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ACTIONING ‘BE GOOD’

HOW TORRENS UNIVERSITY AUSTRALIA’S RESEARCH CONTRIBUTES TO SUSTAINABLE DEVELOPMENT GOALS AND IMPACTS COMMUNITIES AND PRACTICES

*Mandi Baker, Hayden McDonald, Denise De Souza, Zelinna
Pablo, Craig McLachlan, Simon Stewart, Athena
Vongalis-Macrow*

Keywords

Applied Ethics, Case Study, Torrens University Australia; SDG 4.

Abstract

Sustainability is an important agenda embedded in Torrens University Australia (TUA)’s research strategy. To illustrate how Sustainable Development Goal (SDG) targets are addressed by Torrens University researchers, this chapter identifies real-world problems and reports on research that has delivered sustainable change. The four case studies presented in this chapter demonstrate impactful research on education, health, and business contexts. These studies show how to address challenges unique to these contexts and implement sustainable improvements.

A strategic priority of TUA is to provide research and education outcomes that improve people's health and wellbeing. To 'be good' and 'be well' are core TUA values. These institutional values influence the research process and assessment of research impact at TUA. The 'Be Good' agenda shapes the university's interdisciplinary approach to addressing quality education (SDG 4). Notably, TUA's intentional prioritisation of access and equity values in research enables multiple SDGs to be addressed, as identified within the case studies reported in this chapter. TUA's research strategy encourages such studies that develop sustainable solutions, by promoting research focused on helping people and their communities enact positive and enduring change*.

Introduction

In 2015, world leaders outlined a global plan for a more interconnected future that provided social and economic security for all: 'Transforming Our World: The 2030 Agenda for Sustainable

* Corresponding authors: Dr. Mandi Baker, Centre for Public Health, Equity and Human Flourishing, mandi.baker@Torrens.edu.au; Dr. Hayden McDonald, Centre for Organisational Change and Agility; Dr. Denise de Souza, Centre for Healthy Sustainable Development; Dr. Zelinna Pablo, Centre for Healthy Sustainable Development; Prof. Craig McLachlan, Centre for Healthy Futures; Prof. Simon Stewart, Institute for Health Research; Dr. Athena Vongalis-Macrow, independent consultant.

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Development'.¹⁰³ The agenda outlined 'a plan of action for people, planet, and prosperity'.¹⁰⁴ The target date for the achievement of this agenda was 2030, now leaving less than a decade to achieve the lofty ambitions of the Sustainable Development Goals (SDGs). Despite criticism labelling SDGs quixotic¹⁰⁵, a global will to enact principles outlined in the goals remains. Policies and practices are increasingly seeking to embed sustainable developments for transforming the world. Ultimately, achieving SDGs means global transformation in how societies and economies function and integrate with nature. As 2030 approaches, a sense of urgency is warranted given persistent gaps between SDG objectives and global socio-economic conditions, especially in the context of COVID-19 and post-pandemic recovery.

Sustainability is an important agenda embedded in Torrens University Australia (TUA)'s research strategy.¹⁰⁶ To prioritise sustainability, TUA strategically organises researchers into interdisciplinary teams formed around themes that deliver positive social, environmental, and economic impacts through collaboration with community, industry, and other researchers. For research to have impact, solutions that help people and their communities enact sustainable change must be developed, delivering innovation and sustainability outcomes that address SDG targets.

¹⁰³ United Nations General Assembly, *Transforming Our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1 (21 October 2015), https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf.

¹⁰⁴ United Nations General Assembly, *Transforming Our World*, 1.

¹⁰⁵ Gunzel-Jensen, Siebold & Kroeger, 2020: "Do the United Nations' Sustainable Development Goals matter for social entrepreneurial ventures? A bottom-up perspective"

¹⁰⁶ TUA, *Torrens University Australia Strategic Research Plan 2021–2025* (TUA, 2020).

This chapter will highlight a range of interdisciplinary research projects that draw on the theme of sustainability. Specifically, each project illustrates TUA's commitment to research that makes a positive impact and, in doing so, presents targeted ways of addressing the identified SDGs. The research case studies demonstrate collaborations and thought leadership that make positive impacts on communities, both locally and globally, through improving access to quality education, health and services; promoting more equitable practices; and creating the foundations for transformative change. The chapter will demonstrate the innovative character of TUA research and important steps taken towards achieving SDG targets.

Sustainable Development Goals: An Integrated Approach

A total of 17 SDGs has identified pressing global challenges, and 169 targets have been set to stimulate actions towards alleviating these challenges.¹⁰⁷ The 17 goals broadly encompass people, the planet, prosperity, peace, and partnerships (see Table 1). The goals focus on alleviating poverty, creating better basic living conditions, especially for developing nations, creating more equitable social and economic outcomes, promoting a more sustainable way of living, and better managing the earth's ecosystems. The resolution adopted by the United Nations (UN) General Assembly on 25 September 2015 stipulates that all the goals are inseparable and integrated.¹⁰⁸ The goals will guide policymakers and practitioners in confronting economic, social, and environmental challenges, improving five overarching objectives of development goals including social inclusion, environmental

¹⁰⁷ A full list of targets for each goal can be found at <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

¹⁰⁸ United Nations General Assembly, *Transforming Our World*, 1.

sustainability, global prosperity and, finally, global cooperation and peace.

Table 1. Interconnectedness of the 17 SDGs with Five Foci¹⁰⁹

5 'Ps' of the Development Goals	Interrelated SDGs
• People	– No Poverty (Goal 1) – Zero Hunger (Goal 2) – Good Health and Wellbeing (Goal 3) – Quality Education (Goal 4) – Gender Equality (Goal 5) – Clean Water and Sanitation (Goal 6)
• Prosperity	– Affordable Clean Energy (Goal 7) – Decent Work and Economic Development (Goal 8) – Industry, Innovation and Infrastructure (Goal 9) – Reduce Inequalities (Goal 10) – Sustainable Cities and Communities (Goal 11) – Responsible Consumption and Production (Goal 12)
• Planet	– Climate Action (Goal 13) – Life below Water (Goal 14) – Life on Land (Goal 15)
• Peace and Partnerships	– Partnerships for the Goals (Goal 17)

¹⁰⁹ The table is sourced from Stephen Morton, David Pencheon and Neil Squires, 'Sustainable Development Goals (SDGs), and Their Implementation: A National Global Framework for Health, Development and Equity Needs a Systems Approach at Every Level', *British Medical Bulletin* 124, no.1 (2017), <https://doi.org/10.1093/bmb/ldx031>.

Table 1 illustrates the interconnectedness of the 17 SDGs when the five foci are mapped against the goals. The table shows that while the five foci are standalone, each contains specific goals that are also integrated with broader socioeconomic and environmental targets. The interconnected nature of the goals and their underlying targets have prompted researchers to advocate for more systemic approaches to achieving SDG objectives.¹¹⁰

Most organisations have an embedded focus on sustainability and have set specific targets that are relevant in the context of the organisation.¹¹¹ Higher education institutions, and universities specifically, are also active in promoting sustainability as a concept and practice that shapes governance, operations, and education. However, the urgency of the SDG agenda demands a further embedding of sustainability practices to accelerate specific goals and targets. These targets are relevant to universities in at least two ways. First, as large organisations, the strategies and plans need to reflect policies and practices that enable people, the planet, prosperity, peace, and partnerships as part of their daily operations. Second, by shaping research and education, universities identify how learning, teaching, research, and education can contribute to the achievement of SDG targets. For example, affordable and clean energy (SDG 7) is an area of keen research in universities. Universities tackle the goals and targets of SDG 7 by ‘promoting sustainability through combining sustainable energy with the processes of knowledge transmission and research’.¹¹²

¹¹⁰ Morton, Pencheon and Squires, ‘Sustainable Development Goals’.

¹¹¹ Stuart Hart and Mark B. Milstein, ‘Creating Sustainable Value’, *Academy of Management Executive* 17, no. 2 (2003): 62, <https://doi.org/10.5465/ame.2003.10025194>.

¹¹² Amanda L. Salvia and Luciana L. Brandli, ‘Energy Sustainability at Universities and Its Contribution to SDG 7: A Systematic Literature Review’, in *Universities as Living Labs for Sustainable Development*, ed. Walter L. Filho et al. (Cham: Springer, 2020), 29.

University research is also driving better quality education (SDG 4) and practices that enable equitable access to education at all levels.¹¹³ There are numerous initiatives that draw on the SDGs and aim to offer solutions towards meeting SDG targets.

Setting a SDG Research Course for Torrens University

Torrens University Australia (TUA) is a private, investor funded, university. As a for-profit organisation, the decision to prioritise social justice, sustainability principles and a commitment to connect the world for good is voluntary. Torrens has chosen to Be Good. Subsequently, TUA has developed the 'Be Good' agenda which outlines principles for empowering 'people to connect the world for good' that align with SDG objectives.¹¹⁴ The Be Good philosophy of TUA runs parallel and symbiotic to its certification as a B Corporation (B Corp). Businesses accredited with the B Corp certification must satisfy social and environmental performance targets and report annually on social impact to maintain public transparency and legal accountability. The Torrens Be Good philosophy and B Corp status is woven into the fabric of the institution, from its governing strategic plans to employee paid volunteer days. Torrens stands by the belief that 'together we can create a more sustainable world where purpose, passion and profit sync together for the greater good'.¹¹⁵

Research at TUA, like all areas, is guided by the Be Good philosophy. The TUA Research Strategic Plan 2021-2025 orients research efforts toward four themes 'to bridge across boundaries to

¹¹³ Stephanie Allais et al., 'Universities, The Public good, and the SDG 4 Vision', in *Grading Goal Four*, ed. Antonia Wulff (Leiden: Brill, 2020).

¹¹⁴ Torrens University Australia (TUA). *Social Impact Report 2021*. TUA, 2021.

¹¹⁵ Torrens University Australia (TUA). *Social Impact Report 2021*. TUA, 2021.

address complex local and global issues of significance'.¹¹⁶ The four themes of Security and Sustainability, Building Health Solutions, Societies in drastic change, and People and Industry for impact, map to TUA's Be Good philosophy and indirectly to the SDGs (see table 2, Conclusions). The four research themes are also mapped, in the Research Strategic Plan 2021-2025, to national research classification and reporting requirements. This provides the mechanism through which the Be Good philosophy is brought to life and actioned via research. The TUA Strategic Research Goals provide the foci for research, including priority publishing and grant areas, in ways that compliment and contribute to SDG goals.

All research centres set explicit Be Good goals. In particular, the newly established research Centre for Healthy Sustainable Development's (CHSD) holds as its unique aim to address SDGs. The centre's charter states that it aims 'to work towards healthy sustainable development' that links 'the UN SDG goals to current, important, and complex policy issues in Australia (and across the globe) including health, education and housing'.¹¹⁷ The CHSD organises its research efforts into three streams that align with SDG 3 of Good Health and Wellbeing, SDG 4 of Quality Education and SDG 11 to make cities and communities sustainable via secure housing for all. TUA research centres provide the clustering of expertise and activity to support the research themes. Additionally, all employees, including researchers, are urged to set annual Key Performance Indicators (KPIs) that demonstrate how their work will contribute to Be Good. This encourages researchers, within the context of their expertise and research centre, to contribute to Be Good goals. Additionally, TUA research applies six Be Good

¹¹⁶ Torrens University Australia (TUA). *Torrens University Australia Strategic Research Plan 2021-2025*. TUA, 2021.

¹¹⁷ Torrens University Australia (TUA). *Centre for Healthy Sustainable Development 3-Year Strategic Plan*. TUA, 2022.

principles when assessing the appropriateness/value of grant applications, external research projects and prospective research partners. These six Be Good principles are:

- Champion the power of people to connect the world for good,
- Contribute to the betterment of Australian society, economy, education and/or research,
- Uphold our commitment to diversity and inclusion, and respect for Indigenous peoples,
- Give due consideration to the impact on all stakeholders, including shareholders, employees, students, customers, participants, and partners,
- Partner organisations committed to social responsibility, and
- Improve society in Australia and globally.

These principles provide a tool for robust decision-making that ensures our efforts maintains the vision and achieves our Be Good promise. These examples demonstrate how social and economic sustainability can be integrated into governing policy and practice, which then has a flow-on effect to research actions.

The research culture at TUA is cultivated to support, recognise and celebrate work that has positive impacts on people and places. For example, TUA's annual research awards celebrate excellence in supporting TUA's Be Good mission through research that has positive impacts on people and communities. Additionally, TUA research adds to and benefits from Be Good internal and external events and communications. For example, the 'Research That Matters' podcast series in 2022 explored the intersection and positive impacts of research, industry and practice. This endeavour showcased the interdisciplinary work and impact of emerging scholars and research elders alike. It is, however, never just one person, project or effort, but the collective work and contributions of many, with exemplary 'Be Good' leadership and

vision, that shape the unique fabric of Torren's research foci on social and economic sustainability and equity.

Research Enabling Sustainable Development Goal 4: Quality Education Enabling Access and Equity that Frames a Research Agenda

This chapter demonstrates how TUA enables the SDGs as part of its Be Good agenda that shapes research priorities. The research presented in this chapter is prompted by concerns about people and their future considering ongoing disparities in education, health, and employment. Concerns about access and equity within these contexts are essential to the research which focuses on meeting the needs of people and their future, as well as how people are connected to a collective future.

Equity is an everyday concern of decision-making based on the distribution of resources.¹¹⁸ How resources are distributed is reflective of cultural values and draws on theories of social justice.¹¹⁹ Distributing an unlimited supply of resources to all would be desirable if it were not for the scarcity of resources. The post-COVID-19 context has exacerbated this resource distribution dilemma, particularly, for universities facing extensive austerity measures. This further complicates the desire for people to gain access to all the resources they need. Decisions must be made and sharing rules defined to determine how resources will be distributed appropriately.

The resource equity allocation rule 'is a method, process or formula that allocates any given supply of goods, among any potential group of

¹¹⁸ H. Peyton Young, *Equity: In Theory and Practice* (New Jersey: Princeton University Press, 1995).

¹¹⁹ Commission on the Social Determinants of Health (CSDH) (2008) *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health. Final Report*. Geneva: World Health Organization.

claimants according to the salient characteristics of those claimants'.¹²⁰ As a Public Benefit Corporation, TUA has explicit and legal requirements to positively impacts its partners, students and society more broadly. TUA's *Social Impact Report* is a testament to values-based decision-making that prioritises education equity in distributing appropriate resources to those that are directly impacted and where the need is most urgent.¹²¹ The Be Good charter states:¹²²

Every student who walks through our doors is trusting us with their lives and their futures. This is why we don't shy away from our role as change makers through our teaching, our research, and our engagement. But we strive for something more. You will see in this report that through our Be Good agenda, we deliver impact for communities and individuals where it is most urgent and needed, through harnessing the energy of our people, facilitating community engagement, embedding change making and advancing public leadership.

The focus on equity shapes how the researchers at TUA facilitate their research aims, how they engage with individuals and the community, and what impact is made through the research. The Be Good values promote equity in shaping decision-making about research and its purpose. A framework that promotes access and equity essentially places the needs of people at the centre of research. The research presented here examines how the needs of people can be better supported to reach a sustainable solution. This research is participatory and involves input from people about solutions and how these can be embedded into their lives. Research with an access and equity focus is

¹²⁰ Young, *Equity*, 8.

¹²¹ TUA, *Social Impact Report*.

¹²² TUA, *Social Impact Report*, 5.

people-centred,¹²³ as it respects the lived experiences and knowledge of the participants.¹²⁴ The purpose of this research is to shift from pre-packaged solutions to coordinated and localised problem-solving by tackling social and structural impediments.¹²⁵

Through equity-inspired research, TUA's Be Good mission integrates with SDG 4 to promote quality lifelong education as well as other SDGs. For example, explicit action plans to ensure equitable educational experiences of learners with disabilities means a commitment towards creating accessible and inclusive environments for students with disabilities. TUA policy states, 'We are committed to meeting our obligations outlined by the *Commonwealth Disability Discrimination Act 1992* (DDA) and the Disability Standards for Education 2005, and ensuring a great student experience can be had by all'.¹²⁶ Equity-based action plans are illustrated in practice through partnering not-for-profit organisations like the Inclusion Foundation (previously e.motion21) and conducting research on TUA's Impact21 program. This program offers an innovative transition to work-related learning for a cohort of young adult learners with Down syndrome (DS). This research aims to reduce the impediments to employment for these

¹²³ Andrew Sayer, *Why Things Matter to People: Social Science, Values and Ethical Life* (New York: Cambridge University Press, 2011).

¹²⁴ Anna Bennett, 'Access and Equity Programme Provision-Evaluation in Australian Higher Education: A What Matters Approach', *Educational Research and Evaluation* 24, no. 8 (2018), <https://doi.org/10.1080/13803611.2019.1643740>.

¹²⁵ Chau Trinh-Shevrin et al., 'Defining an Integrative Approach for Health Promotion and Disease Prevention: A Population Health Equity Framework', *Journal of Health Care for the Poor and Underserved* 26, no. 20 (2015): 146, <https://doi.org/10.1353/hpu.2015.0067>.

¹²⁶ TUA, 'Access and Equity Policy', accessed 26 July 2021, <https://laureateaus.sharepoint.com/sites/MyTorrens/SitePages/Operations/Student/Sub-pages/Disability%20Services%20.aspx>.

individuals by co-creating a program that draws on the needs of the students, the employers and university learning. This example showcases the access and equity framing of the research and demonstrates a commitment to providing for the needs of these learners; to ensure their health and wellbeing (SDG 3), access to quality education (SDG 4), reducing inequalities (SDG 10) and access to decent work (SDG 8).

The following four case studies that follow are presented by TUA researchers to illustrate the Be Good philosophy in action and showcase meaningful research that impacts people, communities, and their prosperity. The first case study describes research undertaken by Drs Denise De Souza and Zelinna Pablo, alongside a not-for-profit organisation. Their study reports findings from formative evaluation work undertaken to enhance a program designed to make an impact on the personal and working life of young adults with intellectual disability. The Impact21 initiative, which began in February 2019, aimed to establish and make more accessible a holistic tertiary educational training and employment pathway for individuals living with Down Syndrome (DS). The second case study features research led by Professor Simon Stewart, National Health and Medical Research Council of Australia Senior Principal Research Fellow. The study involves a collaboration with partners in Mozambique and surrounding low-income countries (LICs) in Southern Africa to build sustainable health research programs that improves the health of vulnerable African communities. The findings provide insights into unique causes, consequences and practical solutions to cardiopulmonary disease of vulnerable individuals and communities in Africa. Case three describes research led by Professor Craig McLachlan. In this study, the Nepal Development Society (NDS) conducted a retrospective evaluation of the Community-Based Intervention for Blood pressure reduction In Nepal (COBIN) trial data. The COBIN trial was initiated to train female

maternal health volunteers in Nepal to screen and deliver a health literacy intervention to improve blood pressure.¹²⁷ Case four's research, conducted by Dr Hayden McDonald, examines Workplace Health Promotion Programs (WHPP) implemented by a sample of Australian universities to improve employee health. The study documents difficulties with balancing the business and social outcomes attributable to WHPP's, highlighting the importance of considering how workplace systems and structures (e.g. committees, partnerships and key-performance measures) influence program implementation. The case studies demonstrate how TUA fosters an unique approach to accelerating actions targeting SDG achievement. The institution-wide interdisciplinary research integrates the people and prosperity foci¹²⁸ of several SDGs (see Table 1) to showcase an innovative systematic approach to research that emphasises how higher education can promote notions of equity and access and how research can be applied to address numerous SDG targets.

Case Study 1: Research Addressing SDGs by Enabling Disability Access to Education and Work

Impact21: Providing Quality Education and Fostering Equitable Outcomes for Individuals with Down syndrome

The SDGs emphasise enhancing social inclusion, especially for marginalised groups,¹²⁹ and people with DS are one of the most marginalised groups. Their marginalisation is exacerbated through the

¹²⁷ Dinesh Neupane et al., 'Community-Based Intervention for Blood Pressure Reduction in Nepal (COBIN Trial): Study Protocol for a Cluster-Randomized Controlled Trial', *Trials* 17, no. 1 (2016), <https://doi.org/10.1186/s13063-016-1412-3>.

¹²⁸ Morton, Pencheon and Squires, 'Sustainable Development Goals'.

¹²⁹ Emma Tebbutt et al., 'Assistive Products and the Sustainable Development Goals (SDGs)', *Globalization and Health* 12, no. 1, (2016), <https://doi.org/10.1186/s12992-016-0220-6>.

lack of access to quality education, especially post-secondary education, and training that would better prepare them for the world of work. This case study presents a formative evaluation that is framed by an integrated response to meeting SDG objectives based on a program for young adults with DS. The evaluation focuses on the design and delivery of quality education (SDG 4) to a cohort of young adults with DS experiencing inequality through reduced access to education, training and employment. The evaluation thus supports SDG 4's fifth target, which foregrounds the need to ensure that vulnerable people, including persons with disabilities, obtain access to all levels of education and vocational training. Education and training are instrumental to work, which is key to the social and economic inclusion of all, including the inclusion of persons with disabilities, a point also foregrounded by SDG 10.2.

The initiative is situated within the context of social policy reform taking place in the disability service system in Australia. The reform is being implemented via the National Disability Insurance Scheme (NDIS),¹³⁰ that gives individuals access to funding that may be utilised for employment training and support.¹³¹ Despite the scheme, the Organisation for Economic Co-operation and Development, in 2017, reported the under-representation of employees living with a disability

¹³⁰ Megan Moskos and Linda Isherwood, 'Individualised Funding and its Implications for the Skills and Competencies Required by Disability Support Workers in Australia', *Labour & Industry: A Journal of the Social and Economic Relations of Work* 29, no. 1 (2019), <https://doi.org/10.1080/10301763.2018.1534523>.

¹³¹ Karen R. Fisher et al., *Effectiveness of Individual Funding Approaches for Disability Support* (Occasional Paper No. 29, Canberra: FaHCSIA, 2010); Liberal Party of Australia, 'Our Plan to Support People with Disability', accessed 25 August 2019, <https://www.liberal.org.au/our-plan-support-people-disability>.

or a mental health condition in Australia's labour market.¹³² The employment rates of people with intellectual disability (ID) remain low when compared to the general population. In 2012, it was noted that only 39% of people with ID in Australia are employed, in comparison to 55% and 83%, respectively, of individuals living with other disabilities or no disabilities.¹³³ The lack of employment and active participation in economic life, due to experienced inequalities, affects the wellbeing of people with disabilities. Research shows that perceived independence is essential for the employment readiness of those living with disabilities.¹³⁴ As the life expectancy of individuals with DS nears 60,¹³⁵ with one in 10 individuals living into their 70s,¹³⁶ the role of post-secondary education has become more integral to ensuring health and opportunity for young adults with DS. Evidence shows a positive

¹³² Simon Darcy and Tracy Taylor, 'Australia's Disability Discrimination Problem in Three Charts', *The Conversation*, 12 October 2017, accessed 2 May 2019, <https://www.abc.net.au/news/2017-10-12/disability-discrimination-in-the-workplace-in-three-charts/9038178>.

¹³³ Australian Bureau of Statistics, 'Intellectual Disability Australia, 2012', accessed 26 July 2021, <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4433.0.55.003main+features452012>.

¹³⁴ Ben Barr, Philip McHale and Margaret Whitehead, 'Reducing Inequalities in Employment of People with Disabilities: The Impact of National Labour and Social Protection Policies', in *Handbook of Disability, Work and Health*, ed. Ute Bültmann and Johannes Siegrist (Cham, Springer, 2019).

¹³⁵ Marie M. Channell and Susan J. Loveall, 'Post-High School Transition for Individuals with Down Syndrome', *International Review of Research in Developmental Disabilities* 54 (2018), <https://doi.org/10.1016/bs.irrdd.2018.07.003>.

¹³⁶ Jennifer Torr, Andre Strydom, Paul Patti and Nancy Jokinen, 'Aging in Down Syndrome: Morbidity and Mortality', *Journal of Policy and Practice in Intellectual Disabilities* 7, no. 1 (2010), <https://doi.org/10.1111/j.1741-1130.2010.00249.x>.

connection between education and wellbeing, health and employment. This extends to individuals with ID such as DS.¹³⁷

The work undertaken by researchers in the research Centre for Healthy Sustainable Development aimed to address the inequities facing young adults with DS by formatively improving on the design of an innovative industry-based education and training program to ensure that individuals with DS have access to the necessary skills and knowledge that would lead to more equitable employment opportunities and outcomes.

The Research Process

The designers of the Impact21 program contended that few education-to-work training programs, for individuals living with ID in Australia, have established a direct pathway to the possibility of longer-term employment. Therefore, the purpose of the formative evaluation was to inform the implementation of education initiatives that structured meaningful learning experiences within a holistic tertiary educational training and employment pathway. The aim was to develop and trial a hands-on, functional and relevant curriculum that would incorporate workplace skills and knowledge to prepare students for real work experience. The first part of the initiative was on campus and the second part consisted of workplace 'taster' experiences. At the end of the workplace 'taster experiences', students were able to nominate their preferred workplace, and efforts were made to secure employment for the students. The research always had a real-world focus to achieve equitable outcomes for students that would lead to longer-term,

¹³⁷ Anja Holwerda, *Work Outcome in Young Adults with Disabilities* (The Netherlands: University of Groningen, 2013); Janet Robertson et al., 'The Association between Employment and the Health of People with Intellectual Disabilities: A Systematic Review', *Journal of Applied Research in Intellectual Disabilities* 32, no. 6 (2019), <https://doi.org/10.1111/jar.12632>.

meaningful employment for individuals living with DS and, ultimately, improve both their economic and social wellbeing.

Twelve young adults with DS participated in the program. Their parents and teachers were also recruited. The involvement of parents was critical, as they are integral in providing young adults with DS with support and helping them make decisions. A broad spectrum of research was undertaken involving interviews, observations, and evaluation, all of which were detailed and undertaken according to TUA's ethical guidelines.

Key Findings

Curriculum and Quality Education for Individuals with Down syndrome

The design of the Impact21 curriculum comprised 1) developing socio-emotional, communication and job-related skills and competencies; 2) learning how to maintain overall health and fitness; and doing so 3) within an inclusive university setting. The university base was critical in helping habituate participating students to the practices of institutions and organisations, thereby providing students with a range of social skills that were translated into workplace behaviours. The content was developed and trialled, and progressively improved by foregrounding work-based skills into the learnings. Feedback from employers was sought to improve the curriculum for the next program iteration and incorporated a focus on the skills of listening, following instructions, interacting, and problem-solving. Quality communication and developing confidence also underscored all the student learning. As such, speech therapy content was an important curriculum that would further facilitate students' greater participation in the workplace.

Students' Education and Well Being

Students' motivations for joining the program revolved around opportunities for self-improvement, extending social circles and gaining some financial independence. After the completion of the program, student participants reported becoming more motivated and future-focused. They noted a broader outlook of employment: moving from a narrow, financial-focused, short-term perception to a longer-term, more holistic view of work. Although student participants reported high confidence in their likelihood of obtaining and maintaining employment following completion of the program, mentors voiced concerns about the realism of their goals due to employment barriers for people with intellectual disabilities.

The students identified the importance of the program in giving them greater confidence in communicating. The students spoke of the feeling of being 'at home' within the university and described how having access to university-based study made them 'feel good'. The feeling of being at home, feeling good and being excited underpins the emotional connection to universities as inclusive spaces which increase students' confidence.

Parental Support

Parental responses suggested the program filled existing gaps in the training and employment of adults with DS. These include challenges in securing sustained employment, receiving opportunities to improve self-worth, gaining exposure to work-related social and life skills, experiencing job progression, being assigned a broader scope of work rather than mostly repetitive tasks when in employment, and accessing national employers who could provide more job security.

Teachers' Education and Support

Dedicated staff trialled extensive hands-on, active, and participatory teaching. The teaching staff made a significant connection with the students, broadening their classroom roles as teachers to advocates and coaches.

University Life Inclusion and Reducing Inequality

One of the challenges encountered in the research was the short timeline available to strategize, plan and coordinate more inclusion activities. A more deliberate effort that maps how inclusion might take place throughout the year—for example, through participation in the university's orientation week, workshops to create awareness, and social and sporting events—would ensure more consistent and sustained inclusion of the participants within the larger university.

Employers' Access and Opportunity

Prospective employers revealed the need to develop employment policies and practices specific to individuals with DS. This information would aid prospective employers to confidently build practices within their organisation and have more certainty in employing individuals with DS. The confidence gap of employers points to the lack of research about inclusive employment practices for individuals with DS in workplaces and underscores the need for further experiential-based research to build more robust knowledge that can shape employment policy and outcomes for people with DS.

Case Study Implications for Sustainable Development Goals

Access to Relevant Education Leading to Work

It is estimated that over 15% of the world's population have a disability,¹³⁸ yet the needs of disabled and vulnerable people are not

¹³⁸ Grech, 'Disability and Development'.

explicit in the SDGs. People with disabilities are impacted by social and economic factors in numerous ways. The 2030 Agenda for Sustainable Development focuses on economic, social, and environmental development to ensure that all people have access to prosperity. For people with disabilities, the lack of access to a range of services, education and opportunities means that they experience obstacles and barriers that prevent them from having a more active and fuller participation in their life. This case study reports on research undertaken by the Centre for Healthy Sustainable Development at TUA to draw on research-informed education, training, and work transition capabilities, to assist a group of individuals with DS in acquiring a broader range of skills and knowledge that would lead to employment. The case study exemplifies our commitment to addressing SDGs within our research. This case study of an innovative program to support the education-to-work transition of a group of young adults with DS demonstrates an integrated approach to addressing the SDGs. The research focused on designing and delivering quality education that meets the needs of the students, especially the need for targeted post-secondary education that would prepare students for the world of work. As mentioned earlier, such programs demonstrate specific pathways to achieving inclusive and equitable access to lifelong learning, education and training opportunities for persons with disabilities (SDG 4, specifically target 4.5), thus addressing hurdles to social and economic exclusion often experienced by vulnerable groups (SDG 10.2).

Work is ongoing in this area. To expand on this research, a TUA team is now conducting a multi-country comparative case study of Impact21 with other similar transition-to-work programs for persons with intellectual disabilities that are embedded in tertiary settings in Chile and in Ireland, with the specific aim of analysing what makes such programs sustainable over the long-term. While this research is in early stages, emerging findings indicate that historical, socio-political, and

educational policy mechanisms are relevant contextual factors leading to important nuances between seemingly similar programs, among them different degrees of embeddedness within the tertiary educational institution.

Case Study 2: Building Sustainable Health and Research Programs in Mozambique

Having established an emerging pattern of heart disease linked to both historically prevalent factors such as malnutrition and childhood infectious diseases and recent epidemiological transition in the neighbouring country of South Africa, we turned our attention to neighbouring African countries likely to be earlier in the evolution of cardiovascular risk and disease.

According to nearly every measure published by the World Health Organisation (WHO) and World Bank, Mozambique is one of the poorest countries in the world. Spanning more than 2,000 km along the Indian Ocean (see Figure 1), much of its young population of approximately 30 million live in rural and peri-urban regions. They heavily rely on major hospitals in urban centres, such as Maputo (approximately 1.3 million people), Beira (approximately 500,000 people) and Nampula (approximately 650,000 people) located in the Southern, Central and Northern regions for health care. As reported by the World Bank,¹³⁹ recent economic growth in Mozambique has widened socioeconomic disparities (with half the population still living in poverty and many of these people living in rural regions). Critically, they each share much in common with neighbouring poverty-stricken

¹³⁹ The World Bank, 'Mozambique Economic Update: Less Poverty, but More Inequality', accessed March 2021, <https://www.worldbank.org/en/country/mozambique/publication/mozambique-economic-update-less-poverty-but-more-inequality>.

countries (also identified by the World Bank as low-income), such as Malawi, Zimbabwe, Zambia, and Tanzania.



Figure 1.

Many of the UN's 17 SDGs are inexorably linked to enhancing the future health and wellbeing of those living in LICs, such as Mozambique.¹⁴⁰ Unfortunately, Africa remains home to many of the poorest billion people worldwide.¹⁴¹ Moreover, it is falling behind in many development goals.¹⁴²

¹⁴⁰ United Nations, 'Take Action for the Sustainable Development Goals – United Nations Sustainable Development', accessed March 2021, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

¹⁴¹ Gene F. Kwan et al., 'Endemic Cardiovascular Diseases of the Poorest Billion', *Circulation* 133, no. 24 (2016), <https://doi.org/10.1161/CIRCULATIONAHA.116.008731>.

¹⁴² Gene Bukhman et al., 'The Lancet NCDI Poverty Commission: Bridging a Gap in Universal Health Coverage for the Poorest Billion', *Lancet* 396, no. 10256 (2020), [https://doi.org/10.1016/S0140-6736\(20\)31907-3](https://doi.org/10.1016/S0140-6736(20)31907-3).

As first revealed by *the Heart of Soweto Study*,¹⁴³ in a large African urban community, a cruel paradox is in play as we try to facilitate and meet these aspirational goals. Specifically, many individuals fortunate enough to survive historical diseases of poverty (i.e., malnutrition and communicable diseases) are vulnerable to developing Non-Communicable Diseases (NCDs) later in life.¹⁴⁴ As in the rest of the world, NCDs in Africa are linked to urban migration, economic development and unhealthy environments and lifestyles that result in a high burden of disability and death.¹⁴⁵ Unlike the rest of the world, with the notable exception of Australia's Indigenous population,¹⁴⁶ it is younger adults and women at the prime of their socioeconomic potential who are most affected in Africa.¹⁴⁷ Overall, NCDs are responsible for one-third of disability-adjusted life-years in vulnerable African communities.¹⁴⁸

¹⁴³ Karen Sliwa et al., 'Spectrum of Heart Disease and Risk Factors in a Black Urban Population in South Africa (the Heart of Soweto Study): A Cohort Study', *Lancet* 371, no. 9616 (2008), [https://doi.org/10.1016/S0140-6736\(08\)60417-1](https://doi.org/10.1016/S0140-6736(08)60417-1).

¹⁴⁴ Simon Stewart et al., 'Standing at the Crossroads between New and Historically Prevalent Heart Disease: Effects of Migration and Socio-Economic Factors in the Heart of Soweto Cohort Study', *European Heart Journal* 32, no. 4 (2011), <https://doi.org/10.1093/eurheartj/ehq439>.

¹⁴⁵ Fausto Ciccacci, Stefano Orlando, Noorjehan Majid and Cristina Marazzi, 'Epidemiological Transition and Double Burden of Diseases in Low-Income Countries: The Case of Mozambique', *The Pan African Medical Journal* 37 (2020): 49, <https://doi.org/10.11604/pamj.2020.37.49.23310>.

¹⁴⁶ Alex Brown et al., 'Cardiometabolic Risk and Disease in Indigenous Australians: The Heart of the Heart Study', *International Journal of Cardiology* 171, no. 3 (2014), <https://doi.org/10.1016/j.ijcard.2013.12.026>.

¹⁴⁷ Kwan et al., 'Endemic Cardiovascular Diseases'; Sliwa et al., 'Spectrum of Heart'.

¹⁴⁸ Gene Bukhman, Ana O. Mocumbi and Richard Horton, 'Reframing NCDs and Injuries for the Poorest Billion: A Lancet Commission', *Lancet* 386, no. 10000 (2015), [https://doi.org/10.1016/S0140-6736\(15\)00278-0](https://doi.org/10.1016/S0140-6736(15)00278-0).

The *Heart of Soweto Study*¹⁴⁹ revealed that diseases affecting the heart (and lungs) of adult African men and women are different from those in the rest of the world.¹⁵⁰ Surveillance studies across the continent have highlighted African-specific health issues that add to the already heavy burden of infectious diseases and injuries. These include poorly detected and controlled high blood pressure (hypertension),¹⁵¹ heart failure in pregnant women (peripartum cardiomyopathy)¹⁵² and conditions affecting the right heart and lungs (pulmonary hypertension).¹⁵³ Critically, due to higher economic growth, communities such as Soweto in South Africa are further along the pathway of epidemiological transition. Theoretically, they are decades ahead of a phenomenon (increasing cardiovascular risk due to greater urbanisation and economic mobility) than their African neighbours. Thus, there is an opportunity to learn more about (and delay/prevent) the same process in countries like Mozambique.

¹⁴⁹ Simon Stewart et al., 'A Not-So-Rare Form of Heart Failure in Urban Black Africans: Pathways to Right Heart Failure in the Heart of Soweto Study Cohort', *European Journal of Heart Failure* 13, no. 10 (2011), <https://doi.org/10.1093/eurjhf/hfr108>.

¹⁵⁰ Pauline Cavagna et al., 'Antihypertensive Strategies and Hypertension Control in Sub-Saharan Africa', *European Journal of Preventive Cardiology* (2020), <https://doi.org/10.1177/2047487320937492>.

¹⁵¹ Kamilu M. Karaye et al., 'Clinical Features and Outcomes of Peripartum Cardiomyopathy in Nigeria', *Journal of the American College of Cardiology* 76, no. 20 (2020), <https://doi.org/10.1016/j.jacc.2020.09.540>.

¹⁵² Friedrich Thienemann et al., 'The Causes, Treatment, and Outcome of Pulmonary Hypertension in Africa: Insights from the Pan African Pulmonary Hypertension Cohort (PAPUCO) Registry', *International Journal of Cardiology* 221 (2016), <https://doi.org/10.1016/j.ijcard.2016.06.242>.

¹⁵³ Ashley K. Keates et al., 'Cardiovascular Disease in Africa: Epidemiological Profile and Challenges', *Nature Reviews. Cardiology* 14, no. 5 (2017), <https://doi.org/10.1038/nrcardio.2017.19>.

Establishing a Sustainable Program of Non-Communicable Disease-Focused Research in Southern Africa

For the past 5–6 years, Professor Simon Stewart and his research group have worked closely with a TUA Adjunct Professor, Ana Mocumbi, and her research teams based at the Mozambique Institute for Health and Education Research (with close links to the Mozambique Government, the National Institute of Health, and a network of health facilities across the country) to build research capacity in NCD-focused research, health information systems and, ultimately, health programs and policies.

In an African first, we conducted the *MOZambique snApsHOT of emeRging Trends (MOZART) Disease Surveillance Study*. Involving clinicians from three hospitals servicing impoverished communities in Maputo, Beira and Nampula (with 2,000 km between the former and latter, with minimal air services), we captured data on approximately 8,000 emergency presentations of all ages during two 30-day/24-hour during the ‘dry’ and ‘wet’ seasons.¹⁵⁴

In the absence of primary care services (and even ambulances for traumatic injuries and emergencies), our selected hospitals represent a barometer of the spectrum of disease and injury across Mozambique. Among many important and insightful findings, this study revealed a high and unmet burden of poor heart and lung health across Mozambique that is characterised by key differentials in - a) urban versus peri-urban locations, b) demography, c) socio-demographic profiles, d) clinical history (e.g., TB/HIV); e) household conditions with deadly exposure to indoor air pollution and f) seasonal fluctuations in the pattern of disease that will only worsen in response to climate change.¹⁵⁵

¹⁵⁴ Ana O. Mocumbi et al., ‘Differential Patterns of Disease and Injury in Mozambique: New Perspectives from a Pragmatic, Multicenter, Surveillance Study of 7809 Emergency Presentations’, *PLoS One* 14, no. 7 (2019).

¹⁵⁵ Mocumbi et al., ‘Differential Patterns’.

Revealing the True Heart and Lung Health of Southern Africa

It was from this initiative that we highlighted the dangers of indoor air pollution in Africa.¹⁵⁶ We also developed a pragmatic algorithm to detect early-to-established forms of cardiopulmonary disease in low-resource/income clinical settings.¹⁵⁷ When combined with our 'mapping' of the pattern of poor heart and lung disease across the lifespan (see Figure 2 below), this pilot program led to the design and building of the interdisciplinary Socioeconomic and Environmental Antecedents to Reveal the Cardiopulmonary Health of Africa (SEARCH-AFRICA) Program outlined below.

As shown in Figure 2, the MOZART Disease Surveillance Study revealed an alarming pattern of lung disease and then combined heart/lung disease in those seeking emergency care from the three diverse communities in Southern, Central and Northern Mozambique.¹⁵⁸ As noted above, differential patterns of disease were evident and reflected in upper versus lower respiratory disease based on urban versus peri-urban/rural dwelling peoples, as well as the time of the year. However, with an estimated one in 20 mainly impoverished peoples living adjacent to the Mavalane General Hospital in Maputo seeking acute care for cardiopulmonary disease, the overall trends look ominous for the future heart and lung health of this young, impoverished country.

¹⁵⁶ Ana Mocumbi et al., 'Cardiovascular Effects of Indoor Air Pollution from Solid Fuel: Relevance to Sub-Saharan Africa', *Current Environmental Health Reports* 6 (2019), <https://doi.org/10.1007/s40572-019-00234-8>.

¹⁵⁷ Simon Stewart et al., 'Clinical Algorithm to Screen for Cardiopulmonary Disease in Low-Income Settings', *Nature Reviews Cardiology* 16, no. 1 (2019), <https://doi.org/10.1038/s41569-019-0268-0>.

¹⁵⁸ Mocumbi et al., 'Population Study'.

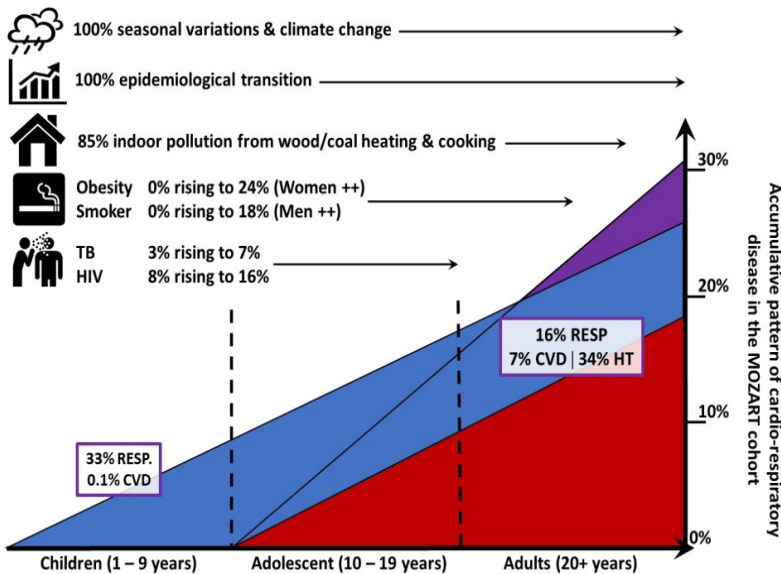


Figure 2. The Increasing Confluence of Poor Heart and Lung Health in the MOZART Cohort

Notes: This figure plots the pattern of lung/respiratory disease (RESP) and heart/cardiovascular disease (CVD) in different but representative age groups of people presenting for emergency care across Mozambique.¹⁵⁹

Clearly, there are a multitude of factors that are driving a new burden of disease in Mozambique, with a predominance of women and adults in the prime of their lives most likely exposed to a combination of historical disease of poverty (i.e., malnutrition and communicable diseases), unhealthy environments (from indoor to outdoor air pollution) and the adoption of unhealthy lifestyle behaviours. Without a comprehensive response, from surveillance to new health systems and health policies, Mozambique, like many LICs in the region and wider

¹⁵⁹ Mocumbi et al., 'Population Study'.

Africa, will never have a healthy population effort to meet the UN's SDGs.¹⁶⁰

It is for the above reasons that, with the explicit support of TUA's Centre for Cardiopulmonary Health, Professor Mocumbi and her team have developed the ambitious goal of undertaking the SEARCH-AFRICA health services research program (see Figure 3). Concurrently, with institutional partners in Africa (University of Cape Town in South Africa to the Aswan Heart Centre in Egypt), the USA (Harvard University and University of California – San Diego) and the UK (University of Glasgow), Professor Mocumbi is leading an initiative to establish a Global Health Research Centre for Cardiopulmonary Health in Southern Africa. Once fully realised, this centre will be a hub for significant research collaboration and capacity building across Mozambique and the broader Southern African region. This would entail innovative state-of-the-art educational and research strategies implemented by a new generation of African health researchers and expert research support personnel.



¹⁶⁰ Bukhman et al., 'Reframing NCDs'.

Figure 3. The SEARCH-AFRICA Research Program

Notes: As low-income/low-resource countries, Mozambique and the broader Southern African region are in desperate need of a coordinated program of health services research, from community and clinical surveillance programs to trials of innovative programs to optimise heart/lung health.¹⁶¹ This ambitious program is attempting to intimately involve local communities in and with the design of health programs specifically meeting their needs. This is evident, for example, in plans to test an innovative intervention where a local bank micro-finances impoverished households to sustainably purchase cleaner household fuel to improve the quality of the air they (and their infants/children) breathe every day.

The Way Forward for Mozambique

It is important to note that in attempting to publish our initial findings from the MOZART Disease Surveillance Study and subsequent plans for the SEARCH-AFRICA Program, there has been much scepticism about the value and even validity of our research approach from the editorial teams of peer-review journals and funders. Despite scepticism regarding initial findings from the MOZART Disease Surveillance Study and subsequent plans for the SEARCH-AFRICA Program, the Heart of Soweto study's results have since appeared in major medical and cardiology journals. As Professor Mocumbi notes, it would have been much easier if we had studied and reported on a single disease state (preferably a communicable disease), but such cases are rare in Mozambique and neighbouring countries. The irony of this unfortunate situation is the belief that the complex health issues facing the diverse peoples of Africa can be neatly distilled from the global or

¹⁶¹ Gene Bukhman et al., 'The Lancet NCDI Poverty Commission: Bridging a Gap in Universal Health Coverage for the Poorest Billion', *Lancet* 396, no. 10256 (2020), [https://doi.org/10.1016/S0140-6736\(20\)31907-3](https://doi.org/10.1016/S0140-6736(20)31907-3).

regional projections (in the absence of health information systems and, therefore, actual data) of disease. Paternalistic prejudice and protection of large swathes of research funding by individuals and institutions operating outside Africa represent a major threat to any attempts to develop meaningful and impactful health services research.¹⁶² It is noteworthy that the UK-based National Institute for Health Research are trying to better understand the local context and needs of LIC's in this respect. Concurrently, internal factors (e.g., political and institutional corruption, entrenched health inequalities at the population level and armed conflict) are difficult to overcome at local and regional levels.

Mozambique, with its geographically dispersed and diverse population of approximately 30 million people, nearly half of whom are children/adolescents, represents a microcosm of the complex challenges facing the wider region and African continent. In simple terms, there are immediate educational and economic challenges to be met. For example, the sheer volume of young children means that many schools (and individual teachers) run three separate classes per day. Concurrently, poverty rates remain stubbornly high. Linked to all these issues is the loss of adults in the prime of their life: the average life expectancy remains in the mid-50s and fewer than one in 20 people reach the age of 65 years.¹⁶³

Through our collaborative program of support and mentorship, we have identified poor overall health and, specifically, the unique combination of heart/lung disease as a major limitation in the future socioeconomic growth of Mozambique. This applies equally to similarly impoverished countries throughout Africa. Having carefully planned how we attend to address this, both through sustainable capacity building and innovative research and health service solutions, our

¹⁶² Stewart et al., 'Clinical Algorithm'.

¹⁶³ The World Bank, 'Mozambique', accessed March 2021, <https://data.worldbank.org/country/MZ>.

challenge now (to ourselves and the rest of the world) is to implement these solutions. Subsequently, we will need to assess their impact not only on individual health metrics and longevity but also within the prism of the broader SDGs established by the UN. Our collaborative program of research is of direct relevance to achieving several SDGs, including target 3.4 regarding the reduction of premature mortality from noncommunicable disease through prevention and treatment which falls under SDG 3 of Good Health and Wellbeing and targets 10.3 and 10.B under SDG 10 of Reduced Inequalities. Particularly, in that 10.3 looks to reduce inequalities of outcome through practice and action and 10.B in how this research seeks to support the most impoverished and disadvantaged communities in African countries and encourages the flow of finances and expertise.

Case Study 3: Cardiovascular Disease Reduction in Nepal—Providing Quality Education and Fostering Equitable Chronic Disease Management Outcomes in Nepal

Case Study Context

SDG 3 emphasises the need to enhance good health and wellbeing. As part of this development goal, the prevention of chronic disease is important in communities (as recognised in SDG indicator 3.4.1 and target lifestyle changes for prevention and treatment 3.8). As countries like Nepal have become more westernised, there have been significant improvements in mortality and morbidity related to infectious diseases. However, with the adoption of a westernised diet and lifestyle, chronic diseases and associated modifiable risk factors have escalated. For instance, there is a high level of hypertension in Nepal with levels currently around 24–27% in community screening studies.¹⁶⁴ As a

¹⁶⁴ Dinesh Neupane et al., ‘Effectiveness of a Lifestyle Intervention Led by Female Community Health Volunteers versus Usual Care in Blood Pressure

university with a global interest in health equity and solutions, Professor Craig McLachlan's team has been concerned with the perception that there is a high level of hypertension across urban and rural communities of Nepal. McLachlan and team know, through their research, that establishing baseline measurements of blood pressure through mass coordinated screenings help to identify a health need for lifestyle modifications and to better manage individuals with identifiable elevated blood pressure.¹⁶⁵ Hypertension is a risk factor for stroke and serious cardiovascular disease, including myocardial infarction and heart failure. Stroke and cardiovascular disease are chronic diseases that impact families, the economy, and the distribution of limited health recourses. Indeed, society mapping and models of economic cost to economies also represent a research gap in developing countries.¹⁶⁶ McLachlan's team can now use baseline hypertension prevalence to help frame and influence policy directions in Nepal to address blood pressure.

Reduction (COBIN): An Open-Label, Cluster-Randomised Trial', *The Lancet. Global Health* 6, no. 1 (2018), [https://doi.org/10.1016/S2214-109X\(17\)30411-4](https://doi.org/10.1016/S2214-109X(17)30411-4).

¹⁶⁵ Dinesh Neupane et al., 'Awareness, Prevalence, Treatment, and Control of Hypertension in Western Nepal', *American Journal of Hypertension* 30, no. 9 (2017), <https://doi.org/10.1093/ajh/hpx074>; Kamal Ghimire et al., 'Knowledge, Attitudes, and Practices Related to Salt Consumption in Nepal: Findings from the Community-Based Management of Non-Communicable Diseases Project in Nepal (COBIN)', *Journal of Clinical Hypertension (Greenwich)* 21, no. 6 (2019), <https://doi.org/10.1111/jch.13544>.

¹⁶⁶ S. U. Raymond, S. Leeder and H. M. Greenberg, 'Obesity and Cardiovascular Disease in Developing Countries: A Growing Problem and an Economic Threat', *Current Opinion in Clinical Nutrition and Metabolic Care* 9, no. 2 (2006).

A vicious cycle of inequity can be created by chronic diseases that become difficult to manage.¹⁶⁷ Community marginalisation is exacerbated by a lack of health literacy, screening opportunities to interact early and provide educational messages at the community level. In Nepal maternal female community health volunteers have been retrained to measure blood pressure within their respective communities. This has led to the better identification and management of blood pressure. Importantly, female health volunteers are already embedded in the health system. The use of female health volunteers allows for expanding human resources for community blood pressure screening and health education interventions.

Key to a community health reform is the leverage that can be demonstrated by active NGO engagement with different levels in the health system and the community. NGOs with strong academic networks can facilitate health policy change and interventions at the community level with evaluation and evidence to support policy initiatives. This case study demonstrates research that is framed by an integrated response to meeting SDGs 3.4, 3.5, 3.8, 3.a and 4.7 and objectives for health, wellbeing and disease reduction in communities that have limited and fragmented health infrastructure. The case study demonstrates how two research programs for hypertension in Nepal intersect with actions that enable the SDGs. The research explores the design and delivery of quality education (SDG 4.7) to urban and remote geographical communities experiencing chronic disease inequality through reduced access to health education and understanding community health risk factors. The research also focuses on the health and wellbeing of the participants (SDG 3.4, 3.5, 3.8 and 3.a), as healthy

¹⁶⁷ Lago-Peñas et al., ‘The Impact of Socioeconomic Position on Non-Communicable Diseases: What Do We Know About?’, *Perspectives in Public Health* 141, no. 3 (2020), <https://doi.org/10.1177/1757913920914952>.

living promotes an engaged workforce and has economic returns to the community and Nepal.

This initiative is situated within the context of significant social health policy reform driven, in part, by interactive NGOs that also engage various stakeholder groups, including the government health ministry, female health workers, academic networks and primary healthcare clinics. This creates opportunities for non-Nepalese background researchers to work with local academics, via the Nepal Development Society, to better understand both the drivers of disease and the complexities of the health systems.

Previously, NGOs in Nepal have been criticised for initiating programs that are fragmented or have no sustainable implementation plan.¹⁶⁸ This blood pressure intervention and policy reform are being coordinated with the Nepal Development Society, as a NGO partner, which leads and coordinates training, fieldwork, governance, health policy and data management, and government linkages.

The research undertaken by the Centre for Healthy Futures at TUA has aimed to address the inequities of Nepalese communities with individuals with poorly managed or undiagnosed blood pressure issues. Innovative community-based education programs have been designed to target blood pressure knowledge, measurement, and health communication strategies for communities. Importantly, program outcomes are evaluated. The training and implementation of the program delivered by female health workers, for example, can be

¹⁶⁸ Rajendra Karkee and Jude Comfort, 'NGOs, Foreign Aid, and Development in Nepal', *Frontiers in Public Health* 24, no. 4 (2016): 177, <https://doi.org/10.3389/fpubh.2016.00177>.

modelled using economic tools to establish both outcome effectiveness and cost-effectiveness.¹⁶⁹

The Research Process

The Nepal research programs have contended that while many education-to-community training programs exist, few have tried to create a pathway that leads to the possibility of longer-term changes in health and lifestyle factors that induce sustainable changes in health outcomes. Therefore, the purpose of the research was, first, to understand and describe the problem. The problem is the perception of a high rate of undetected hypertension in communities, a high level of borderline hypertension and a high burden of poorly managed blood pressure in individuals. Thus, the first aim was to explore the magnitude of the problem. The second aim was to pilot education initiatives. The specific role of health workers was to measure blood pressure in the community, educate the community (on common modifiable blood pressure risk factors), and develop a referral pathway for those found to have hypertension.

Important to this process are cohort studies, with long-term follow up measurements, to understand the impact of education programs and their sustainability in communities. The aim was to develop and trial a targeted screening and health education program, and then measure its impact on blood pressure changes over time. The COBIN trial is the only study in a developing country to engage female health volunteers (already valued as part of the maternal health system) to deliver an intervention as well as measure and report levels of blood pressure that require management.¹⁷⁰ The cohort has now been followed up twice and a third follow-up is planned. We have also reported on the learning

¹⁶⁹ A. Krishnan et al., ‘Cost-Effectiveness and Budget Impact of the Community-Based Management of Hypertension in Nepal Study (COBIN): A Retrospective Analysis’, *Lancet Global Health* 7, no. 10 (2019).

¹⁷⁰ Neupane et al., ‘Effectiveness of a Lifestyle Intervention’.

experiences of female health volunteers in learning to measure blood pressure.¹⁷¹ For the female health volunteers, prior to blood pressure screening, their services had not been previously engaged for blood pressure reduction or was focused on chronic disease management. While female health volunteers are an integral part of the health services, their sole responsibility has previously been to reduce female birthing complications.

Key Findings

Curriculum and Quality Education for Individuals with Chronic Diseases in Nepal

The design of the Nepal interventions and the screening programs (COBIN and May Month) thus far have been completed through co-design and have comprised 1) competency-based training for blood pressure screening in urban and remote settings with female health volunteers, 2) providing intervention studies on how to improve health and fitness at the community level within the family home and 3) engaging our university partners to evaluate the data that has been collected. The university base was critical in helping to bring in new higher degree students to work on the projects that pre-existed with our partners in Nepal; namely, the Nepal Development Society. Students were provided with a range of social skills that were translated into the needs of Nepal via bi-directional engagement. The content was progressively developed and trialled, incorporating a student-led approach, applying for appropriate grants, developing a comprehensive systematic review on the topic and developing a framework for health policy reform. Learning in this space places an emphasis on collaborative strategies with NGOs and Nepalese academic networks.

¹⁷¹ Dinesh Neupane et al., 'Literacy and Motivation for the Prevention and Control of Hypertension among Female Community Health Volunteers: A Qualitative Study from Nepal', *Global Health Action* 8 (2015).

This provides training for higher degree students in both academic research, public health, and NGO settings. By default, the specific Nepalese NGO-based needs were incorporated into student training, with a focus on health policy, public health, chronic disease management, capacity building in low-resource countries, reflective listening, collaboration, interacting, identifying gaps in health services and problem-solving. Higher degree students are now addressing health challenges in Nepal and having a critical positive impact on health systems.

Students' Education and Wellbeing

Students' motivations for joining the case study research program revolved around opportunities for community engagement and preventing chronic disease in LICs. This is particularly true for expatriate students from Nepal or those who have visited Nepal. There is a desire to learn abroad at TUA and bring to Nepal best research practices and apply these skills to public health program development relating to chronic diseases. Students will have the skills to implement and evaluate programs as well as develop relevant health policies. The Nepalese blood pressure screening and intervention case study that has been described provides opportunities as a testbed for public health interventions that can be student-developed or tested by students. Indeed, Nepal has many students who have expressed interest in this model of education.

Both TUA and external collaborative higher degree students identified the importance of this program in giving them a greater voice in Nepal. The students see the investment in Nepal by TUA as a unique opportunity to link formally to an NGO as well as fellow academic networks in the USA, Denmark, and Nepal, which collaborate together on these multidisciplinary projects.

Teachers' Education and Support

Dedicated academic supervisors in TUA can support and develop research interests in Nepal's public health. There is also educational research interest in social science aspects of how additional programs can be developed and sustained.

University Life Inclusion and Reducing Inequality

The Nepal project presented here is an example of a case study where the research was ongoing and brought into TUA by an academic professor. This is a case of where the university can value-add to pre-existing programs and support ongoing research and align appropriate PhD and MPhil students.

Case study Implications for Sustainable Development Goals

The 2030 Agenda for Sustainable Development focuses on economic, social, and environmental development to ensure that all people have access to prosperity. For people with chronic diseases or who are at risk of chronic diseases, the lack of access to health education and health workers at the community level is evident. There has been a national call in Nepal to tackle chronic disease. There is a need for academic strategies to re-explore models of care that are community-aligned. This case study reports on research undertaken by the Centre for Healthy Futures at TUA to draw on research-informed public health training and engagement with NGOs, to assist with an identified problem of a nation with unacceptable levels of hypertension in the community. The case study exemplifies our commitment to addressing SDGs 3, 4 and 10 within our research, with a particular focus on health and wellbeing. This case study illustrates how research directly targets the reduction of inequality in health, through close alignment of female health volunteers and primary care networks in Nepal. The model demonstrates how an NGO can be involved in the coordination and leadership of a program. The NGO has shown value in encouraging

academic research collaboration. It is, indeed, encouraging to see an NGO that is led by young academics from Nepal with a passion to improve public health outcomes for cardiovascular disease and collaborate with diverse global universities that add back to public health development in Nepal, such as TUA.

Scalability is dependent on the buy in for the coordination and implementation of a volunteer health worker model. The uniqueness of this model in Nepal it was the first to re-align female health volunteers to chronic disease management. It has been noted coordinated health volunteers in other capacities are now being deployed in other developing nations such as Africa to assist in the management of HIV.¹⁷² The success of any volunteer health worker model is dependent on alignment with pre-existing health systems and infrastructure even if in a weakened state.

Case Study 4: Progressing Sustainable Development Goals through Well-Designed Workplace Initiatives

Sustainable development goals have been established by the UN to develop appropriate settings and conditions for protecting people and the planet. Improving people's health and wellbeing is an important agenda of these goals.¹⁷³ The following discussion outlines the design and findings of Hayden McDonald's research that examines links between

¹⁷² Shelley KD, Frumence G, Mpembeni R, George AS, Stuart EA, Killewo J, Baqui AH, Peters DH. Can volunteer community health workers manage multiple roles? An interrupted time-series analysis of combined HIV and maternal and child health promotion in Iringa, Tanzania. *Health Policy Plan*. 2018 Dec 1;33(10):1096-1106. doi: 10.1093/heapol/czy104.

¹⁷³ Nour Chams and Josep García-Blandón, 'On the Importance of Sustainable Human Resource Management for the Adoption of Sustainable Development Goals', *Resources, Conservation and Recycling* 14 (2019), <https://doi.org/10.1016/j.resconrec.2018.10.006>.

workplace health promotion programs (WHPPs) and several SDGs. Workplaces have an important role in progressing SDGs, providing important settings to alleviate health risks for the broader population.¹⁷⁴ Various initiatives to achieve improved health (SDG 3) include prevention and treatment to reduce mental illnesses (SDG 3.4), addictions (SDG 3.5), and occupational hazards (SDG 3.9), while increasing the capacity of workplaces to manage such health concerns.¹⁷⁵

This case study introduces a framework for guiding the implementation of WHPPs and considers managerial settings for promoting their implementation. Workplaces will be more likely to provide munificent support to employees when evidence of the links between business and social outcomes exist.¹⁷⁶ Selecting appropriate systems and structures for implementing WHPPs will help to link business objectives with broader concerns such as improving people's health (SDG 3) and working conditions (SDG 8), and promoting equality (SDG 10). Developing effective partnerships (SDG 17) to support the selection and implementation of WHPPs will also ensure that organisations and communities benefit from a healthy and productive workforce.

Research Design

A multi-method qualitative research design was used to examine how universities in the process of implementing WHPPs balance

¹⁷⁴ Nugent et al., 'Investing in Non-Communicable Disease Prevention and Management to Advance the Sustainable Development Goals', *The Lancet* 391, no. 10134 (2018).

¹⁷⁵ Ilona Kickbusch and Don Nutbeam, 'A Watershed for Health Promotion: The Shanghai Conference 2016', *Health Promotion International* 32, no. 1 (2017), <https://doi.org/10.1093/heapro/daw112>.

¹⁷⁶ Parry and Johnson, 'Contextualizing Leisure Research', 125.

employee and organisational demands.¹⁷⁷ First, content analysis was used to develop a framework for analysing WHPP implementation from theoretical and practical perspectives.¹⁷⁸ Archival data, including minutes of meetings, planning documents, policies and procedures and advertising materials, was gathered from the websites of eight Australian universities and subsequently stored and analysed within NVivo. The coding process was iterative, moving between data and theory, to refine a framework for implementing WHPPs and identify how workplace systems and structures influence program implementation. The coded content and categories were discussed and validated by a panel of peers before being validated by employees within the university sector. Content analysis findings were then used to study an organisation in the process of implementing WHPPs. Applying content analysis findings to a case organisation in the process of implementation enabled interactions between WHPPs and workplace systems and structures to be explored as they emerged.

This research developed a framework for implementing WHPPs that improves employee health (and addresses several SDG objectives) while accounting for various systems and structures that influence program implementation. Actor–network theory’s recognition that ‘humans are acted on as much as they act’, helped to extend this research inquiry more broadly.¹⁷⁹ Adopting this methodology—with its neutral perspective on the agency of human and non-human actors—provided opportunities to trace the active role non-humans play in implementing WHPPs and defining health. Based on this theoretical perspective, this study analysed how systems and structure such as committees and

¹⁷⁷ Brewer and Hunter (2006); Teddlie and Tashakkori (2006).

¹⁷⁸ Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology*, 4th edn (Thousand Oaks: Sage Publications, 2018).

¹⁷⁹ François Cooren, James Taylor and Elizabeth Every, *Communication as Organizing: Empirical and Theoretical Explorations in the Dynamic of Text and Conversation* (Hillsdale: Lawrence Erlbaum, 2006), 82.

performance measures enable health and productivity to be measured and managed through WHPPs. Conducting this research through an actor-network lens is important for advancing SDG objectives as it highlights the systemic shifts required to make these goals valuable and manageable for organisations.

Key Findings and Discussion: Impact on Community Practice

The material features of organisations create the contexts for decisions and actions to target several SDGs. Therefore, examining how business and social objectives embedded within workplace systems and structures influence ideas about health and WHPP implementation is important to progress SDG objectives.¹⁸⁰ This case study developed a framework for improving WHPP implementation, titled Health Issues, Risks and Activities (HIRA) framework. The HIRA framework helps organisations to implement a comprehensive range of WHPPs that target several SDGs (specifically, SDGs 3, 8 and 10) while reinforcing the importance of a collaborative approach to implementation that involves diverse stakeholders (SDG 17).

Good health (SDG 3), inclusive work outcomes (SDG 8) and equality (SDG 10) through WHPPs

The HIRA framework identified health issues such as cardiovascular disease and mental illnesses (SDG 3.4), and health risk factors such as addictions (SDG 3.5) and discrimination (SDG 10.3) to target through WHPPs. In addition to these health concerns, activities commonly used in the WHPPs of sampled universities were identified, such as the distribution of brochures, flyers, guides and posters and organisational culture, policy and structures. The HIRA framework showed that

¹⁸⁰ Nour Chams and Josep García-Blandón, 'On the Importance of Sustainable Human Resource Management for the Adoption of Sustainable Development Goals', *Resources, Conservation and Recycling* 14 (2019), <https://doi.org/10.1016/j.resconrec.2018.10.006>.

universities implement a comprehensive range of WHPPs that balance targeted health concerns with diverse activities to improve desired outcomes. The relative ease with which organisations can promote employee health was also evident in analysing WHPP implementation using the HIRA framework. For example, activities such as the distribution of brochures, guides, flyers and posters provide cost-effective tools for communicating health information. Many universities used such activities to market a range of institutional services available to employees, such as counselling initiatives.

The importance of implementing a comprehensive range of WHPPs within workplaces reinforces the integrated nature of employee health and SDGs. This integration is evident with SDG 8.5 and 8.8 which promote the importance of ‘decent work’ and ‘safe and secure working environments’ for all people. Such targets require investment into workplaces strategies and practices that are inclusive and improve accessibility for marginalised communities. Thus, the case study emphasises the importance of coordinated approaches that align the interests of diverse institutions, (work)places, and people around SDG objectives. The coordination of laws, policies and practices underlies several SDGs (e.g. SDG 10.3 links inequality to discriminatory laws, policies and practices). The HIRA framework is useful for considering varying motivations for WHPPs as it accounts for uncertainties both in terms of targeting relevant employee health concerns and selecting among various activities to implement. For example, legal requirements to prevent discrimination and harassment meant these health risks were primarily targeted through systemic changes to workplace culture and policy rather than other activities.

The commitment of universities to WHPPs was dependent on various political, business and social interests being managed. Variables such as laws, strategies, performance measures, costs and risk appetite altered how universities selected activities to include in WHPPs. Health

issues and health risk factors were comprehensively targeted when the likes of legitimate internal and external suppliers could be relied on to implement and manage programs. For example, all universities offered initiatives to address mental health (SDG 3.4) given legislative prerogatives and access to institutional initiatives, such as mental health first aid. Few universities targeted oral health given limited legal and political motivations to do so in Australia. The choice of activities to include within WHPPs was also significantly influenced by anticipated costs or participation rates than by the impact activities would have on improving health and wellbeing (SDG 3). A health, safety and wellbeing director explained that promoting employee health entails 'shades of grey because the obligation is to prove that health promotion is in the university's interest and convince employees to care about their health'. Performance measures emphasised implementation outcomes over employee health outcomes, which were considered to be more subjective. Various measures were used to track program outcomes, such as the number of participants or events run. Conversely, evaluation measures were based on health outcomes only when institutional benchmarks existed, such as with Weight Watchers (e.g., weight loss per workforce).

The importance of partnerships (SDG 17)

It is important to have diverse stakeholders such as governments, organisations, academics, and people working collaboratively to achieve SDG objectives. In particular, SDG 17.16 targets the formalisation of partnerships between diverse stakeholders to share knowledge, expertise, technology and resources in advancing SDG objectives. Sampled universities operated in different locations but developed similar systems for managing WHPP implementation. Despite being autonomous entities with unique internal processes, universities also established strategic partnerships to broaden the approach to

implementation and improve their collective performance. A network of health promotion representatives from traditional industry competitors shared ideas for enhancing employee health and performance. While this inclusive approach broadened the scope for program selection and implementation, concerns about the focus of decision-making remained.

Despite prioritising internal and external partnerships, the strong emphasis on establishing working groups and committees to govern implementation decisions proved problematic. These administrative structures set the strategic agenda and guided organisational values in relation to health and WHPP implementation. The obligation to account for financial results and to prove that program risks can be successfully accounted for, alienated employees and departments from ideas about health. Health clinic personnel from the case university attributed their limited influence on WHPP decisions to a lack of understanding about managerial objectives for implementation. Having a tightly controlled group of managers govern program implementation decisions also limited the opportunities available for employees to contribute ideas around selecting appropriate implementation strategies. Responsible employees were expected to provide information about their health and to choose to participate in relevant activities to maintain good health.

The potential for WHPPs to ostensibly align with SDG objectives while perpetuating marginalisation was evident in this case study. While the approach to governance and partnerships identified in this case study proved effective based on objective views of performance, a more inclusive approach to implementation could provide sustained improvements in health. Program decisions risk disproportionately benefiting selected groups of people and agendas (e.g., those people selected for committees prioritised implementation outcomes such as managing costs and risks), while other benefits, such as health outcomes, remained uncertain. Management reform is needed to embrace comprehensive WHPPs that account for people's complex

situation, ensuring that workplaces do not select WHPPs which they determine to be valuable. For example, WHPPs targeting objective measures such as weight loss are likely counterintuitive: effectively managing organisational costs and risks but not employee health: people of varying weights likely enjoy physical activity but respond to different health messages and interventions.¹⁸¹

Conclusion and Recommendations Relative to Sustainable Development Goals

While workplaces play an important role in achieving SDG objectives (protecting people and the planet), managerial tools for aligning business and social objectives are needed.¹⁸² The HIRA framework provides practitioners and researchers with a useful tool to analyse the extent and nature of WHPP implementation. Using this framework to analyse the ongoing implementation processes of sampled universities proved that employee health emerges in relation to local contexts.¹⁸³ This finding has highlighted the importance of accounting for diverse interests that influence decisions about WHPP implementation. Despite evidence supporting the strategic benefits of these programs, their voluntary nature means that the motivation and quality of implementation approaches are not guaranteed.¹⁸⁴

A cooperative and reflexive approach to management would allow the pursuit of SDGs transparently by consulting with employees on creating healthy and sustainable settings. In prioritising health,

¹⁸¹ McDonald, H, Gould, R, Delaney, D, Vecchio, V. 'An Investigation of the Health-Promoting Practices of Australian Universities'. *Health Promotion International*. (2021). <https://doi.org/10.1093/heapro/daab004>.

¹⁸² Nugent et al., 'Investing in Non-Communicable'.

¹⁸³ McDonald et al., 'Investigation'.

¹⁸⁴ Thomas Parry and Bruce Sherman, 'Workforce Health--The Transition From Cost to Outcomes to Business Performance', *Benefits Quarterly* 31, no. 1 (2015).

organisations must invest in managerial arrangements that allow employees to contribute new ideas about program selection and implementation. For example, while promoting mental health and wellbeing (SDG target 3.4) entails systemic changes to organisational cultures and structures, personalised strategies to suit the circumstances of each employee are also needed. Thus, organisations should consult with employees about both the objectives and approach to increasing peoples control of their health. Providing employees with an understanding of the managerial tools used to support program selection and implementation is likely to improve the accountability and responsibility for health outcomes.¹⁸⁵

The present research also motivates organisations to meet the objectives of SDG 17 by strengthening links between systems and structures for implementing WHPPs and the ongoing articulation of political agendas and goals. Implementation outcomes were improved through a cooperative approach to WHPP implementation between different universities. Such findings provide important feedback to organisations on negotiating and designing WHPPs that align with broader institutional objectives (like SDGs). Rather than providing a competitive advantage, sharing learnings between organisations will help to provide external assurance of the credibility of pursuing SDGs. Cooperation will ensure that investments into SDGs 3, 8, 10 and 17 become valuable and manageable to a broad range of organisations. For some organisations, understanding how employee health can be promoted with minimal cost and risk will be beneficial, while others may be more capable of leading change.

¹⁸⁵ Kickbush (1994).

Reflections and continuous learning

There are no fixed ways for universities to address the SDGs and contribute towards the achievement of relevant targets. TUA has taken an institution-wide approach towards accelerating the achievement of SDGs. As the goals are global, complex and interrelated, TUA has drawn on its unique philosophy, 'Be Good', to frame an integrated approach based on TUA's guiding principle of 'the power of people to connect the world for good'.¹⁸⁶ The Be Good philosophy establishes a foundation for collectivising institutional actions and targeting these towards making positive social differences. Embedding Be Good within learning and teaching activities makes it a relevant and transformational agenda for guiding staff and students across the institution. This chapter has focused on the development and application of research relevant to the SDGs with researchers focused on answering pressing problems, such as those posed by the SDGs. The Be Good philosophy dovetails with the SDG agenda. Notably, this philosophy steers TUA's research towards delivering social and economic solutions that positively impact people and communities. The research strategy, structures, and themes at TUA direct resources towards projects that will enact change and deliver meaningful and innovative solutions to ongoing challenges.

Lessons learned

There are many challenges in the process of steering a young, quickly growing, diverse and geographically wide-spread university (campuses in most major cities in Australia, New Zealand and China). Amassing contributions and aligning the research agendas of scholars can be a slow process. Research projects can take years from inception to evidence and can be waylaid by securing adequate funding, partners,

¹⁸⁶ TUA, *Social Impact Report 2019* (TUA, 2019), 3.

access to sites and data. The co-authors of this paper reflected on some of the challenges and learnings from the projects described herein. The following is a snapshot of wisdom gained:

- Communicating with and managing relationships with diverse stakeholders is essential. All the case studies described in this chapter involved multiple and diverse stakeholders; each with unique interests, motivations and desired outcomes from the respective project. Research that is positioned at the intersections of academia, industry, government, practitioner and participants requires advanced abilities to listen, understand and communicate in ways that are accessible, inclusive and respectful of each person and group. In practical terms, this meant writing emails, information sheets and presenting research results in multiple ways and forums. It also meant nurturing relationships of trust, including the investment of time and energy. Research projects, of the size discussed here, requires clear vision, strong leadership and attentiveness to communication that is fitting for different audiences.
- Another lesson learned is about defining the ‘success’ of a project in ways that make sense to the people and project involved. For example, in the Impact21 project, it was challenging to define success given that the program was meant to pursue a rich ecology of stakeholder goals: sustainable customised employment for participants, inclusive work environments for partner employers, program quality as defined by disability education designers and specialists, compliance with regulatory requirements for disability training programs as defined by the NDIS, and operational efficiency as defined by Inclusion Foundation. Since the writing of the Impact21 case for this chapter, TUA has partnered with Inclusion Foundation to develop a monitoring and evaluation framework that

captures what a multifaceted notion of success should mean and how it can be operationalised. Problematising assumptions of success and defining the success of a project in terms that are fitting for the project and its participants is essential to ensuring projects are truly inclusive and just.

- The previous lesson surfaces yet another learned; that research, by its iterative and evolutionary nature, is open for considering and re-considering assumptions that may have created limitations or barriers. As such, research can function as a vehicle for creativity, problem solving and innovation when it comes to addressing the very problems and issues the SDGs are designed to address. Sometimes, it is a change in thinking that can reveal a simple, yet effective solution not previously applied. Research projects, especially those where thought-leaders collaborate with industry leaders and practitioners create an environment ripe for innovation and leadership.
- People are experiencing financial inequality and expressing distrust in governance systems, leading to wealth and value gaps. Consequently, global plans for increased collaboration to solve social and economic issues (the stratagem of SDGs) are challenging to implement. Polarisation makes it difficult to allocate collective solutions to suit individual circumstances (or national solutions for ethnic cultures). Such reconciliation challenges were evident in research on WHPP implementation. For organisation's to be serious about employee health, managerial arrangements that allow employees to contribute new ideas about program selection and implementation must be prioritised. Here, generic or indiscriminate practices are problematic as people's health situations vary such as for working caregivers or employees experiencing personal challenges. Physical and mental health issues arise at any time

and affect people in different ways. Yet, gracious WHPPs that benefit employees experiencing difficult circumstance could be costly to employers thus creating tensions over equity and opportunity. Thus, regarding health, any pursuit of SDGs must occur transparently by consulting with employees on creating healthy and sustainable settings.

- Finally, setting SDG targets within a research project from its inception can only strengthen its ability to contribute to targets and indicators. As with the COBIN project, the initial goal was to prevent and treat blood pressure. The project was designed as a translational health research project where knowledge is taken from ‘bench to bedside’. COBIN was not designed in terms of contributions to SDG in its original form, nor was this a driving force at the institution or for the lab at that time. It is only in retrospect that MacLachlan and his team can see the value of their work across a range of SDGs. It is through the fertile sharing across research cultures as well as the growth and translation of Be Good into TUA research that a multi-layered research objective approach has become visible and, thus, a practical possibility that researchers are adopting SDGs into their early project planning. MacLachlan is now championing the practice of SDG oriented clinical trial protocol papers. The power and innovation of this approach to trial protocol papers can, arguably, strengthen the contribution of such projects to attaining SDG targets.

As an institution, we are still developing our understanding and institutional approach to social justice. In 2022, we have engaged a formative think tank, in the form of a Social Justice Colloquium, where experts “unpacked” social justice concepts and open dialogue was facilitated. The complexity of agreeing to a definition of social justice, among respective scholars, is rife let alone to do so across diverse

institutional functions, philosophies and purposes. Yet, with the intent of defining a TUA stance on social justice and ways in which this can be interpreted into practice, the forty, or so, attendees engaged in respectful, robust and fruitful discussion. Admirably, TUA recognises that there is more to be done, from the macro to the micro, and has set forth an on-going plan to continue this work, deepen our collective understanding and commitment to social justice and SDGs as well as cultivate a spirit of Be Good and its legacy.

Conclusions

The case studies demonstrate how TUA's Be Good philosophy is contributing to realising UN SDGs through its research strategic agenda and endeavours. TUA research, in general, is underpinned by acknowledging the importance of SDGs pertaining to quality education (SDG 4), equity (SDGs 3, 4, 8, and 10) and social justice (SDGs 11) as well as being a driving force in shaping research in higher education. The Be Good principle has fostered, in TUA researchers, a broader understanding of the role of education to assist communities and the importance of higher education institutions to lead research that enables communities to thrive. Torrens University emphasises research that enables education and research-informed programs that encompass sustainability practices in workplace settings, outdoor spaces, health landscapes and spaces where situated practice and service provision is located.

The range of case studies showcase the critical importance that TUA places on meeting its commitment to achieving the SDGs. TUA aims to address disparity that impacts peace, partnerships, people, and their prosperity. How the Be Good philosophy of TUA is emanated in and through its research endeavours partner with the social, economic, and environmental concerns of the SDGs is illustrated below (see Table2).

Table 2. Torrens University Australia ‘Be Good’ Research and Case Study Research

SDG Foci	‘Be Good’ objectives	TUA research pillars	Case Studies	Integrated SDGs
• People	– Deliver impact for communities and individuals where most urgent and needed. – Transform lives through education. – Research of national and global significance.	Building Health Solutions People and Industry for impact	– Disability and meaningful education and work – Building sustainable health-research programs in Mozambique – Cardiovascular disease reduction in Nepal	– Good Health and Wellbeing (Goal 3) – Quality Education (Goal 4) – Partnerships for Goals (17)
• Prosperity	– Meet the highest social and environmental standards. – Focus on graduate employability – Volunteer expertise and services. – Ensure opportunity for all, including the disadvantaged	Security and Sustainability Societies in drastic change	– Progressing SDGs through wellbeing workplace initiatives	– Decent Work and Economic Growth (Goal 8) – Reduce Inequalities (Goal 10) – Sustainable Cities and Communities (Goal 11)

Despite the diversity of the research that is presented here, there are common threads that tie them together. Namely, all these studies hold as their central vision a world where those who have been underrepresented and underserved are recognised and efforts are made in all layers of social, political and economic strata to attend to the challenges they face. Overall, this not only aligns with TUA's Be Good philosophy and the SDGs purpose but also a commitment to humanitarian values of contributing to the health, sustainability and wellbeing of our precious and fragile planet. Each researcher and their teams demonstrate their commitment to the, sometimes, long and arduous work of making positive change however disparate, niche and small. There appears in the very act of 'doing' this research work the hope that from 'little things, big things grow'¹⁸⁷. This maxim, fitting for a collective of culturally diverse (mostly) immigrant Australian researchers and drawn from the lyrics of a song about an Aboriginal's stand for recognition, also points to the power of everyday acts. In this case, the power of doing research.

The second thread apparent throughout all the case studies presented here is the immense collaboration of networks of people across institutions, cultures, and geographies to bring both the interventions and research to life. There is an inherent recognition that change, and the thought, planning and work required for change, is not a solo endeavour and requires the commitment and effort of many. The collaborations of each study illustrate the need to listen, adapt to and cooperate across much diversity; diversity that could, otherwise, be used to draw boundaries or incite competition. Each study required many to prioritise the vision of contributing to and effecting the attainment of SDGs before the social, economic or political gains of an individual or singular

¹⁸⁷ Paul Kelley and Kevin Carmody. From Little Things Big Things Grow. Wb Music Corp., Paul Kelly Music, Song Cycles Pty Ltd. 1993.

institution. When reflected on in this way, the individual and collective commitment of so many to the goals of the SDGs is inspiring and serves as a reminder that there is still much hope in these uncertain and challenging times.

Bibliography

Allais, Stephanie, Elaine Unterhalter, Palesa Molebatsi, Lerato Posholi and Colleen Howell. 'Universities, The Public good, and the SDG 4 Vision'. In *Grading Goal Four*, edited by Antonia Wulff, 135–155. Leiden: Brill, 2020.

Australian Bureau of Statistics. 'Intellectual Disability Australia, 2012'. Accessed 26 July 2021.
<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4433.0.55.0.03main+features452012>.

Barr, Ben, Philip McHale and Margaret Whitehead. 'Reducing Inequalities in Employment of People with Disabilities: The Impact of National Labour and Social Protection Policies'. In *Handbook of Disability, Work and Health*, edited by Ute Bültmann and Johannes Siegrist, 1–19. Cham: Springer, 2019.

Beaney, Thomas, Aletta E. Schutte, George S. Stergiou, Claudio Borghi, Dylan Burger, Fadi Charchar, Suzie Cro et al. 'May Measurement Month 2019: The Global Blood Pressure Screening Campaign of the International Society of Hypertension'. *Hypertension* 76, no. 2 (2020): 333–41.
<https://doi.org/10.1161/HYPERTENSIONAHA.120.14874>.

Bennett, Anna. 'Access and Equity Programme Provision-Evaluation in Australian Higher Education: A What Matters Approach'. *Educational Research and Evaluation* 24, no. 8 (2018): 523–37. <https://doi.org/10.1080/13803611.2019.1643740>.

- Bilodeau, Angèle and Louise Potvin. 'Unpacking Complexity in Public Health Interventions with the Actor–Network Theory'. *Health Promotion International* 33, no. 1 (2016): daw062. <https://doi.org/10.1093/heapro/daw062>.
- Brown Alex, Melinda J. Carrington, Michele McGrady, Geraldine Lee, Christopher Zeitz, Henry Krum, Kevin Rowley and Simon Stewart. 'Cardiometabolic Risk and Disease in Indigenous Australians: The Heart of the Heart Study'. *International Journal of Cardiology* 171, no. 3 (2014): 377–83. <https://doi.org/10.1016/j.ijcard.2013.12.026>.
- Bukhman, Gene, Ana O. Mocumbi, Rifat Atun, Anne E. Becker, Bhutta Zulfiqar, Agnes Binagwaho, Chelsea Clinton et al. 'The Lancet NCDI Poverty Commission: Bridging a Gap in Universal Health Coverage for the Poorest Billion'. *Lancet* 396, no. 10256 (2020): 991–1044. [https://doi.org/10.1016/S0140-6736\(20\)31907-3](https://doi.org/10.1016/S0140-6736(20)31907-3).
- Bukhman, Gene, Ana O. Mocumbi and Richard Horton. 'Reframing NCDs and Injuries for the Poorest Billion: A Lancet Commission'. *Lancet* 386, no. 10000 (2015): 1221–22. [https://doi.org/10.1016/S0140-6736\(15\)00278-0](https://doi.org/10.1016/S0140-6736(15)00278-0).
- Caloyeras, John P., Hangsheng Liu, Ellen Exum, Megan Broderick, and Soeren Mattke. "Managing manifest diseases, but not health risks, saved PepsiCo money over seven years." *Health Affairs* 33, no. 1 (2014): 124-131.
- Cavagna, Pauline, Méo Stéphane Ikama, Kouadio Euloge Kramoh, Jean Laurent Tamkombe, Ibrahima Bara Diop, Ibrahim Ali Toure, Dadhi M. Balde et al. 'Antihypertensive Strategies and Hypertension Control in Sub-Saharan Africa'. *European*

- Journal of Preventive Cardiology (2020).
<https://doi.org/10.1177/2047487320937492>.
- Chams, Nour and Josep García-Blandón. 'On the Importance of Sustainable Human Resource Management for the Adoption of Sustainable Development Goals'. *Resources, Conservation and Recycling* 14 (2019): 109–22.
<https://doi.org/10.1016/j.resconrec.2018.10.006>.
- Channell, Marie M. and Susan J. Loveall. 'Post-High School Transition for Individuals with Down Syndrome'. *International Review of Research in Developmental Disabilities* 54 (2018): 105–35.
<https://doi.org/10.1016/bs.irrdd.2018.07.003>.
- Ciccacci, Fausto, Stefano Orlando, Noorjehan Majid and Cristina Marazzi. 'Epidemiological Transition and Double Burden of Diseases in Low-Income Countries: The Case of Mozambique'. *The Pan African Medical Journal* 37 (2020): 49.
<https://doi.org/10.11604/pamj.2020.37.49.23310>.
- Cooren, François, James Taylor and Elizabeth Every. *Communication as Organizing: Empirical and Theoretical Explorations in the Dynamic of Text and Conversation*. Hillsdale: Lawrence Erlbaum, 2006.
- Darcy, Simon and Tracy Taylor. 'Australia's Disability Discrimination Problem in Three Charts'. *The Conversation*. 12 October 2017. Accessed 2 May 2019. <https://www.abc.net.au/news/2017-10-12/disability-discrimination-in-the-workplace-in-three-charts/9038178>.
- Dooris, Mark, Jane Wills and Joanne Newton. 'A Critical Discussion with Reference to Healthy Universities'. *Scandinavian Journal of Public Health* 42, no. 15 (2014): 7–16.
<https://doi.org/10.1177%2F1403494814544495>.

- De Souza, Denise E., and Athena Vongalis-Macrow. "Evaluating a pilot education-to-work program for adults with Down syndrome." *Studies in Educational Evaluation* 70 (2021): 101016.
- Fisher, Karen R., Ryan Gleeson, Robyn Edwards, R, Christiane Purcal, Tomasz Sitek, Brooke Dinning, Carmel Laragy, Lel D'aegher and Denise Thompson. *Effectiveness of Individual Funding Approaches for Disability Support* (Occasional Paper No. 29). Canberra: FaHCSIA, 2010.
- Ghimire, Kamal, Tara B. Adhikari, Anupa Rijal, Per Kallestrup, Megan E. Henry and Dinesh Neupane. 'Knowledge, Attitudes, and Practices Related to Salt Consumption in Nepal: Findings from the Community-Based Management of Non-Communicable Diseases Project in Nepal (COBIN)'. *Journal of Clinical Hypertension (Greenwich)* 21, no. 6 (2019): 739–48. <https://doi.org/10.1111/jch.13544>.
- Gray, Tonia and Denise Mitten, eds. *The Palgrave International Handbook of Women and Outdoor Learning*. London: Palgrave Macmillan, 2018.
- Grech, Shaun. 'Disability and Development: Critical Connections, Gaps and Contradictions'. In *Disability in the Global South*, edited by Shaun Grech and Karen Soldatic, 3–19. Cham: Springer, 2016.
- Hart, Stuart, L. and Mark B. Milstein. 'Creating Sustainable Value'. *Academy of Management Executive* 17, no. 2 (2003): 62. <https://doi.org/10.5465/ame.2003.10025194>.
- Hashemi, Goli, Hannah Kuper and Mary Wickenden. 'SDGs, Inclusive Health and the Path to Universal Health Coverage'. *Disability and The Global South* 4, no. 1 (2017): 1088–111.

- Holwerda, Anja. *Work Outcome in Young Adults with Disabilities*. The Netherlands: University of Groningen, 2013.
- Karaye, Kamilu M., Hadiza Sa'idu, Sulaiman A. Balarabe, Naser A. Ishaq, Umar G. Adamu, Idris Y. Mohammed, Isa Oboirien et al. 'Clinical Features and Outcomes of Peripartum Cardiomyopathy in Nigeria'. *Journal of the American College of Cardiology* 76, no. 20 (2020): 2352–64. <https://doi.org/10.1016/j.jacc.2020.09.540>.
- Karkee, Rajendra and Jude Comfort. 'NGOs, Foreign Aid, and Development in Nepal'. *Frontiers in Public Health* 24, no. 4 (2016). <https://doi.org/10.3389/fpubh.2016.00177>.
- Keates, Ashley K., Ana O. Mocumbi, Mpiko Ntsekhe, Karen Sliwa and Simon Stewart. 'Cardiovascular Disease in Africa: Epidemiological Profile and Challenges'. *Nature Reviews. Cardiology* 14, no. 5 (2017): 273–93. <https://doi.org/10.1038/nrcardio.2017.19>.
- Kelley, Paul and Carmody, Kevin. *From Little Things Big Things Grow*. Wb Music Corp., Paul Kelly Music, Song Cycles Pty Ltd. (1993).
- Kickbush, Ilona. "Introduction: Tell Me a Story." *Health Promotion in Canada: Provincial, National and International Perspectives*. Eds. Pedersen, A, M O'Neill and I Rootman. Toronto: WB Saunders (1994): 8-17.
- Kickbusch, Ilona and Don Nutbeam. 'A Watershed for Health Promotion: The Shanghai Conference 2016'. *Health Promotion International* 32, no. 1 (2017): 2–6. <https://doi.org/10.1093/heapro/daw112>.

- Krippendorff, Klaus. *Content Analysis: An Introduction to Its Methodology*, 4th edn. Thousand Oaks: Sage Publications, 2018.
- Krishnan, A., E. A. Finkelstein, P. Kallestrup, A. Karki, M. H. Olsen and D. Neupane. 'Cost-Effectiveness and Budget Impact of the Community-Based Management of Hypertension in Nepal Study (COBIN): A Retrospective Analysis'. *Lancet Global Health* 7, no. 10 (2019): e1367–74.
- Kwan, Gene F., Bongani M. Mayosi, Ana Mocumbi, J. Jaime Miranda, Majid Ezzati, Yogesh Jain, Gisela Robles, Emelia J. Benjamin, S. V. Subramanian and Gene Bukhman. 'Endemic Cardiovascular Diseases of the Poorest Billion'. *Circulation* 133, no. 24 (2016): 2561–75. <https://doi.org/10.1161/CIRCULATIONAHA.116.008731>.
- Lago-Peñas, S., B. Rivera, D. Cantarero, B. Casal, M. Pascual, C. Blázquez-Fernández and F. Reyes. 'The Impact of Socioeconomic Position on Non-Communicable Diseases: What Do We Know About?' *Perspectives in Public Health* 141, no. 3 (2020): 158–76. <https://doi.org/10.1177/1757913920914952>.
- Liberal Party of Australia. 'Our Plan to Support People with Disability'. Accessed 25 August 2019. <https://www.liberal.org.au/our-plan-support-people-disability>.
- Liu, Hangsheng, Soeren Mattke, Katherine M. Harris, Sarah Weinberger, Seth Serxner, John P. Caloyeras, and Ellen Exum. "Do workplace wellness programs reduce medical costs? Evidence from a Fortune 500 company." *Inquiry: the journal of health care organization, provision, and financing* 50, no. 2 (2013): 150-158.

- Malmi, Teemu and David A. Brown. 'Management Control Systems as a Package—Opportunities, Challenges and Research Directions'. *Management Accounting Research* 19, no. 4 (2008): 287–300. <https://doi.org/10.1016/j.mar.2008.09.003>.
- McDonald, Hayden, Ryan Gould, Deborah Delaney, Nerina Vecchio. 'An Investigation of the Health-Promoting Practices of Australian Universities'. *Health Promotion International*, (2021). <https://doi.org/10.1093/heapro/daab004>.
- Mocumbi, Ana O., Cebola Bonifácio, Artur Muloliwa A, Frederico Sebastião, Samuel J. Sitefane, Naisa Manafe, Igor Dobe et al. 'Differential Patterns of Disease and Injury in Mozambique: New Perspectives from a Pragmatic, Multicenter, Surveillance Study of 7809 Emergency Presentations'. *PLoS One* 14, no. 7 (2019): e0219273.
- Mocumbi, Ana O., Maria B. Ferreira, Daniel Sidi and Magdi Yacoub. 'A Population Study of Endomyocardial Fibrosis in a Rural Area of Mozambique'. *New England Journal of Medicine* 359, no. 1 (2008): 43–49.
- Mocumbi, Ana O., Simon Stewart, Sam Patel and Wael K. Al-Delaiimy. 'Cardiovascular Effects of Indoor Air Pollution from Solid Fuel: Relevance to Sub-Saharan Africa'. *Current Environmental Health Reports* 6 (2019): 116–26. <https://doi.org/10.1007/s40572-019-00234-8>.
- Morton, Stephen, David Pencheon and Neil Squires. 'Sustainable Development Goals (SDGs), and Their Implementation: A National Global Framework for Health, Development and Equity Needs a Systems Approach at Every Level'. *British Medical Bulletin* 124, no. 1 (2017): 81–90. <https://doi.org/10.1093/bmb/ldx031>.

- Moskos, Megan and Linda Isherwood. 'Individualised Funding and its Implications for the Skills and Competencies Required by Disability Support Workers in Australia'. *Labour & Industry: A Journal of the Social and Economic Relations of Work* 29, no. 1 (2019): 34–51. <https://doi.org/10.1080/10301763.2018.1534523>.
- Neupane, Dinesh, Craig S. McLachlan, Bo Christensen, Arjun Karki, Henry B. Perry HB and Per Kallestrup. 'Community-Based Intervention for Blood Pressure Reduction in Nepal (COBIN Trial): Study Protocol for a Cluster-Randomized Controlled Trial'. *Trials* 17, no. 1 (2016). <https://doi.org/10.1186/s13063-016-1412-3>.
- Neupane, Dinesh, Craig S. McLachlan, Shiva Raj Mishra, Michael Hecht Olsen, Henry B. Perry, Arjun Karki and Per Kallestrup. 'Effectiveness of a Lifestyle Intervention Led by Female Community Health Volunteers versus Usual Care in Blood Pressure Reduction (COBIN): An Open-Label, Cluster-Randomised Trial'. *The Lancet. Global Health* 6, no. 1 (2018): e66–e73. [https://doi.org/10.1016/S2214-109X\(17\)30411-4](https://doi.org/10.1016/S2214-109X(17)30411-4).
- Neupane, Dinesh, Craig S. McLachlan, Shiva Raj Mishra, Michael Thorlund, Mette Schlütter and Per Kallestrup. 'Literacy and Motivation for the Prevention and Control of Hypertension among Female Community Health Volunteers: A Qualitative Study from Nepal'. *Global Health Action* 8 (2015): 28254.
- Neupane, Dinesh, Archana Shrestha, Shiva Raj Mishra, Joakim Bloch, Bo Christensen, Craig S. McLachlan, Arjun Karki and Per Kallestrup P. 'Awareness, Prevalence, Treatment, and Control of Hypertension in Western Nepal'. *American Journal of Hypertension* 30, no. 9 (2017): 907–13. <https://doi.org/10.1093/ajh/hpx074>.

Nugent, Rachel, Melanie Y. Bertram, Stephen Jan, Louis W Niessen, Franco Sassi, Dean T. Jamison, Eduardo González Pier and Robert Beaglehole. 'Investing in Non-Communicable Disease Prevention and Management to Advance the Sustainable Development Goals'. *The Lancet* 391, no. 10134 (2018): 2029–35.

Organisation for Economic Co-operation and Development, Paris: OECD Publishing, 2017.

Outcomes Star. 'The Outcomes Star in Australia'. Accessed 30 November 2019. <https://www.outcomesstar.org.uk/about-the-star/international-use-of-the-star/australia/>.

Parry, Thomas and Bruce Sherman. 'Workforce Health--The Transition From Cost to Outcomes to Business Performance'. *Benefits Quarterly* 31, no. 1 (2015): 32–38.

Raymond, S. U., S. Leeder and H. M. Greenberg. 'Obesity and Cardiovascular Disease in Developing Countries: A Growing Problem and an Economic Threat'. *Current Opinion in Clinical Nutrition and Metabolic Care* 9, no. 2 (2006): 111–16.

Robertson, Janet, Steve Beyer, Eric Emerson, Susannah Baines and Chris Hatton. 'The Association between Employment and the Health of People with Intellectual Disabilities: A Systematic Review'. *Journal of Applied Research in Intellectual Disabilities* 32, no. 6 (2019): 1335–48. <https://doi.org/10.1111/jar.12632>.

Salvia, Amanda L. and Luciana L. Brandli. 'Energy Sustainability at Universities and Its Contribution to SDG 7: A Systematic Literature Review'. In *Universities as Living Labs for Sustainable Development*, edited by Walter L. Filho, Amanda L. Salvia, Rudi W. Pretorius, Luciana Londero Brandli,

Evangelos Manolas, Fatima Alves, Ulisses Azeiteiro, Judy Rogers, Chris Shiel and Arminda Do Paco, 29–45. Cham: Springer, 2020.

Sayer, Andrew. *Why Things Matter to People: Social Science, Values and Ethical Life*. New York: Cambridge University Press, 2011.

Shelley KD, Frumence G, Mpembeni R, George AS, Stuart EA, Killewo J, Baqui AH, Peters DH. Can volunteer community health workers manage multiple roles? An interrupted time-series analysis of combined HIV and maternal and child health promotion in Iringa, Tanzania. *Health Policy Plan*. 2018 Dec 1;33(10):1096-1106. doi: 10.1093/heapol/czy104.

Sliwa, Karen, David Wilkinson, Craig Hansen, Lucas Ntyintyane, Kemi Tibazarwa, Anthony Becker and Simon Stewart. 'Spectrum of Heart Disease and Risk Factors in a Black Urban Population in South Africa (the Heart of Soweto Study): A Cohort Study'. *Lancet* 371, no. 9616 (2008): 915–22. [https://doi.org/10.1016/S0140-6736\(08\)60417-1](https://doi.org/10.1016/S0140-6736(08)60417-1).

Stewart, Simon, Wael Al-Delaimy, Karen Sliwa, Magdi Yacoub and Ana Mocumbi. 'Clinical Algorithm to Screen for Cardiopulmonary Disease in Low-Income Settings'. *Nature Reviews Cardiology* 16, no. 1 (2019): 638-41. <https://doi.org/10.1038/s41569-019-0268-0>.

Stewart, Simon, Melinda J. Carrington, Sandra Pretorius, Puthuma Methusi and Karen Sliwa. 'Standing at the Crossroads between New and Historically Prevalent Heart Disease: Effects of Migration and Socio-Economic Factors in the Heart of Soweto Cohort Study'. *European Heart Journal* 32, no. 4 (2011): 492–99. <https://doi.org/10.1093/eurheartj/ehq439>.

Stewart, Simon, Ana O. Mocumbi, Melinda J. Carrington, Sandra Pretorius, Rosie Burton and Karen Sliwa. 'A Not-So-Rare Form of Heart Failure in Urban Black Africans: Pathways to Right Heart Failure in the Heart of Soweto Study Cohort'. *European Journal of Heart Failure* 13, no. 10 (2011): 1070–77. <https://doi.org/10.1093/eurjhf/hfr108>.

Stewart, Simon and Karen Sliwa. 'Preventing CVD in Resource-Poor Areas: Perspectives from the "Real-World"'. *Nature Reviews Cardiology* 6 (2009): 489–92. <https://doi.org/10.1038/nrcardio.2009.79>.

Tebbutt, Emma, Rebecca Brodmann, Johan Borg, Malcolm MacLachlan, Chapal Khasnabis and Robert Horvath. 'Assistive Products and the Sustainable Development goals (SDGs)'. *Globalization and Health*, 12, no. 1, (2016): 1–6. <https://doi.org/10.1186/s12992-016-0220-6>.

Teddle, Charles, and Abbas Tashakkori. "A general typology of research designs featuring mixed methods." *Research in the Schools* 13, no. 1 (2006): 12-28.

Thienemann Friedrich, Anastase Dzudie, Ana O. Mocumbi AO, Lori Blauwet, Mahmoud U. Sani, Kamilu M. Karaye, Kechukwu S. Ogah. 'The Causes, Treatment, and Outcome of Pulmonary Hypertension in Africa: Insights from the Pan African Pulmonary Hypertension Cohort (PAPUCO) Registry'. *International Journal of Cardiology* 221 (2016): 205–11. <https://doi.org/10.1016/j.ijcard.2016.06.242>.

Torr, Jennifer, Andre Strydom, Paul Patti and Nancy Jokinen. 'Aging in Down Syndrome: Morbidity and Mortality'. *Journal of Policy and Practice in Intellectual Disabilities* 7, no. 1 (2010): 70–81. <https://doi.org/10.1111/j.1741-1130.2010.00249.x>.

Torrens University Australia (TUA). *Social Impact Report 2019*. TUA, 2019.

Torrens University Australia (TUA). *Social Impact Report 2021*. TUA, 2021.

Torrens University Australia (TUA). *Torrens University Australia Strategic Research Plan 2021–2025*. TUA, 2020.

Torrens University Australia (TUA). 'TUA Access and Equity Policy'. Accessed 26 July 2021.

<https://laureateaus.sharepoint.com/sites/MyTorrens/SitePages/Operations/Student/Sub-pages/Disability%20Services%20.aspx>.

Torrens University Australia (TUA). *Torrens University Australia Strategic Research Plan 2021–2025*. TUA, 2021.

Trinh-Shevrin, Chau, Nadia S. Islam, Smiti Nadkarni, Rebecca Park and Simona C Kwon. 'Defining an Integrative Approach for Health Promotion and Disease Prevention: A Population Health Equity Framework'. *Journal of Health Care for the Poor and Underserved* 26, no. 20 (2015): 146–63.

United Nations. 'Take Action for the Sustainable Development Goals – United Nations Sustainable Development'. Accessed March 2021. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

United Nations General Assembly. *Transforming Our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1. 21 October 2015. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf.

The World Bank. 'Mozambique'. Accessed March 2021.
<https://data.worldbank.org/country/MZ>.

The World Bank. 'Mozambique Economic Update: Less Poverty, but More Inequality'. Accessed March 2021.
<https://www.worldbank.org/en/country/mozambique/publication/mozambique-economic-update-less-poverty-but-more-inequality>.

Young, H. Peyton. *Equity: In Theory and Practice*. New Jersey: Princeton University Press, 1995.