and Adolescent Development, Family Studies, Psychology, Mental Health, Public Health, and Neuroscience, and some of the works entailed interdisciplinary collaborations. There is a good balance of journal articles and more in-depth pieces of work. An impressive number of special issues and books/monographs have been published under the auspices of the CoE HD. This combination of outputs allows for depth as well as breadth of scholarship.

The broad methodological approaches of the research conducted under the auspices of the CoE HD are well balanced. The bulk of the research employs mixed methods (57%), followed by 34% of the studies being qualitative only, and 9% quantitative only. The CoE HD has balanced support for long-term projects with shorter, more focused research. The long-term projects have built upon and drawn from very valuable sets of data and have enabled the CoE HD to build up an impressive knowledge base in particular areas (such as the 28-year birth cohort study). CoE HD Founding Director Prof Richter, in her input, spoke to the importance of social scientists learning to use big data sets. The panel argues that it is equally important to develop theoretically rich and methodologically sound qualitative research, especially since much qualitative research that is produced in South Africa (and elsewhere) lacks the kinds of sophistication that allows the work to go beyond description. We believe that the CoE has established a good balance between these two imperatives.

The **relevance** of the work of CoE HD is undisputed. The topics addressed are on diverse aspects of human development of relevance to the South African context. The diversity of publication venues means that complexities involved in particular issues can be unpacked and policy and intervention implications highlighted. Given the unique challenges faced in South Africa with regards to human development, this approach is to be welcomed. The CoE HD demonstrates effective alignment with the National Development Plan.

It should be noted that the impressive output by the CoE HD in just a few short years can be attributed to their thoughtful efforts to **build upon existing resources** and pockets of excellence rather than “starting from scratch”. This has taken the form of drawing from existing longitudinal and national datasets, partnering with key academic leaders in the field, and utilising existing networks.

Beyond the research outputs per se, CoE HD has made strides in establishing effective **procedures for soliciting and selecting research grants**. The CoE HD maintains a database that helps them manage public announcements including grant opportunities. The framework for three grant levels is conceptually compelling and effective in addressing the aim of CoEs to raise capacity of scholars across the career trajectory. The parameters are clear with respect to criteria and processes for reviewing proposals, and applicants receive feedback. In some cases CoE HD has gone beyond the call of duty by taking the initiative to contact scholars who did not receive a grant to advise and guide them on modifying their grant submission to be more competitive for the subsequent round.

The value of the grants to researchers’ development is undeniable - the grants supported the advancement and implementation of scholarly pursuits in important topic areas, many of which do not qualify for other more popular funding opportunities. Moreover, CoE HD grants were in many cases catalysts for research programmes, serving as a springing board for research groups to **leverage additional funding** that could further increase the scope and impact of their work. This is exactly the kind of synergistic processes aimed for.

Moreover, one of the impressive contributions as regards to development of researchers is inclusion and mentorship of **student researchers**, such that many students first-authored and co-authored papers. This was an area of pride for the CoE HD staff and admiration by collaborators from other institutions who saw it as a positive model from which they could learn.

Challenges and areas for growth

The study of “human development” is quite broad and encompasses the intersections of multiple aspects of development (e.g. health, psychological wellbeing, relational, socio-economic) across multiple lenses of study from the biological to sociological. The countless possibilities of what to investigate poses both an opportunity as well as a challenge. A challenge for all research in South Africa is bringing the various strands together to create the

“bigger picture”³. While some of this have been done through the CoE HD, there may be room for further development in this area.

The four overarching themes have been used as a framework for selecting and organising the various research pursuits through grants, collaborations, and other research supports. Although this strategy was useful for the new and budding CoE HD to identify and strengthen existing areas of investigation and to foster creativity across diverse areas of scholarship, this has meant that **the resulting body of work appears to be loosely tied together**. Multiple interviewees, including Prof Richter and CoE HD Acting Director Prof Norris, articulated differing views on which research foci were the key areas of accomplishment and coherence.

One of the main reasons why the body of scholarship produced by the CoE HD is so multifaceted is because it does not conduct research itself or set a firm agenda around the types and topics of research. Rather, it supports research endeavours and collaborations through a “hub and spokes” model. After reviewing CoE HD research outputs, the panel was convinced that moving forward it would be advantageous for the Centre to select at least one or more specific areas of focus while continuing to support diverse work. Prof Norris asserted that the original model was optimal in establishing the CoE HD, but that a hybrid kind of model of having a key central focus balanced with eliciting proposals in diverse areas may be more suitable going forward, which aligns with the panel’s conclusions.

Moreover, across the four thematic areas, the panel noted that **socio-economic development seemed less developed** compared to the other research strands. Naturally, socio-economic factors may be embedded in works under the other three themes, but it is less visible as a main topic for publications. Livelihoods and related topics were strong aspects of the initial CoE HD proposal, but with the departure of Prof Imraan Valodia, who took up a Dean position at Wits, this aspect did not launch and coalesce as quickly as other areas. Nevertheless, the CoE HD team assured the panel that there is substantial work in this area in the pipeline.

Just as reaching a target balance in diversity of research areas can be a challenge, so is the aim to **diversify the researchers supported**. Among the 54 grants recipients thus far, more are female (59.3%) than male (40.7%) and more recipients are White (63.0%) than Black (37.0%). Among male recipients, slightly more are White (59.1%) than Black (49.9%). Among female recipients more are White (65.6%) than Black (34.4%). No Black (irrespective of male or female) ever received a Strategic Grant.

Therefore, it can be concluded that unlike bursary support to post-graduate students (see discussion below), the grants are received disproportionately more by Whites and females. Interviewees mentioned several potential explanations for this disparity. The feminisation of the Social Sciences leads to under-valuing of the field among men. People disadvantaged by Apartheid may choose to pursue other disciplines that are perceived to have more lucrative and stable income in order to support families. There is also the lure of corporate or other

³ Macleod, Catriona Ida. "The case for collation to inform debate and transform practice in decolonising Psychology." *South African Journal of Psychology* (2018): 0081246318784508.

high paying jobs. The general Higher Education environment has become less attractive as a place of employment for young graduates. Moreover, the demographic profile of current academics and researchers remains predominantly White at the senior level, which means that there is a lack of Black and female role models.

The CoE HD team acknowledged that it **has not been sufficiently successful in providing grants to individuals from historically disadvantaged institutions (HDIs)**. One of the interviewees indicated that one of the reasons is that many HDIs do not have functional websites with details of their academics and research fields, and their Research Offices sometimes are not efficient at making people aware of funding opportunities or providing support in applications. That said, both outgoing and interim Directors acknowledged the need to do mobilisational work in raising awareness about, and the attractiveness of, the CoE HD's research opportunities in these institutions.

Finally, a question was raised in the panel regarding what entails high-quality knowledge production. The CoE HD Self-Assessment Report listed 18 peer-reviewed articles in **journals with an impact above 5**, an indicator required by the NRF. This is impressive. Nevertheless, the Report points out that this requirement is problematic. The panel concurs wholeheartedly. Very few Social Science and Humanities journals have an impact above 5. This requirement potentially forces the CoE HD researchers to publish in Public Health journals to the detriment of Social Science journals. In addition, this criterion encourages publication in journals located in the global North, to the detriment of African and South African journals.

Recommendations

1. This is the only CoE specifically within the areas of Social Sciences and Humanities. It was established following national reports highlighting the poor state of the Social Sciences and Humanities in South Africa. As the CoE HD moves into the next five years of research development, it will be important to be vigilant about continuing a primary focus on Social Science research questions and methods and not to veer towards Medical Sciences, Neurosciences, traditional Public Health, or other areas.
2. The good balance of longitudinal versus short-term projects; qualitative, quantitative, and mixed methodologies; basic to applied research; and projects within the four thematic areas should be retained. This balance does not necessarily occur on its own; the strategies used to ensure this balance should be maintained.
3. The framework of four thematic areas is well selected. Retention of the same themes to ensure continuity of research endeavours over time is encouraged. Additionally, the third focus on socio-economic development (stemming from the original proposal on livelihoods) has lagged behind the others in terms of productivity so it is hoped that the currently budding projects in this area are further developed.
4. The topics addressed by CoE HD largely have potential for intervention and policy implications, and that can enhance the impact of the CoE HD. Thus, future efforts to

develop applied research (e.g. intervention development) should be encouraged, perhaps by leveraging additional funding given that intervention research is costly.

5. Although the past scope of research agenda emerged organically from the types of projects that were funded by CoE HD and this was strategic to launch and stabilise the CoE HD, moving forward the impact would be higher if CoE HD actively identifies and nurtures at least one or more coherent interdisciplinary areas of focus and purposely establishes or facilitates research groups around such areas of inquiry.
6. Relatedly, CoE HD encourages initiatives across multiple disciplines, but this can be more coherent and produce higher impact if the endeavours by the different disciplines are more purposefully synthesised. For example, scholars from multiple disciplines can focus on addressing a specific research question from different angles.
7. To identify one or more specific research agendas of high relevance within or across the four thematic areas, it would be helpful to gain external feedback from the CoE HD Scientific Advisory Committee, other expert scholars, and/or utilisers of data to identify gaps and priorities for areas of focus. This could be conducted through creative means such as virtual meetings, a survey of collaborators, or even a conference roundtable session.
8. Employing a full-time researcher in the CoE HD, as suggested by Dr. Norris and others at CoE HD, is a commended plan. This researcher can perform collation and synthesis of research conducted under the auspices of the CoE, as well as possibly systematic reviews of topic areas of importance to the CoE. The researcher would also play an important role in leveraging potential external funding, liaising with HDIs on research-related endeavours, and other related tasks.
9. The CoE HD is aware of the need to support more Black researchers, as well as males. The current plans to reach HDIs is laudable and it is encouraged to continue to track progress in this area and to evaluate and explore alternative strategies. For example, suggestions by interviewees to join events at those campuses could be considered.
10. The current model seen across some of the projects of multiple collaborators and students working together is encouraged. It may be useful for the CoE HD (upon building its capacity with the hiring of more central staff) to consider offering trainings to others in, *inter alia*, how to incorporate students into research teams.
11. NRF should reconsider its indicator of publishing in journals with an impact factor above 5. This is an inappropriate indicator in the Social Sciences and Humanities. Instead, a nuanced approach should adopted that encourages researchers to publish: (1) where possible and suitable, in the top journals *in their field*; and (2) in a suitable balance of journals (international journals based in the global North; international African-based journals; international journals based in other global South countries; South African-based journals; journals read principally by academics and researchers; and journals read principally by professionals).

KPA2: Education and training

Description from NRF terms of reference

Human resource development is to be done through Masters and Doctoral programmes, post-doctoral support, joint ventures in student training, etc. In creating, broadening and deepening research capacity, the CoE needs to devote particular attention to racial and gender disparities.

Discussion

The CoE HD, through collaboration within its network and beyond, contributes to education and training of post-graduate students (Masters, Doctoral, and Post-Doctoral levels) primarily through access to bursaries. The Masters students are funded for two years at R70 000 a year; Doctoral students are funded for three years at R100 000 a year; and Post-Doctoral fellows are funded for three years at R200 000 a year. The 81 recipients thus far are 45.7% Masters level, 35.8% Doctoral level, and 18.5% Post-Doctoral level.

Recipients are selected based on good academic records (1st and 2nd class), research topic compatible with CoE HD thematic areas, appropriate supervisor, and nationality (in line with the NRF/DST requirement concerning the allowable percentage of bursaries allocated to non-South African students).

Beyond the financial support, CoE HD is actively engaged in other forms of student development for the bursary recipients as discussed below. These include organising and requiring attendance at an annual workshop/conference, support for conference attendance, and encouragement to attend seminars and roundtables.

Strengths

“Education and Training” is, in and of itself, an integral component of accelerating the process of human development through contributing to human capital formation. Overall, the CoE HD has made tremendous strides in establishing a bursaries system that is efficient and effective. For many students, the impact of the bursaries on their careers transcended the financial sphere to also advantage them in building their CV and research profile, raise confidence and capacity to continue a research career, and facilitate their ability to obtain additional funding. The CoE HD efforts have, moreover, impacted the students beyond the financial support by creating a special sense of community among the recipients.

The **selection process** is straightforward and well-organised. The CoE HD Management Committee is responsible for deciding the recipients, either by approving a list of recommended Masters applications as identified by the CoE HD Director and Manager, or through full review and consensus for the Doctoral and Post-Doctoral applications. All applicants are informed of their results. Public clarity on the process and clear evaluation criteria enhances the image, reputation, transparency, and accountability of the CoE HD.

There was consensus among interviewed students that the simplicity of the application requirements and methods, and the swiftness of the final decisions, were laudable and made the CoE HD bursary opportunity much more appealing than other potential funding sources that were perceived to be burdensome, bureaucratic, and slow.

Analysis of **students' race and gender** showed a trend that complies well with the CoE HD's commitment to building the capacity of under-represented groups, paying particular attention to racial and gender disparities. There is a distinct order pattern: females are ahead of males (76.5% and 23.5% respectively) and Blacks are ahead of Whites (72.8% and 27.2% respectively). These results were aimed for according to the evaluation criteria. Overall, the order is 56% Black Female, 21% White Female, 17% Black Male, and 6% White Male. Although these trends align with the national transformation agenda, it should be noted once again that there is a disproportionately low representation of males in the Social Science fields. As such, the allocation of a quarter of the bursaries to males can, at the same time, be seen as an accomplishment.

Analysis of **students' disciplines** showed an impressive diversity of nearly 30 specialisations that have been supported, which is testament to not only the CoE HD's flexibility and openness in funding diverse topics and methodologies, but also their success at reaching across different university academic departments that are often isolated in silos. The CoE HD has awarded bursaries to several students in scarce skills areas, including Statistics, Epidemiology, Demography, Economics, Biological Anthropology, and Health Sociology.

The CoE HD has come up with clever strategies to promote students' **completion of their degrees** and **publication of their research work**. CoE HD rewards publications with minor additional grants, and timely degree completion with small transition grants meant to enable them to move on to the next step of their research or career. These incentives were extremely attractive and motivated the students. This is to be commended within the context of students nationally failing to complete within the prescribed time. The Council of Higher Education reported that in 2005 that the mean years to completion for Masters in the Humanities and Social Sciences was 2.6 and 2.9 years respectively, and for PhD 5.0 and 4.6 years respectively. No change was noted between data for 2000 and 2005.

Another factor that interviewed students attributed to their academic successes was the ease and **flexibility of how the funding is utilised**. Students could apply the received funding to whatever aspect of their personal (e.g. living expenses) or academic (e.g. fieldwork travel and data collection, transcription) demands that needed it most. This meant that the funding was in essence personally tailored to each individual, allowing for it to have the best impact in helping them reach their goals, without any restrictive guidelines or divisions in how money is to be used, and without significant bureaucracies.

In addition to the short-term academic successes, the long-term impacts of the bursaries are naturally of importance. The majority of students interviewed reported that the bursaries did indeed significantly enhance their **commitment to a research career**, whether in academic

settings or other settings such as industry. Masters students realised that conducting research was rewarding and found themselves on a previously unexpected pathway towards a Doctorate. Doctoral and Post-Doctoral students already had a budding interest in research and academia, which the bursary helped solidify or helped give them the opportunities, confidence, and motivation to pursue. A few students also commented on how the bursary moreover afforded them the freedom to study what they wanted.

The CoE HD, in addition to awarding bursaries to students, actively provides **support for research capacity development** in a number of ways. This includes:

- a) Annual student convening, linked to a national disciplinary conference for which students' travel, accommodation, and registration are supported;
- b) Support for local and international conference attendance;
- c) Support to selected students to attend training courses in advanced quantitative research;
- d) Regular phone, email, and social media contact with students to inform them of grant, conference, and work opportunities;
- e) Publication and celebration of student achievements such as peer-reviewed papers;
- f) Encouragement for progress of their degrees; and
- g) Nominations for awards.

Most students mentioned the required **annual conference convening** as a main highlight. This gathering is successful in motivating students to participate in large academic conferences, which can further their career development. It moreover has had direct impact on the students' research development through the attendance of special research events (such as the launch of the *Lancet* special issue) and integration of hands-on skills-based workshops (for example, in data management). At last year's conference in Durban students participated in training on communicating scientific research that they found highly useful.

Networking with other students as well as professionals at the annual conferences and other events was mentioned by most of the students to be one of the main benefits of their affiliation with CoE HD. They established ties with colleagues from other disciplines, shared and received feedback on their work, developed social support systems with other students (with conversations continuing via e-mail), and received informal mentorship from academics. Overall the networking opportunities seemed to provide both technical as well as social and emotional support, all of which can be especially powerful in ensuring successful completion of their academic degree or fellowship.

The CoE HD also engages in **personalised interactions with the students** that go above and beyond the normal activities of funding organisations. This was an impressive strength of the CoE HD of which the students were very appreciative. This starts from the very beginning of the process, with encouragement to potential applicants and their supervisors to apply for a bursary and advice on how to better align their proposals. The personalised support, especially from Media and Communications Officer, Ms Wendy Landau, continues throughout

the years and even after completing the degree or Post-Doctoral fellowship. It ranges from communications on topics of interest to nominations for awards.

Thus, a palpable **sense of community** was observed among the students, influenced by the CoE HD's personalised interactions, social networking (e.g. on WhatsApp), and the events that students were encouraged or required to attend. Many of the students interviewed know each other and interact with each other in a range of ways, and they also described warm ties with the CoE HD staff (e.g. "team", "family", "connected"). It was impressive to see how the CoE HD, despite its decentralised national "hub and spokes" model, was still able to create such attachment among the bursary recipients. That positive spirit may translate to the students feeling a commitment to continue in their research field and later support the CoE HD through, for example, advertising the CoE HD's opportunities.

Challenges and areas for growth

The primary challenges faced by the CoE HD regarding bursaries are consequences of the **designated amounts of bursary support**. It is less than the funding provided to the same levels of students by other educational and scholarship programmes (most notably Mellon Foundation and the National Institute of Humanities and Social Sciences). This results in successful students leaving the CoE HD programme in order to take up these offers. This is a common problem for entities funded by the NRF (e.g. SARChI Chairs). In addition, students are seldom encouraged by their supervisors to apply to other funding sources while enjoying the bursary. There are also institutional restrictions in terms of the additional amounts for which they may apply (i.e. a ceiling at each level), and a policy from the NRF that students may not benefit from more than one source of NRF funding.

Thus, **the funding is often inadequate for those students who want to do primary data based research work**. Those who do not have access to running expenses from other research projects have to use their bursary money. While this is not a problem for students with alternative means of subsistence (e.g. staying at home, or earning a salary as in the case of HSRC Post-Doctoral fellows), those requiring money for accommodation, food, transport etc. may forego some important data collection such as in the case of a student who did not have the means to collect data from one of the schools that was meant to form part of the study.

The amount of funding, moreover, has consequences for the number and types of applicants for the bursaries. In particular, it appears that there are **relatively few Post-Doctoral applications** and many of the Post-Doctoral applicants are not South African. This is unfortunate because fostering those at the Post-Doctoral stage can contribute significantly to the research agenda of the CoE HD and growth of the academic workforce of Social Science scholars specialised in human development. An explanation provided was the low amount that a Post-Doctoral fellow is awarded; better offers may be made by employers.

Although international students may find the bursaries to be attractive, the transformation imperative of the government may, at times, be at odds with the status of a university as

space for international debate and discussion. The latter requires that the university foster its internationalisation profile and rankings through attracting international students and staff and encouraging international exchange and collaboration. The restriction of the number of bursaries that can be allocated to international students may mean that **some top students are unable to conduct their studies in South Africa.**

Funding conditions and amounts may be one of the many factors that shaped the somewhat skewed distribution of bursaries per discipline. **The single most represented discipline is Psychology** at both Masters level (R2.17 million) and Doctoral level (R 2.7 million). For the Post-Doctoral fellowship the highest spending was directed for HSD, followed by Psychology and Clinical Medicine. While these patterns may be an artifact of which fields the CoE HD team have been more successful in reaching, as well as the nature of the human development topics that naturally attract students studying human behaviour, it could also be that the bursary amounts may not be competitive in some fields.

In relation to the above-mentioned observation about the slower buildup of the socio-economic development theme within the CoE HD, the economists interviewed indicated that the bursary amounts were not competitive in their field. There were also other potential explanations for the few Economics applicants. Interviewees indicated that **many Economics graduates are not interested in Social Economics**, and that this specialisation has to be developed over time through close interaction with students. This is difficult if one does not have direct contact with students (as is the case with the CoE HD).

The awarding of bursaries to students in Paediatrics, Medicine, and Clinical Medicine raised some debate within the panel. Some members felt that if the research conducted by these students had a Social Science angle, then this was perfectly acceptable. Others felt that: such students have many more opportunities for bursary funding than do Social Science students; given the students' background, such research is unlikely to be grounded within the rich nuances of Social Science theory and methodology; and given the poor state of the Social Sciences, as outlined in the introduction of this report, an exclusive concentration on Social Science Masters and Doctoral students is justified. The panel did not reach consensus on this, and leaves the discussion of these two points of view to the CoE HD and the NRF/DST.

In order to enhance the number and variety of applicants, CoE HD has implemented diverse advertising strategies. This includes e-mails to all Research Offices of universities and research councils, bulk mail to more than 1500 stakeholders, website and social media announcements, and others. There was perception among the students that awareness of the bursary opportunity has gained greater traction over the past couple of years. Yet, for the majority of students we interviewed, the way they became aware of the bursary was through word of mouth from supervisors and acquaintances. As such, it is imperative for the CoE HD to track the successes of their advertising strategies and modify efforts accordingly.

Not only did most student interviewees not learn about the bursary opportunity from formal announcements, it appeared that there was opportunity for CoE HD to further examine their

articulation of important messages in formal announcements to potential and current bursary recipients. For example, one of the students saw the announcement regarding the bursary through her university's electronic mailing list, but after reading it was still unsure whether she was eligible to apply as a non-Wits student. Other students were unaware until very recently of incentives for publishing and graduating on time and some learned about it from others in their same cohort; presumably only some students read the communications.

Students who continue to receive funding across years are required by NRF to be **re-contracted by the CoE HD each year**. The panel wholeheartedly agrees with recommendations in the CoE HD Self-Assessment Report that students should have a single contract, with regular supervisor and students reports of progress serving as an indication of the need to possibly terminate the agreement. If the conditions for renewal (e.g. grounds for termination if progress is not satisfactory) are explicit, this process can be rigorous. The current system (re-contracting each year) places an unnecessary administrative burden on the CoE HD, time that can be better utilised for other relevant work. In addition, it causes disruption in the payment cycle, creating a potential 3-month funding drought during the renewal period that can cause hardship to students.

It was reported to the panel that the NRF is, moreover, considering **centralising applications** for bursaries through the NRF. This would add unnecessary bureaucracy and could have multiple negative consequences. CoE HD has been successful at actively recruiting applicants through social networking and relationship building methods. This personalised process as well as the ease and efficiency of the current application system were lauded by the students as significant strengths that made the CoE HD bursary attractive and from the start increased their sense of community with CoE HD. Because the bursaries are not as financially competitive in the national landscape, adding a more formal and less approachable system that would no doubt also take longer to process may result in a reduced rate of applications and subsequent acceptances of the bursaries. Autonomy over the bursary application system currently gives CoE HD the opportunity to monitor application trends in real time, to easily modify the application questions or requirements whenever desired in order to meet an important goal for improvement, and to tailor the application to the relevant norms in the field.

Regarding the CoE HD activities in which students engaged, there were several suggestions offered by the students in regards to opportunities for growth. Many students felt that access to **mentors or a mentoring system** beyond their relationship with their primary supervisor would be useful. One student spoke of her positive experience with other funding of having a mentor not related to the project who could offer advice and support. While a good suggestion, the difficulty, of course, is the human resource capacity to effect such a system. As the CoE HD builds up its cadre of previous bursary recipients, perhaps those junior scholars can serve as mentors to newer students, or perhaps a mentoring programme can be embedded in the annual conference meetings.

Some Post-Doctoral fellows felt that the events organised by CoE HD were more **aimed at graduate students than postdocs**. They would value different input such as how to conceptualise and actualise a larger research project, how to build one's research trajectory, how to meet researchers in South Africa and abroad around particular research ideas, and how to apply for grants. Postdocs appreciated that there are different kinds of scholarly careers – some more applied, some with more interaction with NGOs than the traditional route of academic or employment in a research institute. They felt that they would like to hear how established academics built and got the most out of their careers.

Students also mentioned that they would benefit from **support regarding transitioning** from their current status to the next step in their career (e.g. for Masters students how to pursue a Doctorate and alternative sources of support; for Doctoral and Post-Doctoral students how to transition into a successful career). Many suggestions were provided to that end, such as internships, visits to universities by potential employers, input on how to write grant proposals, writing workshops, and mentoring. Some interviewees felt that the CoE HD could encourage departments to allow postdocs to supervise post-graduate students (even honours students); since the postdoc is for 3 years this would be feasible.

One student was concerned that because her funds were transferred to the HSRC, she had to access them through the HSRC systems, which she found to be a bureaucratic hurdle and which cost her more money owing to their procurement policies.

Recommendations

1. The NRF bursary amounts are not adequate or competitive, which likely impacts the number of applicants overall as well as from certain disciplines like Economics. The amount of bursary support needs to be increased in line with the prevailing market for similar support in South Africa, preferably by expanding the budget pool available rather than by reducing the number of students who are awarded support.
2. Centralising bursary applications at the NRF is not recommended and will likely lead to a reduction in volume of applications as well as dilution of several key strengths that were appreciated by the students.
 - a. The centralisation of the bursaries is also at odds with the NRF/DST goals of having the CoE's become self-sustainable at the conclusion of the funding time period. If that is the goal, then it is essential to foster operational autonomy among the CoEs from the very start and decrease dependence on NRF resources and infrastructure.
 - b. If the NRF is concerned about standardising application and/or selection procedures across the CoEs, then an alternative approach could be to simply provide the CoEs with clear outline of the generic guidelines or criteria that should be applied.
3. The panel could not see a clear justification for re-contracting students each year. A more efficient system, adopted by the CoE HD, is to offer a single contract with

conditions for “automatic” renewal and clearly outlined mechanisms for withdrawing funding from students who do not meet sufficient progress.

4. Despite Psychology being eminently suited to studying human development, and notwithstanding the impressive array of other disciplines captured in the bursaries, it would be advantageous to strengthen the contributions of alternative Social Science perspectives and methodologies. For example, greater contributions from bursary recipients from Economics, Sociology, and Anthropology could bring value to the themes and topics investigated through the CoE HD.
5. The CoE HD is encouraged to conduct ongoing monitoring and evaluation of how it is reaching potential applicants.
6. The current pattern of bursary support to the students is relatively well balanced. Moving forward, it would be important for CoE HD to thoughtfully consider the trends and target aims regarding the characteristics of students supported. For example:
 - a. There may be a tension between transformation aims and disciplinary aims in terms of gender. Males are disproportionately underrepresented in Social Sciences and thus their presence should be fostered. Yet, there continues to be an emphasis on supporting the education and livelihood of women and thus the bursary selection criteria prioritises women.
 - b. The potential tension between transformation and internationalisation could be managed by the CoE HD being able to negotiate, on a year by year basis, for a greater percentage of bursaries to be allocated to foreign nationals if and where there is clear evidence that these students will add value to the research being conducted.
 - c. The CoE HD’s plans for reaching historically disadvantaged universities are welcomed. The following strategies may also be considered: mailing posters that departments can hang up in their visible and relevant notice boards, using social media, site visits and talks with Research Offices, relevant staff, and Student Representative Councils, open house dissemination, and joint events.
7. The current result-oriented model of encouraging multiple students and collaborators to work together should be continued. CoE HD can replicate this model more often by suggesting to research groups that they encourage more of their students to apply for bursaries, and by aligning this model with a more targeted research agenda as discussed in the “Research” section above.
8. The CoE HD’s incentives for publishing and timely degree completion appear to be making a difference in enhancing motivation among the students. The impact of instituting these rewards should be monitored and evaluated over time, and further non-material and material incentives can be considered as relevant.
9. As a good motivational and incentive policy, it is worth including student research progress and outcomes in the newsletter. For example, the newsletter could have a section for students to submit their professional updates or latest publications, in addition to potentially highlighting one or more student work in an article.

10. Many students made suggestions concerning improving their professional knowledge-base and preparing for a successful career in research and academia. These suggestions are worth consideration. In particular, more training events at conferences and events that target Postdocs' specific needs could be organised.
 - a. Example topics that were raised by the students included: how to develop and successfully complete each stage of the thesis; how to transition into further degrees or work; networking and relationship development skills; how to manage a research lab or programme; developing a research trajectory; applying for research funding, writing for publication; how to transition successfully in their academic career from student to professional; and exposure to different types of scholarly careers (e.g. in civil society, industry, policy, applied research).
 - b. Supervisors and students could be surveyed to determine the types of knowledge and skills they perceive to be most desired.
11. In order to involve supervisors more fully, the CoE HD could develop a handbook for supervisors that includes bursary guidelines and strategies to enhance the impact and value of the relationship formed between the student, supervisor, and CoE HD.
12. Mentorship is a resource that students of all levels desired, to complement the more formal supervisory relationships at their university. In order to make the mentorship support more effective, the following suggestions may be worth considering:
 - a. Establishing and publicising (e.g. on the website) a searchable inventory of volunteer mentors that students can independently contact based on specific criteria (e.g., location, specialisation, etc.).
 - b. Establishing a virtual mentoring network, for example as a Facebook group or e-mail listserv, in which both students and professionals at all career stages are members. Students can present questions to the group in order to receive any responses as relevant.
 - c. Creating a formal mentoring programme that is organised by CoE HD in which interested students (or all students) are systematically paired with mentors. Criteria would be outlined for the mentoring relationship (e.g. number or frequency of meetings) to somewhat standardise the process.
 - d. Hosting open mentoring sessions at the annual conference meetings. Formats that are common at conferences nowadays include speed mentoring, as well as group mentoring in which students sign up to attend a discussion with one of several available mentors based on the topic of the mentoring session.
 - e. Encouraging former bursary recipients to participate as mentors as part of their "giving back" to the CoE HD.
13. To further promote students' sense of community and support, student, and alumni networking set-ups could be considered. The benefit and importance of networking was mentioned in all the student meetings. Students and alumni may decide what could be the best way to effect this; suggestions offered by students thus far were:

- a. Organising workshops and events during the year outside of the annual gathering, where students can meet one another. They can be held in different localities.
- b. Creating a LinkedIn group for current and past bursary recipients.
- c. Setting up regional meetings for students to get together, whether informally or with a formal task such as to review each others' papers and theses.
- d. Establishing virtual support groups.

KPA3: Information brokerage

Description from NRF terms of reference

CoEs are intended to provide access to a highly developed pool of knowledge, maintaining databases, promoting knowledge sharing and knowledge transfer, etc.

Discussion

The CoE HD communicates the results of research conducted under its auspices through a range of communication channels including a website, electronic newsletters, social media, public lectures, panels and events, YouTube videos, "nuggets" (short pieces outlining research results), newsprint, television and radio media, and annual exhibits for learners. The 2018 Self-assessment Report documents an impressive array of inputs over the past four years (2 NRF SAFM public lectures, 24 public events or panels, 20 nuggets, 313 media items, and 11 YouTube videos).

Strengths

One of the aims of the CoEs is to not only produce new knowledge but to also facilitate access to this knowledge by professional and lay communities. The human development focus of the CoE HD makes it perhaps one of the CoEs with the highest potential for communications impact. Much of the work relates to people's everyday lives and may have influence on audiences ranging from families to civil society to policy makers. The average media outlet may not be interested in covering topics related to some basic sciences and methodologies, yet certainly topics related to fatherhood, violence, breastfeeding, child wellbeing, livelihoods, and most other topics studied by CoE HD awardees and partners would be of interest to almost any venue. Many of the topics can stimulate debate or be "hot topic" issues for the public.

With respect to professional audiences, the CoE HD's successful strategy has been to encourage the open sharing of data and to repackage information produced from the CoE HD's projects through means that are useful to various professional audiences. The CoE HD actively encourages **open access datasets** and actively guides researchers into the direction of existing datasets (including longitudinal ones). This is an effective approach in order to encourage greater utilisation of often untapped valuable knowledge and also to enhance

networking ties with the entities that host such data. These big data partners across the CoE HD network have been a valuable resource for investigators and policy.

Collaborators commended the CoE HD for their talent in presenting **research briefs** in a way that was palatable to those working in policy settings. For example, key information has been condensed in two-page reports that are akin to policy briefs, and CoE HD staff and collaborators also write up public opinion pieces or meet with other entities to advise and guide them on the issues. This helps to better frame and deliver what otherwise may be complicated scientific data into messages in ways that can have higher impact on policy decisions. CoE HD has complemented such efforts by contributing to more extensive **open access reports** such as the *Child Gauge*. This helps set the CoE HD as a leader in influencing the public discourse on human development issues.

Much of the research that is conducted through the CoE HD is, moreover, relevant and useful to the general public. The CoE HD has demonstrated social responsibility in relaying critical findings through active dissemination of results via a variety of different approaches including traditional media such as **television, newsprint, and radio media**. Most of these outlets reached local, regional, and national populations. This variety can potentially target multiple audiences. The volume of representation in **news and feature articles** published by respectable news outlets was particularly impressive. These more than 300 items found in both print and electronic form, referenced or interviewed about 30 different lead investigators, grantees, fellows, and even PhD students. Some of the articles also reached international audiences.

One of the observed successes of the CoE HD public dissemination, although it did not seem to be highlighted in any of the documents or stakeholder interviews (perhaps indicating a hidden or yet acknowledged strength), has been in the form of **opinion pieces**, including in *The Conversation*. These included a broad array of print and electronic writings including op-eds, blogs, and external contributor pieces. This was one of the types of public dissemination that demonstrated high variety in topics and contributions from multiple grantees and investigators. These kinds of media contributions are useful because the content is directly written by the person most informed on the topic rather than depending on journalists who may distort or bias the way information is presented.

The **nuggets** were similarly seen as effective ways to summarise data. The nuggets were well articulated and used effective graphics to illustrate the information.

Another way that CoE shared information to both professional and lay audiences was through **public presentations**, mostly seminars and lectures held at university campuses, primarily at Wits, such as in the “Brain Matters” seminar at Wits. These types of events usually draw audiences not only from academic and student communities but also the local public and media. Some of the events were co-hosted with other collaborators, which enhances networking ties. These events are not only beneficial in relaying research information to the public in an accessible manner, but also strategic for advertising the potential CoE HD opportunities such as grants and bursaries.

Some of the public events raised much enthusiasm and interest, such as the **CoE Directors Forum exhibition** in 2017 which showed a wonderful collaboration with two community radio stations. This had an outstanding mixture of interactive experiences, contribution by multiple stakeholders including students and junior researchers, engagement from government such as the DST Minister, and tackling of “hot topic” issues.

One of the most exciting ventures planned by the CoE HD is the interdisciplinary thematic **conference** that is planned for 20-21st of November 2018 with the theme “Children, Families and the State: Collaboration and Contestation.” An annual conference was planned according to the 2014 original proposal, but given the extensive efforts invested in setting up and stabilising the Centre, it is not surprising that such a conference was not organised until now. It seems that there is a sufficient threshold of prominence and recognition, as well as interested stakeholders ranging from students to collaborators to produce a conference that can be successful. Moreover, it appears that the CoE HD is being strategic in trying to intensify the impact of the conference through, for example, aligning the *Child Gauge* launch with the conference.

Social media appears to be a significant and budding strength for the CoE HD. The Twitter account shows an impressive level of daily activity, with tweets that are exciting, thought-provoking, and interesting. The tweets cover events conducted by the Centre, recent research reports, and announcements. The account has 715 followers. Both Twitter and Facebook accounts were established in 2016, so the progress in this area is quite noticeable.

The CoE HD has a comprehensive **website** that gives information on the Centre, grants; bursaries; Post-Doctoral fellowships; research conducted within the CoE; current postgraduate and Post-Doctoral fellows; present and past grantees and bursary holders; publications; news, nuggets, events, and media coverage; and policy briefs. New and established users are able to access a wealth of information on the site. The website is nicely organised and is user-friendly, which is another testament to the CoE HD’s talent in tailoring information to diverse audiences, a talent that is often lacking in academic settings.

Finally, the CoE HD has been actively intensifying its communications with others through the development of a **mailing list** that is regularly updated and production of a **newsletter**. Although these efforts are not primary methods for releasing research data per se, it is strategic in order to build active interest in human development issues among diverse persons and to release news on any new publications and events.

Effective dissemination of knowledge needs a coordinated and targeted approach, and thus the hiring of a full-time Communications Officer in 2017 and recent **hiring of a part-time journalist** have supported the Center in strengthening its public communication efforts. The interaction between the CoE HD team and media specialists appear to be beneficial. The journalist’s ability to write and present information to media outlets in an engaging style, while retaining the accuracy of academic research, is a highly sought after skill. Overall, the “lay” material produced by the CoE is interesting, visually attractive, and easily readable.

Challenges and areas for growth

The NRF expects Centres of Excellence to promote professional access to their scientific endeavours by, for instance, making **databases publicly available and journal articles open access**. It should be noted that the CoE HD does not conduct in-house research but rather facilitates research endeavours by supporting investigators at all career levels with funding and coordinating collaborations. As such, the CoE HD does not own or host major datasets that can be shared with others. Moreover, the cost of publishing in Open Access venues is often prohibitive.

As such, it was felt by the review panel that there were untapped opportunities for greater exposure of the work, and that amplifying current media efforts can extend the CoE HD's impact by contributing to changing people's knowledge, attitudes, and behaviours. The first few years of the Centre's development were rightfully focused on building the foundation for its work, and it would have been realistically difficult to balance the tremendous efforts in scientific production and dissemination with an equally voluminous public dissemination plan. But as the start-up period stabilises, there may be greater opportunity to refine the communication plan and implementation.

Although the CoE HD has shown excellent variety in the types of communication venues targeted, there did not appear to be a **clear plan in place for what specific research outputs to disseminate via which particular venues**. A couple of the communication types were dominated by the lead initiative of other entities rather than the CoE, such as the publicity around the *Child Gauge* reports. If the CoE HD chooses to intentionally and strategically build one or more areas of research collaboratives, a targeted information dissemination plan can align with that.

The planned conference is for free to 150 participants. While free participation is in line with the CoE HD's mandate to disseminate data without restrictions, it does mean that fewer people can attend. It would be important for the CoE HD to examine carefully the **ways in which the conference can and should take shape**. Key questions relate to the extent to which the conference is: an internal platform for sharing information within the CoE HD network versus a public platform for widespread dissemination; an academic event versus one that is of interest to general public; open to various topics or targetted at one or more specific topics or studies chosen by the CoE HD; and a small intimate gathering versus a larger-scale public event.

Moreover, the **quantity of some types of communication outputs were underwhelming** in comparison to the potential interest in capturing the public imagination. In particular, there were very few appearances in the traditional media such as **TV and radio**. For example, during the year 2017 there was only one TV appearance listed. On the other hand, electronic-based efforts have been intensifying over the years.

This begs the question of the major challenge for South Africans as a whole with regards to what is termed **the digital divide**. Access to the internet and to computers is highly skewed

along class and location lines. While this is not a problem unique to the CoE HD, it is contingent upon such units and the NRF/DST to ensure that the benefits of research are not restricted to a narrow band of South Africans. This is all the more important considering that many of the human development challenges and opportunities researched have high relevance to disadvantaged communities.

There is an opportunity for the CoE HD to examine how to potentially reach more diverse communities. For example, to get messages to rural communities one needs to be able to speak the languages of these communities – this is a common limitation for academics who do not speak community languages. **The benefits of diversifying community outreach** go beyond the purpose of disseminating relevant information to creating interest in the CoE HD that might potentially facilitate greater awareness of bursary options among persons who are Black and male.

There are **noticeable shifts** in the information brokerage efforts over the past few years. For example, there has been a decrease over time in the production of nuggets, which can be attributed to unclear mechanisms for dissemination and questions about their perceived impact. At the same time, social media is flourishing. It can be challenging to balance and coordinate the different media options. Alignment of the different venues could save time and increase impact; for example, currently content on different social media accounts are duplicated which is an effective strategy. Additionally, more careful examination of impact and usage of information can help the CoE HD determine where to best invest their efforts.

The majority of media outlets have been **limited to South African audiences**, with few reports reaching international audiences.

At the moment a large proportion of media appearances **do not explicitly mention affiliation to the CoE HD**. Although this is not always possible, depending on the nuances of the specific media item, it is an area that could be deserving of further thought. Bursary recipients have, for the most part, not been as involved in the information brokerage efforts.

Recommendations

1. The impact of communication efforts would be strengthened by developing an explicit communications plan, particularly if that plan aligns with the research plan.
2. Greater efforts are encouraged in varying methods of delivering information in order to target diverse audiences as relevant to the content of the information delivered.
 - a. Enhancing the dissemination of information through traditional media (television, radio, and print) can complement the outstanding efforts conducted with electronic venues.
 - b. Moreover, the CoE HD can consider pursuing alternative venues as relevant to the information and populations in question, including community radio stations which have been underutilised (podcasts can be sent to them) and various outlets in different languages.

3. In order to gain more frequent appearances in traditional media and both print and electronic articles by news venues, strategies can be used to establish and nurture relationships with the media outlets. Some potential suggestions that can be considered by CoE HD (if not already part of their activities) are listed here:
 - a. A common strategy amongst universities is to establish a list for the media of potential experts and the topics about which they can speak, languages they can speak, their contacts, etc. This list can be posted on the CoE HD website and media venues can be alerted to its presence so they know whom to reach out to when working on human development stories.
 - b. It is strategic to develop a media contacts list in the form of a database of journalists focused on Social Science and health issues, and to maintain regular individualised contact with them. That way whenever a new research result or event could be publicised, it would be easier and quicker to request media coverage.
 - c. Issuing regular formal media releases (press releases) would bring frequent attention to the CoE HD and encourage different news outlets to cover the results of research. This would be useful also in alerting media about public events and seminars of interest.
 - d. Because government events often carry more clout and attract media coverage, it would be strategic to co-host joint events with government entities such as launches of research reports/findings.
 - e. Many media representatives nowadays gain ideas for stories through social media, so the CoE can explore ways to strategically obtain more followers from the media on its Twitter account.
 - f. Special “media packages” can be provided for journalists invited to public events. This can include a list of “talking points” regarding the topic that can facilitate their presentation of the content, free access to the event (including meals) or seating if the event otherwise has a cost or seating restrictions.
 - g. Those who are interviewed for news and feature articles should be frequently and actively encouraged to mention their affiliation with the CoE HD. This would be more likely to happen if it is the Centre itself that has facilitated or coordinated the media appearance.
4. The CoE HD could moreover make greater use of their relationship with media specialists by gaining advice from them. If the CoE HD develops ongoing relationships with key journalists from different media outlets, then they will be able to have informal discussions with them regarding potential coverage of topics.
5. The newsletter is a valuable source of news and information, and its impact can be capitalised more effectively with small efforts, especially now that the mailing list database is growing significantly. For example:
 - a. It would be helpful for the newsletter to have a regular release plan (currently there does not appear to be a clear pattern in timing) so that recipients can anticipate and pay closer attention to each issue.

- b. Previous and most recent newsletters should be easily noticeable and readable from the website (we were not able to find it).
 - c. If the newsletter contains brief summaries and links to research information and write-ups of previous public events, this could be a valuable resource. It could also be a venue for bursary recipients to write brief summaries of their works.
6. The nuggets are currently submitted to NRF for their dissemination and utilised as posters and handouts at events. The panel agrees with the recommendation by the CoE HD in the Self-Assessment Report that such nuggets would benefit from more effective distribution by the NRF, in particular finding ways to share them with relevant users such as schools, libraries, and clinics. They can also be shared with media outlets.
7. Bursary recipients should be actively encouraged to publicise their research not only in scientific venues but also through other methods to reach broader audiences. They can be encouraged to deliver public presentations, write articles for the newsletter, write opinion pieces, inform the CoE HD when there is a topic that could be presented to the media, and join and share articles and links via social media (which, of course, youth have a great talent in utilising).
8. The upcoming November conference is anticipated to be a key venue with high impact for disseminating information related to human development. It will be important to implement very intense media efforts, and to perhaps produce from the conference one or more academic products (like conference proceedings).
- a. A formal evaluation process is recommended for the conference to identify areas of strength and determine ways to improve subsequent conferences.
 - b. If subsequent conferences are planned, it would be strategic to rotate the venue among different regions in South Africa to encourage greater awareness and attendance by local participants.
 - c. If subsequent conferences are planned, it would be strategic to host it with a regular time frame (e.g. annually or every two years at a certain month/time of year) so that potential participants can anticipate and plan ahead.
 - d. It is encouraged for CoE HD to carefully consider the main aims and scope for a regular conference, as discussed above. The goals and objectives should be clearly articulated among the CoE HD's team and relayed in annual plans and reports.
 - e. If the conference continues to be a more intimate gathering (currently limited to 150 people including students), active efforts should be made to find ways to disseminate the information widely, such as live streaming, inviting media, through conference proceedings or reports.
9. It would be valuable for more of the CoE HD journal articles to be Open Access, but currently it is financially prohibitive. The NRF is encouraged to explore ways to increase capacity for Open Access.

10. Many research programs and university centers have online repositories of their work. While students' and researchers' universities may upload on their repositories, it may be useful for CoE HD to explore the creation of a CoE HD repository (or all CoE's via the NRF website). The benefit of this approach is that it would allow for more articles to be read while circumventing the Open Access restrictions. This is because many journals have policies that allow posting to institutional repositories the manuscript drafts, pre-prints, or even the final articles after an embargo time period.

KPA 4: Networking

Description from NRF terms of reference

CoEs are expected to actively collaborate with reputable individuals, groups, and institutions. Equally CoEs must negotiate and help realise national, regional, continental, and international partnerships, etc.

Discussion

Research networking and support for networking takes a number of forms in the CoE, including: dissemination of suitable calls for academic opportunities (e.g. funding, workshops, conferences) to people funded by the CoE, as well as those outside of the CoE; supporting students and researchers to attend conferences; organising workshops and conferences for funded students and researchers; and informally connecting people with cognate interests and research topics. Networking also occurs with civil society organisations and government departments.

Strengths

Table 11 of the Self-assessment Report lists an impressive array of **partner institutions and organisations**. These include local universities and local research institutes, international universities, and international research institutes. International networking ranges from global North to global South organisations.

Much of the networking has been enabled by the **extensive connections** that Prof Richter and Prof Norris had prior to the CoE HD being established. These have been extended and built upon in a very useful way. Virtually all interviewees indicated that they had had contact with Prof Richter and that she was instrumental in creating networks.

Most **students and Post-Doctoral fellows** interviewed mentioned networking as key to their positive experience of being on CoE funding. They felt that they grew as a result of the networks and gained a better understanding of the research environment.

Challenges and areas for growth

Networking seems to occur mostly with South African universities and academic institutions as well as global North universities. “Ten universities” (unnamed) in the Southern Africa Development Community region are mentioned in relation to one project.

A major area for growth is the low number of collaborative agreements between the CoE HD and HDIs, something that could be explained by the fact that the CoE become functional only in January 2015 and, hence, is relatively young.

Some networks with government departments are established on a need or ad-hoc basis, rather than a formal MoU. There may be opportunities moving forward to formalise relationships with entities such as DBE and HSRC. With respect to the latter, there are shared and complementary interests in the mandates of the CoE HD and the HSD unit of the HSRC. The CoE HD focuses on human development within a biopsychosocial framework, and the HSD takes a more broadly sociological approach. It would be beneficial for CoE HD to consider ways that it could be more strategically aligned with other entities through the establishment of formal MoUs.

Not all students/postdocs found the networking opportunities useful or accessible. For some this was because they were at a more advanced stage than those involved in the particular activity (e.g. workshop), or because they were working in unrelated areas. Some were unable to come to the workshops. For obvious reasons, those located in Gauteng benefitted the most from face-to-face networking opportunities. A more thorough discussion on student networking is found in the Education and Training Section above.

Recommendations

1. Networking with universities, research institutes, and organisations from the global South could be encouraged more. These entities may share expertise and experiences that are more similar and relevant to the South African context.
2. Substantially more effort should be invested in building collaborative relationships with HDIs.
3. Focused MoUs with relevant government departments (e.g. DoH, Department of Social Development, and DBE) and with the HSD of the HSRC may assist in extending the already good work being done in influencing and supporting policy development and interventions.
4. Focused local events could be organised so that students not located in Gauteng may benefit from the face-to-face networking and learning opportunities. These could be organised by students themselves, which would assist them in learning about the planning and management of academic events. (Further recommendations regarding student networking are included in the Education and Training section).
5. Many of the networks were established through the extensive collaborations and contacts of Prof Richter. With her departure, the new Director will have to ensure that

existing networks are retained as well as new ones created. This often requires dedicated time and effort, especially in a transition period.

KPA5: Service rendering

Description from NRF terms of reference

The CoE must provide information, analysis, policy, and other services, including informed and reliable advice, to government, business, and civil society.

Discussion

The notion of service remains conceptually imprecise in the minds of those interviewed including all three Directors of CoEs. Some interviewees saw it as referring to academic service activities such as serving on journal advisory boards, advising graduate student theses, and participating in scientific reviews on behalf of NRF. Others viewed service as contributions to civil society and government such as participating on policy committees and consulting for other entities.

In our review, we emphasise mostly the latter type of service as it appears to be more closely aligned to the NRF definition. Moreover, traditional academic service activities are conducted by university academics regardless of affiliation to CoE HD and based on each individual's previous scholarship, and it does not impact or depend on the CoE HD work. On the other hand, service to other stakeholders and entities including civil society and government would be created and enhanced as a result of the CoE HD reputation, and such relationships would enhance the impact of the Centre on human services and policy.

Strengths

The CoE HD lead researchers **recognised the importance of service rendering** in so far as it relates to participating and in actively providing advisory services to policy and professional bodies within government, industry, and civil society at both the local and international levels. In this respect, the location of the CoE HD in Gauteng is a benefit. Over the years the CoE HD expanded considerably its platform reach through which policy development and advocacy actions, communication, and media exposure could be shared and disseminated to broader audiences. Given the above, it is likely that the momentum generated under previous administration will continue with the appointment of the new Director.

The **policy impact** of research conducted under the auspices of the CoE HD has been impressive as manifested through its contribution to national policies adopted by the Departments of Health and Social Development, as well as policy frameworks by international bodies such World Health Organization (WHO). Prominent examples of these include the *Early Childhood Development (ECD) Diagnostic Review* and UNICEF's 3-part *The Lancet* series on ECD. The work on ECD, families, and fatherhood has been especially influential. The collaboration with the NGO Sonke Gender Justice is to be commended. In addition, the CoE

HD has capitalised on the opportunity created by the Square Kilometre Array to investigate the implications of this large scientific project for human development.

Affiliates and lead investigators render services both in their personal and institutional capacities to other advisory committees and sit on numerous editorial boards of local and international journals. Table 12 on “Service to Science and Scholarship” in the CoE’s Self Assessment Report lists a rich array of service rendering activities - and membership and leadership roles in board and advisory capacities. These include Prof Richter’s participation in *ECD Diagnostic Review* and the development of the *National ECD Policy and Programme* and Prof Shanaaz Mathews’ participation in workshop organised and hosted by UNICEF and WHO.

Added to this has been the CoE HD’s capacity to translate research outputs into service viewed from the Centre’s definition/perspective. Prof Richter’s work on national integrated health policy, for example, translated policy into implementation of the child health campaign centred on the *Road to Health* booklet that every child receives at birth. Less visible and yet influential has been the CoE HD in kind support (for example, time spent serving in DoH’s technical team).

Even more striking has been the CoE HD support, through Prof Richter, in linking the DoH to international level organisations e.g. WHO Nurture and Care Framework (DoH was involved in showcasing South African case studies during the launch). These kinds of efforts have enhanced the reputation of South Africa as being a hub of expertise in child development that has influenced not only the national but also the global agenda.

Challenges and areas for growth

Lack of consensus around the concept of service rendering may lead to context specific meaning and outcomes expectations that are not mutually shared by both the CoEs and NRF. Unless the imprecision around meaning is resolved soon, future disagreements between NRF and CoEs regarding mismatched expectations about the sorts of expected deliverables and outcomes may result.

It is anticipated that with deteriorating economic prospects in the country, CoEs such as Human Development may increasingly face budget constraints negatively impacting efforts to extend the service mandate reach.

Interviewees from the DoH and DBE indicated that they do not have formal agreements with the CoE HD. Service rendering has occurred through collaborative discussions, reference groups meetings, and steering committees set up for particular tasks. The DBE and DoH interviewees indicated that the CoE HD is proactive in contacting them. While this is a strength, they also indicated that those working in government are often “bombarded” by emails from researchers, which could dissipate the strength of the service rendering potential of the CoE HD. Formal MoUs may assist with this.

Recommendations

1. Consensus on the vision and expectations of how service rendering is defined is an essential step.

2. The CoE HD should consider establishing formal MoUs with relevant departments, including Departments of Social Development, Basic Education, Higher Education and Health, as well as be working organically with these departments. Information about what the CoE HD does should be widely disseminated within these departments, so that a large cross section of people in government can benefit, and so that knowledge created by CoE HD is channelled correctly.
 - a. In the same vein, and being a multi disciplinary structure, the CoE could assist in building and catalysing overlapping relationships between government departments through pointing out the implications of the CoE HD research across sectors.
 - b. In this regard, the NRF could be a crucial intermediary that links CoE HD with other government departments and civil society.
 - c. Going forward the CoE HD could explore areas of research relevant to the various government departments (e.g. by entering into the evaluation studies, especially in relation to studies that focus on ECD interventions).
 - d. The development of succinct policy briefs that could be actively disseminated among the relevant government entities as well as made widely available on the website and elsewhere could have valuable impact on shaping the landscape of human development policy in South Africa.
3. Much of the work produced by CoE HD has relevance to non-governmental stakeholders such as multilateral organisations and civil society. It would be helpful for CoE HD to consider ways to reach diverse organisations both nationally and internationally to provide them with information (e.g. policy briefs, short reports) and more substantial supports. This could extend the impact of the CoE HD by influencing the work of service providers, nonprofits, policy makers, and human development leaders in aligning with the evidence base.
4. With the departure of Prof Richter, purposeful efforts should be made to retain and nurture the relationships she established through the various service rendering efforts.

Governance

Discussion

The CoE HD is a virtual centre that operates on a “hub and spokes” model in which management and leadership is located in the core, loosely tied at the periphery with researchers and post graduates students. A unique structural feature of the CoE HD is reliance on relatively lean core staff complement (Director, Manager, Finance Administrator, Media and Communications Officer) that facilitates links between researchers and students at eleven universities, two science councils, and a professional body, along with multiple other collaborators and partners. Collaborative arrangements are low cost as are the type of agreements in place with partner entities.

There are three main organisational structures within the CoE HD that are involved in the operations of the CoE HD: the Management Committee, Steering Committee, and Scientific Advisory Committee. The Management Committee maps the direction and activities of the CoE HD, gives input on the day to day management, and makes decisions such as on the bursaries selection. This committee meets regularly and interacts quite frequently. The Steering Committee was established for governance and accountability. It approves business plans and annual reports. Representatives from the NRF and DST serve on the Steering Committee as ex-officio members. The functions of the Steering Committee are laid out in the Memorandum of Agreement between Wits and the NRF. The Scientific Advisory Committee considers the scientific direction of the CoE HD and advises the Steering Committee. A nomination committee makes suggestions for appointments to the Scientific Advisory Committee and these are approved by Steering Committee.

There are a number of eminent fellows of the CoE HD who provide guidance and input when needed. Institutional partnerships working through Collaborative Agreements with Wits are integral to the governance process.

The CoE HD institutional structure places it within the University of Witwatersrand's DVC Office; the DVC chairs the Steering Committee, but is not involved in the day-to-day decisions and management. University of the Witwatersrand provides a number of support mechanisms, including: physical space; ethics review through the Wits Legal Services; scrutiny and approval of contracts (e.g. MoUs) by Wits Legal Services; financial approvals and procurement; administrative support; and faculty support for students and researchers.

The CoE HD budget allocation shows the following pattern: 40% for Bursaries, 40% for Research, and 20% for Management (including staff, equipment, travel, and annual running expenses).

Strengths

The “hub and spokes” model of the CoE HD works well. It has enabled cross-faculty collaboration within Wits and cross-institutional collaboration within the country and further afield. An important aspect of this is that the CoE HD does not compete with collaborators regarding funding.

The systems within the Wits university work well, and are supportive of the functioning of the CoE HD. As a research intensive university, with many research institutes, Chairs, and CoEs, Wits provides a solid base for this CoE. In addition to the ambient physical space provided, Wits contributes 10% of the CoE HD budget, thereby demonstrating its commitment to the CoE HD. The DVC and the Dean of the Faculty of Health Sciences are supportive of the CoE HD. Both believe that the CoE HD is functioning well.

The Director and Financial Manager have ensured that the CoE HD is **well managed financially**. The proportional allocation of budget to research, bursaries, and management is an effective target. They have met their targets for spending, even with the backlog created

at the beginning of the funding cycle. They are careful to ensure that money is well spent, requiring regular reports from grantees and providing theirs in a timely fashion to the Steering Committee and NRF. There have been three cases where bursaries have been withdrawn owing to non-performance of the student. In a climate where there are many questions about the spending of public funds, this clear commitment to making the best use of the CoE HD funds is to be commended.

The **Scientific Advisory Committee** consists of a good mix of national and international scholars with a strong inter- and multidisciplinarity focus. This is a strength in terms of bringing a range of perspectives into the discussions. The quality and experience of **Management Committee** of the CoE is high as has been that of the Director.

The CoE HD was established from **two competing bids** – one led by Wits and the Human Sciences Research Council (led by Linda Richter & Shane Norris) and the other led by University of KwaZulu/Natal (led by Imraan Valodia). The two streams were merged to Human Development. The Director of the Food Security CoE pointed out that when the NRF requires two bids to come together, there is the possibility of tension. This does not seem to be the case with this CoE HD. Indeed, the former Director pointed to the strengths that the merging of the two bids led to, including expanding the areas of research, and ensuring interdisciplinarity across disciplines that are often siloed.

The CoE HD prides itself on **fostering collaboration across institutions**, and there is good evidence that they are right to be proud of this. This is no small feat in the context of: (1) the current financial climate within the Higher Education landscape in South Africa; and (2) the DHET model of funding universities through, *inter alia*, research outputs and Masters and PhD graduations. These two factors promote competition between universities. The support of the Wits DVC of Research and the concerted efforts of the CoE HD, have been important in ensuring that the collaborative model works well.

The CoE HD leadership style of **delegating and sharing responsibilities** has the beneficial effect of involving many people in a project, the byproduct of which is greater buy-in by researchers.

Many of the people interviewed spoke very highly of the current CoE HD **Manager**, Lethu Kapueja, who is credited with having made a positive difference in the way the organisation functions. Indeed, the panel benefited from his quick and efficient response to our requests for additional information and his well-informed and thoughtful analysis of questions.

The governance structures and reporting requirements ensure good **accountability and transparency**, and provide a sound basis for quality assurance - a view shared by those interviewed including Senior Managers within the university.

Challenges and areas for growth

The CoE HD is **physically located within the** Wits School of Public Health, despite the fact that it is located within the Office of the DVC of Research in terms of the organogram. Reasons

provided for the physical location varied from the questions of space (with space being at a premium in the University), to it being a good fit in terms of the multi-level focus of the CoE HD. While both of these are valid, there is a potential danger of others associating the Centre with the discipline of Public Health. While none of the interviewees saw this to be of current concern, it would be helpful to be cognisant of the long-term perceptions of the CoE HD. Already, there is a perception that the socio-economic window into human development is the least developed leg of the CoE HD.

Much of the success of the CoE HD has been owing to **Director Prof Richter's approach**. She was mentioned by virtually all people the panel interviewed as a dynamic mentor, collaborator, and leader. She has leveraged much funding for her own research and has involved others in the CoE HD. Her example has been sterling. Her departure, therefore, is naturally likely to lead to some instability and readjustment for the CoE HD.

The process of appointing a new director is an area of contention between the CoE HD and the NRF. While the CoE HD felt that the Steering Committee should be allowed to endorse the permanent appointment of the current acting director Prof Norris (especially as he was one of the lead investigators named on the original proposal and has been intimately involved with the CoE from the outset), the NRF felt that external advertising was necessary. The panel viewed the Memorandum of Agreement between the NRF and Wits and noted that it states that Wits will appoint the director (i.e. that Wits' Recruitment policies would apply), and that the Steering Committee has an advisory, rather than decisional, role. Yet at the same time, the succession plan of appointing Prof Norris as the Director subsequent to Prof Richter was outlined in the 2014 original proposal and was not contested by the NRF until recently. The contestation around the appointment of the new Director has clearly caused some ructions, and has resulted in the CoE HD going through a transitional phase with an Acting Director who is not in a position to launch any long terms plans.

NRF is currently proposing that Steering Committee members must be formally appointed by their institution since the NRF's view is that they represent their institution on the board. The former Director does not agree (e.g. MRC president who serves on the board does not represent the MRC on the board). The difficulty with the NRF's position is that institutions may nominate members who are not as *au fait* with the field as those nominated directly by the CoE HD. On the other hand, the perception could be created that the CoE HD nominates members from within a small band of like-minded academics, thereby potentially closing down contestation. A middle ground may be need to be found.

There could be ways to improve the contributions of the different organisational structures in the CoE HD. The Scientific Advisory Committee was also seen to have untapped potential that could be enhanced through engaging the committee on a range of substantial issues of guidance, even through virtual correspondence and meetings.

Recommendations

1. The roles of the Steering Committee, the University, and the NRF/DST in the appointment of Directors need to be made crystal clear so as to obviate similar disputes concerning succession when a Director vacates a post. This applies to this CoE and to other ones managed by the NRF.
2. It is imperative to appoint a strong, credible academic leader in the Director who knows the field well and has the proven capacity to manage a large enterprise.
3. Given the possible challenges that a transition may pose to the CoE HD, appointing a permanent Director as rapidly as possible will be essential to ensuring the stability and productivity of the Centre.
4. The CoE HD team has suggested the appointment of a Deputy Director to alleviate some of the burden of managing the increasingly large and complex enterprise of the CoE HD. The panel agreed that this kind of position could support the envisioning, implementation, and sustainability of the strategic objectives of the Centre. Moreover, the Deputy Director could contribute to transformation aims and also counterbalance the Director's academic specialisation if bringing a set of expertise from a different discipline or skills (such as intervention or policy development).
5. The advisory structures could possibly be more effectively utilised. The panel recognises that the profile and workload responsibilities of lead researchers may limit this. The CoE HD may consider increasing its use of virtual meeting opportunities.
6. The CoE HD will need to remain vigilant about its Social Science mandate, ensuring that it is not, in the perception of others, too closely aligned with Public Health.

Financial sustainability

Discussion

The NRF and DST expect CoEs to be financially self-sustaining after 10 years. The representative from the DST indicated that DST has bilateral agreements with other government departments in which they scope the research agenda and make connections with CoEs. Thus, for example, the CoE HD's work in ECD is relevant to work of the Department of Social Development and this department, according to the DST representative, could feasibly take over the funding. The DST is looking at what other government departments require in terms of Social Science research and what can be done to close the gaps.

The Self-Assessment Report of CoE HD mentioned, "Financially, the CoE is sustainable. The CoE HD, through its funding strategies, researchers and their post-graduate students, has demonstrated that work conducted with the support of the Centre attracts significant leveraged funding..... Given a strong research leader, increasing amounts of funding can be raised for the Centre's programmes and operations (p. 37)." Certainly, the CoE HD has a lot of strengths to enable it to generate and raise funds. Funding support (small or big) may be accessed from many foundations (for example, Mellon, Gates, etc.) and multilateral agencies

(for example, UNDP, WHO, UNICEF, ILO, FAO) who may come forward to fund various components and subcomponents of the CoE HD. The local corporate houses and philanthropic organisations may also come forward to fund through their corporate social responsibility funding mechanisms. These are worth exploring using the strengths of the Centre.

Yet the problem with the sentiments expressed by the DST and CoE HD is that funding from government departments and other leveraged research funding will in all likelihood fund **specific projects**, but NOT the “hub and spokes” governance structure or the multi-level, multi-institutional, and multi-disciplinary nature of the CoE HD. The CoE HD is not a producer, but rather a catalyst and an accelerator or facilitator in the production of research and academic goods in the field of Social Sciences. In order to sustain this particular model, funding for the catalysing or facilitatory functions of the CoE HD will be needed. On the basis of this, the panel believes that the CoE HD, at least in its current form, is not financially sustainable without **core** funding from the NRF/DST. This applies, in our view, not only to the CoE HD, but to all CoEs. The panel argues that it is the job of the NRF/DST to provide continued funding for the catalyst and facilitation functions, while other funders can provide funding for the delivery of particular forms of knowledge production.

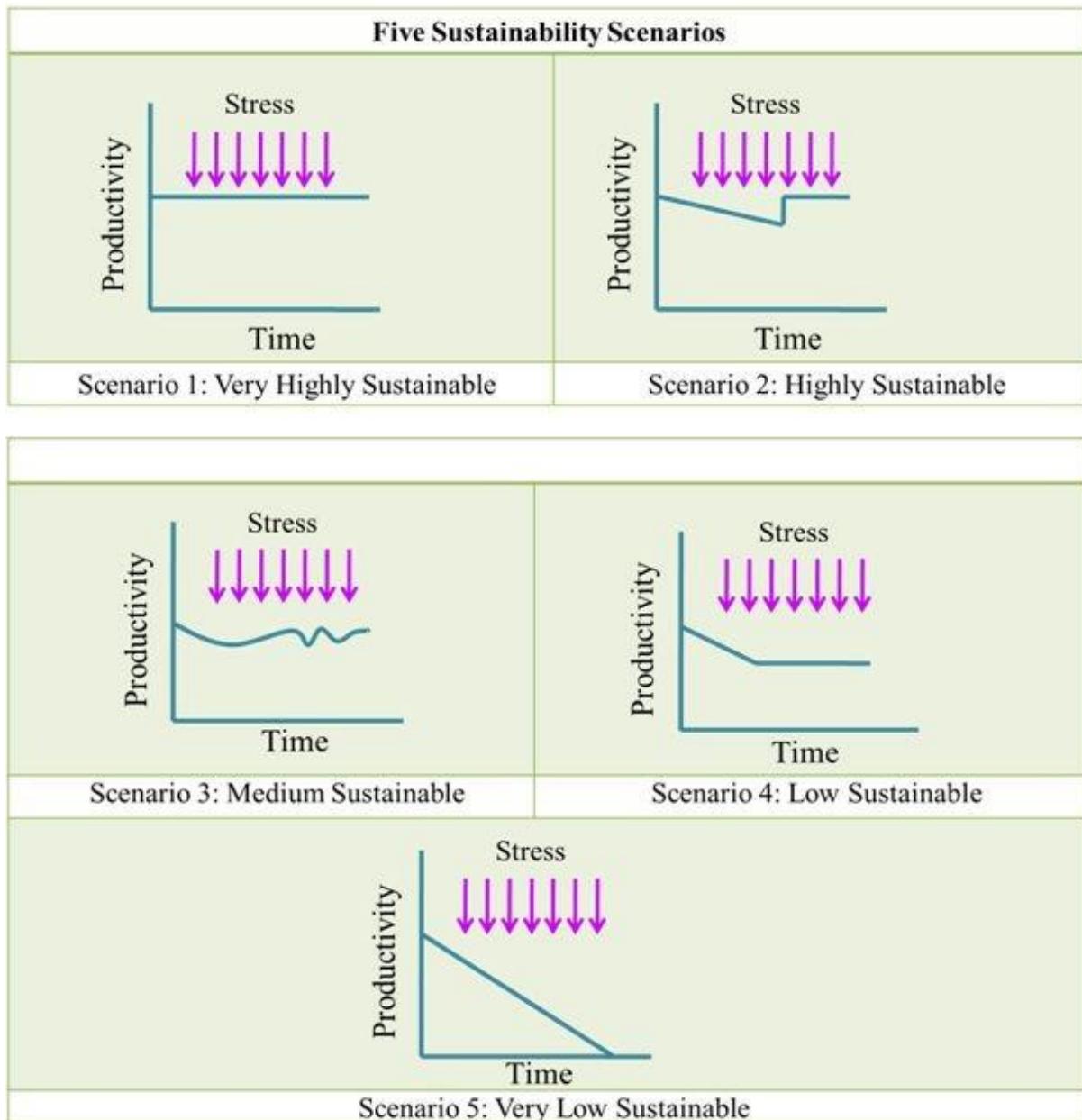
Attaining financial sustainability of an entity like CoE HD is a challenging task primarily due to the nature of work it is engaged in. As a producer of research and academic goods in the Social Sciences, the CoE HD has no ready market to “sell” the product other than government and industry. As pointed out by one of the interviewees, there is a great **danger** with Social Science research being **funded by corporates** (e.g. corporates restricting what can be written and researched, especially if it potentially damages their brand; or, even where this does not occur, the perception of other researchers that this may be the case - i.e. creating a credibility problem).

Nevertheless, the **research conducted through the CoE HD is a public good** and has huge intrinsic value. Such research has rightly been accepted by the South African government as a high priority under the broad themes of poverty, inequality, and social inclusion. It is necessary to expedite the process of transformation of South African society.

In making these assertions, it is necessary to clarify our own understanding of sustainability. We are fully aware that the term ‘sustainability’ is contentious and debatable. Our understanding is that, generically, sustainability is the ability of a system to maintain a consistent output of productivity both in quantity and quality in spite of or in the face of serious stressors. As shown in the figures below⁴, there can be five sustainability scenarios: very highly sustainable, highly sustainable, medium sustainable, low sustainable, and very low sustainable. The goal of sustainability of the CoE HD would be a very highly sustainable situation in which the CoE HD continues its outstanding track record as a catalyst in producing

⁴ Barkat, A. and P. Fishtein (1997). Sustainability of Family Planning Association: Concepts, Dimensions, Measures. The Journal of Social Development, Vol. 12, No. 1, pp.42-68, Institute of Social Welfare and Research: University of Dhaka.

research and education/training even in the face of the major stress factor of the withdrawal NRF/DST support. However, we anticipate that the most likely scenario in the face of **curtailing core funding** would be sustainability that is “to a very low extent.”



Recommendations

1. Since CoE HD deals with high impact public goods – Social Science research and related education and training – it is recommended that the NRF and DST base their discontinuation of funding (after the following or the next cycle) on the utility, relevance, contributions, and performance of the CoE HD rather than on the completion of the time cycle. In other words, time should not be the factor that determines discontinuation. While funding of the core catalysing or facilitating function may be reduced or increased, depending on what other funds are leveraged, the NRF and DST should, in this panel's view, commit themselves to a long-term plan of support.

- a. Rather than a dichotomous decision of continuing versus discontinuing funding, there could be a hybrid approach in which NRF/DST continues to support the core “hub and spokes” operation whereas external funding can be leveraged for specific projects such as research projects.
 - b. Where there are national challenges that exist, NRF should be dedicated to supporting those endeavours, especially because many funders would be reluctant to support those types of topics.
2. The DST should continue to enhance its facilitation of funding from other relevant government agencies.
 3. The CoE HD should, of course, continue to explore all possible pathways to obtain longer term funding support. For this, it would be wise to appoint a Director who has a track record of leveraging diverse types of funding. However, adequate precautions need to be taken in accepting funding support so that funding speaks to CoE HD’s Founding Values, Mission, and Mandates. In particular, conflicts of interest should be avoided if pursuing funding sources from private enterprises and industry.

Conclusions

The NRF formulated a range of objectives for CoEs. These are to:

1. Exploit the competitive advantage vested in outstanding researchers;
2. Reward, retain, sustain, and improve scientific excellence within the CoE;
3. Integrate smaller and related research initiatives into one programme within the niche area of the CoE;
4. Achieve economies of scale through the optimisation of resources and effort by sharing personnel, equipment, data and ideas;
5. Provide secure and stable funds for research and knowledge dissemination within the CoE network;
6. Support planned, strategic, long-term research;
7. Develop human capacity;
8. Contribute to the transformation of individual niche knowledge enterprise;
9. Expand the national research base; and
10. Contribute to the transformation of the National System of Innovation (NSI).

As the above evaluation shows, the CoE in Human Development has met and exceeded all these objectives. A particular strength has been the ability to package information for both academic/scientific audiences as well as policy makers, service providers, and the public. **We commend the staff and students involved on their sterling efforts.** In this review we have pointed to possible areas of extending the already excellent work done.

We started this report with reference to the ASSAf report on the Social Sciences and Humanities. Given the deep concern expressed in this report regarding the state of the Social Sciences and Humanities in South Africa, the NRF/DST is congratulated on allocating a non-predetermined CoE to the Social Sciences and Humanities. However, of the fifteen CoEs

founded and funded by the NRF and DST, only one supports work in the Social Sciences and Humanities. It is strongly recommended that the NRF/DST consider establishing another, complementary Centre of Excellence in the Humanities and Social Sciences. There is plenty proof of concept in the functioning and success of this CoE HD to suggest that another such CoE would add significant value to the research landscape of the Social Sciences and Humanities, as well as impact significantly on policy and interventions in many of the social problems facing South Africa. If such a CoE were to be considered, the leadership of CoE HD may be consulted regarding its ambit so as to ensure complementarity rather than competition.

Appendix 1. List of Stakeholders Interviewed

Students

- Recipients of Masters bursaries
- Recipients of Doctoral bursaries
- Recipients of Post-Doctoral bursaries

University of Witwatersrand management

- Professor Zeblon Vilakazi; Wits University (DVC) Research and Post- Graduate Affairs
- Dr Robin Drennan; University of the Witwatersrand; Director Research
- Professor Martin Veller; Dean, Faculty of Health Sciences, University of the Witwatersrand

CoE HD representatives

- Professor Linda Richter; former Director Center of Excellence in Human Development
- Professor Shane Norris; MRC/Wits Development Pathways for Health Research Unit (DPHRU); Acting Director CoE HD
- Mr Lethu Kapueja; CoE in Human Development Manager

NRF/DST representatives

- Mr Vusi Malele; DST Representative

Government representatives

- Professor Leslie Bamford; Department of Health, South Africa
- Ms Marie-Louise Samuels; Department of Basic Education, South Africa

Collaborators/Researchers

- Professor Heidi Van Rooyen; Human Sciences Research Council
- Professor Servaas Van der Berg; University of Stellenbosch
- Dr Adam Cooper, Human Sciences Research Council, Cape Town
- Professor Juliet Pulliam; South African Centre for Epidemiological Modelling and Analysis, University of Stellenbosch
- Dr Bernadette Daelmans; World Health Organisation
- Professor Tobias Chirwa; Director of School of Public Health; University of the Witwatersrand
- Professor Shanaaz Mathews; Children' Institute, University of Cape Town
- Professor Linda Gray; South African Medical Research Council
- Professor Julian May; DST-NRF Center of Excellence in Food Security, University of Western Cape

- Professor Leila Patel; Center for Social Development in Africa (CSDA), University of Johannesburg
- Dr Anton Binnerman; Square Kilometer Array (SKA), South Africa

Appendix 2. List of Documents Reviewed

Framework and Summaries of DST-NRF CoEs

- DST Handbook to Assist with Operation of a DST-NRF Centre of Excellence
- DST-NRF Centres of Excellence Profiles, 2018
- DST Ten Year Innovation Plan

Establishment of CoE HD

- Terms of Reference for NRF funding proposal review panel members
- Memo regarding name change of CoE to “Human Development”, March 2014
- Revised proposal for Centre of Excellence in Human Development, May 2014
- Memorandum of Agreement between NRF and Wits, October 2014
- Service Level Agreements between NRF and Wits, 2014, 2016, 2017

CoE HD Plans and Reviews

- CoE HD Business Plans 2015, 2016, 2017, 2018
- CoE HD Annual Reports 2014, 2015, 2016, 2017
- Self-Assessment Report of the CoE HD, 2018
- Wits’ Strategic Plan for Research 2012-2017

CoE HD Supplemental Data

- Application process for bursaries and grants
- Call for proposals for research funding
- Guidelines for evaluating bursary and grant applications
- Grants awarded per scientific method
- Grants awarded per discipline
- Bursaries awarded per discipline
- Bursaries awarded by race and gender
- Publications by race and gender
- Researchers supported by race and gender
- Sitemap for website

Review Framework

- Review Framework for Centres of Excellence (CoE) programme, April 2013
- Terms of Reference for Mid-Term Evaluation of CoE HD
- Mid-Term Evaluation of Performance of Centres of Excellence
- Pre-Panel Briefing on CoE HD

Definitions

- Definition of NRF Rating Categories