

The Role of Psychology Towards Sustainable Development Goal 3: Good Health and Wellbeing in South Africa



Ntombophelo Sithole-Tetani ¹ 

¹ Department of Psychology, Walter Sisulu University, South Africa.

ABSTRACT

The 2030 Agenda for Sustainable Development, as it is known, is a call to action to end poverty, protect the planet, and ensure prosperity for all. The third SDG, 'Good Health and Wellbeing,' aims to ensure healthy lives, promote well-being for all ages, and halt and reverse global illnesses such as HIV, tuberculosis, and the COVID-19 pandemic, etc. This paper used a narrative literature review to discuss the role of psychology in SDG3 in the South African Context. A narrative literature review is an extensive joining and assimilation of existing research on a specific issue, providing an overview of major discoveries and their interconnectedness. Findings revealed that despite the significant contributions that can be made by psychology, the barriers to integrating psychology into health systems are as complex as applying a psychological approach to achieving sustainable health outcomes. Barriers are recognized, and their resolution is facilitated within the context of social justice and human rights; the significant roles played by psychology can be enhanced, and the links to vision and TC can be better enabled. Furthermore, In South Africa, the barriers to the seamless integration of psychology into health systems are attributed to a lack of infrastructure, limited resources, and available services, human resources (clinical psychologists), effective training, and existing policies, which need to be addressed by the South African government.

Correspondence

Ntombophelo Sithole-Tetani
Email:
nsithole@wsu.ac.za

Publication History

Received:
22nd October, 2024
Accepted:
12th December, 2024
Published online:
30th December, 2024

Keywords: *Sustainability, SDG3, Development, Health and Wellness, and Well-being.*

INTRODUCTION

De Jong and Vijge highlight that in 2000, the United Nations established the eight Millennium Development Goals to reduce poverty, hunger, maternal and child mortality, diseases, gender inequality, and environmental degradation by 2015.¹ These goals were succeeded by the Sustainable Development Goals in 2016, a more comprehensive and ambitious set of 17 interrelated global goals. The 2030 Agenda for Sustainable Development, as it is known, is a call to action to end poverty, protect the planet, and ensure prosperity for all. The third SDG, 'Good Health and Wellbeing,' aims to ensure healthy lives, promote well-being for all ages, and halt and reverse global illnesses such as HIV, tuberculosis, and the COVID-19 pandemic, etc.² This global agenda of sustainable development is imperative for the working class and poor as it is precisely these groups that we find concentrated in unhealthy communities, in a

¹ Eileen De Jong and Marjanneke J Vijge, "From Millennium to Sustainable Development Goals: Evolving Discourses and Their Reflection in Policy Coherence for Development," *Earth System Governance* 7 (2021): 100087.

² Lars Carlsen and Rainer Bruggemann, "The 17 United Nations' Sustainable Development Goals: A Status by 2020," *International Journal of Sustainable Development & World Ecology* 29, no. 3 (2022): 219–29.

poorly run township or rural hospitals and clinics, and in the working environment where the word 'health' is merely included in the talk-tough proclamations of 'Make South Africa Uninvestment Friendly'. Psychology can play a crucial role in addressing these specific health issues in South Africa by providing psychological counseling, which improves compliance and treatment adherence, addressing mental health stigma, and promoting community resilience in the face of health crises.³

The rapidly changing environment in which South Africans live is characterized by a range of health challenges, such as infectious diseases, poverty-related diseases, and lifestyle-related diseases, ranging from malnutrition, inadequate water and sanitation, and non-existent shelter to high levels of non-communicable diseases such as cardiovascular disease, diabetes, and cancer. The social determinants and root causes of all these challenges lie in power structures and understanding and responding to develop a people-centered care system without prejudice.⁴ Furthermore, the complex and interconnected nature of these health challenges demands that the health goals and targets contained in provincial and district health plans are integrated into multifaceted collaborative alliances that generate collective action for community health. For these reasons, the work below is presented as a pointer to the catalytic role needed to invoke multi-morbidity and engage with broader social determinants of health agenda. It speaks to South African stakeholders' contribution to implementing sustainable development goal three (Good Health and well-being) in the context of South Africa.⁵

An overview of the current health landscape in South Africa is foremost pertinent. As the coronavirus pandemic has continued to impact health service delivery profoundly, it is critical to foreground health systems that have been endemic with challenges long before COVID-19 arrived. Although South Africa's health indicators have improved since 1994, they remain deeply stratified along with wealth and privilege.⁶ Shortfalls in the social determinants of health continue to hamper the country. South Africa remains the "most unequal country in the world". Disparities in health infrastructure and service delivery mirror these socioeconomic imbalances too.⁷

South Africa faces great challenges in public health, from infectious diseases, particularly COVID-19, TB, and HIV, to malnutrition and overnutrition, sugar diabetes, hypertension etc, and finally to changes in diet and exercise leading to chronic diseases. The recent declines in health have come at a time when there are still tremendous socioeconomic inequalities in South Africa.⁸ Migrants move both in and out of South Africa expecting improved opportunities. Like many parts of the world, South Africans also face dual burdens of disease with infectious diseases mingling with non-communicable diseases.⁹ With the end of the official dual system of apartheid, informal townships are slowly being integrated or at least upgraded, creating tremendous problems and opportunities related to health and nutrition. These towns are often places of despair, troubled with high crime levels and adding to their citizenry a culture of demoralization, substance abuse, and, as we have discussed here, malnutrition. Management or resolution of these urban issues will directly influence the success of disease prevention intervention and address SDG3 holistically.¹⁰

The discipline of psychology contributes to understanding how individual, socioeconomic, environmental, and health system factors (micro- and macro-level) shape the likelihood and outcomes of

³ George Halkos and Eleni-Christina Gkampoura, "Where Do We Stand on the 17 Sustainable Development Goals? An Overview on Progress," *Economic Analysis and Policy* 70 (2021): 94–122.

⁴ Sanet Van Zyl, Willem H Kruger, and Corinna M Walsh, "Chronic Diseases of Lifestyle Curriculum: Students' Perceptions in Primary Health Care Settings," *African Journal of Primary Health Care & Family Medicine* 15, no. 1 (2023): 3775.

⁵ Ahmad Alkhatib et al., "Preventing Multimorbidity with Lifestyle Interventions in Sub-Saharan Africa: A New Challenge for Public Health in Low and Middle-Income Countries," *International Journal of Environmental Research and Public Health* 18, no. 23 (2021): 12449.

⁶ B Malakoane et al., "Public Health System Challenges in the Free State, South Africa: A Situation Appraisal to Inform Health System Strengthening," *BMC Health Services Research* 20 (2020): 1–14.

⁷ Mbhekeni Sabelo Nkosi, "Political Economy and the Socio-Cultural History of Land Dispossession, Proselytization, and Proletarianization of African People in South Africa: 1488–1770 (Part 1)," *Philosophical Perspectives on Land Reform in Southern Africa*, 2021, 39–59.

⁸ Emily B Wong et al., "Convergence of Infectious and Non-Communicable Disease Epidemics in Rural South Africa: A Cross-Sectional, Population-Based Multimorbidity Study," *The Lancet Global Health* 9, no. 7 (2021): e967–76.

⁹ World Health Organization, *Guidance on Community Mental Health Services: Promoting Person-Centred and Rights-Based Approaches* (World Health Organization, 2021).

¹⁰ Malakoane et al., "Public Health System Challenges in the Free State, South Africa: A Situation Appraisal to Inform Health System Strengthening."

health, disease, and well-being.¹¹ Social determinants of health (SDHs) contribute an estimated 20% of stress-related illness and 70% of the burden of diseases, including chronic diseases. Cannizzaro et al. echoed that stress can be acute (short-lasting) or chronic (repetitive or occurring over an extended period of time).¹² Under chronic stress conditions, the body remains in a constant state of 'overdrive', which causes deleterious effects on the regulation of stress response systems and various organs. Therefore, Socio-psychological models of coping behavior demonstrate the association between stressful life events and the potential to persevere and resist contracting various non-communicable diseases. Stress contributes to early aging and decreases lifespan while affecting the healthy quality of life.¹³

Behavioural aspects of health: One of the challenges expressed in SDG 3 is the lower mortality rate and a long list of comorbidities, injuries, and traumas which have profoundly described the definition of "well-being" in positive health parameters, such as the World Health Organization (WHO) decision that mentioned good cognitive function and psychological responsiveness.¹⁴ This turns the attention from first coping with disease and infirmity to how we can prevent bodily and behavioural problems by caring for the mind. Epidemiological studies have echoed the body as a reflection of the mind and have been hailed as progress by showing clear associations between mental illness and chronic physical disease. Public health psychology emphasizes the management of unhealthy thoughts, feelings, emotions, personal resources, and decision-making behaviours while emphasizing that health and well-being protect the individual from the disease and help the individual connect with health and recovery following infirmity.¹⁵ The WHO, is of the view that the overlap of the objectives of psychology with those of health has occurred in various specialist psychological interventions to manage physical and mental health associated with non-communicable diseases and some communicable diseases, e.g., stroke, epilepsy, and cancer.¹⁶

The growing specialty, systemic psychology, is aimed at those who address emotional support through suggested adherence to long-term treatment conditions, such as hypertension and diabetes, at the family or group level while studying the socio-cultural factors associated with resilience and depression for different communities.¹⁷ Psychoeducation and Patient education teach behavior management cognitive-based models to manage chronic care diseases, e.g., asthma, abdominal obstructive airways, congestive heart failure, chronic backache, Type 2 diabetes type, chronic arthritis, systemic (connective tissue) diseases of the heart and other organs.¹⁸

The paper, therefore, aims to redefine the role of psychology in SDG3 in South Africa and the global south, focusing on three key areas: applying the human rights perspective, emphasizing the local importance of health and wellbeing, and comparing medical and psychological healthcare models. The article will highlight and celebrate psychology's unique contributions to healthcare and well-being, offering an enlightening perspective. These include its focus on prevention, promotion, and the holistic understanding of health and its ability to address mental health issues, promote behavior change, and provide support in crises. This work presents psychology as a powerful tool for achieving the sustainable development goal of good health and well-being, offering hope and optimism for the future.¹⁹

Das et al. have argued that when SDG 3 is considered from a South African perspective, health and well-being are important as locally relevant issues, given their importance in attaining the sustainable

¹¹ Sarah K Wise et al., "Rhinitis Disease Burden and the Impact of Social Determinants of Health," *The Journal of Allergy and Clinical Immunology: In Practice* 12, no. 6 (2024): 1449–61.

¹² Emanuele Cannizzaro et al., "Night-Time Shift Work and Related Stress Responses: A Study on Security Guards," *International Journal of Environmental Research and Public Health* 17, no. 2 (2020): 562.

¹³ Wise et al., "Rhinitis Disease Burden and the Impact of Social Determinants of Health."

¹⁴ World Health Organization, *Guidance on Community Mental Health Services: Promoting Person-Centred and Rights-Based Approaches*.

¹⁵ World Health Organization, *Improving Early Childhood Development: WHO Guideline* (World Health Organization, 2020).

¹⁶ World Health Organization, *Guidance on Community Mental Health Services: Promoting Person-Centred and Rights-Based Approaches*.

¹⁷ World Health Organization, *WHO Guidelines on Mental Health at Work* (World Health Organization, 2022).

¹⁸ Dainius Puras, "Report of the Special Rapporteur on the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health," *Phil. LJ* 95 (2022): 274; World Health Organization, *WHO Guidelines on Mental Health at Work*.

¹⁹ Donna Allen, Deb Carlson, and 'Chelle Ham, "Well-Being: New Paradigms of Wellness—Inspiring Positive Health Outcomes and Renewing Hope," *American Journal of Health Promotion* 21, no. 3 (2007): 1–12.

development goal of good health and well-being.²⁰ This paper further suggests that a psychological approach can be pivotal in achieving SDG 3 in South Africa. Therefore, this essay strongly emphasizes the importance of positioning the right to health, well-being, and happiness using a local framework. The researcher believes that this local framework is not just a theoretical construct, but a practical tool that can help us understand and address health and well-being issues in distressed, non-western, marginalized, and resource-scarce communities in South Africa, providing reassurance and confidence in its applicability.²¹

METHODOLOGY

This paper used a narrative literature review to discuss the role of psychology in SDG3 in the South African Context. A narrative literature review is an extensive joining and assimilation of existing research on a specific issue, providing an overview of major discoveries and their interconnectedness. Therefore, the researcher employed a narrative literature review to find and analyse the literature. As elucidated earlier, the narrative literature review is an extensive consolidation and integration of existing research on a specific issue. For the current study, the researcher consolidated and integrated existing research on SDG3, health, and wellness, providing an overview of major discoveries and their interconnections using a narrative structure devoid of structured meta-analysis to delineate the factors contributing to health and wellness. When a researcher synthesizes, he/she organizes similar ideas so readers can understand how they overlap. This process assists in showing where the researcher's voice or ideas are incorporated into existing knowledge.²²

The data was gathered through desktop research using search engines such as Google Scholar, Ebscohost, YouTube, Lib-guides, Research Gate, etc. The researcher also relied on secondary data, which gave rise to heterogeneous sources, including empirical monographs, books, theses, and journal articles. The researcher also had informal conversations with colleagues from different stakeholders about their understanding of SDG3 and the role of psychology in achieving this goal. Data for this study was also solicited from articles found on Google Scholar that were searched through desktop research using various data sources, including books, dissertations, and journal articles. The sources were deemed advantageous and provided reliable information for this discussion paper. According to Mastrodicasa and Metellus, large amounts of data used in this paper are posted on various websites.²³

The collected data files were analysed through content analysis through the following process: The researcher developed her research questions and chose the content she wanted to analyse from the collected files. Thirdly, the process of identifying biases followed. Lastly, the researcher defined the units and categories of coding, and the text was coded into manageable content categories. This process assisted in ensuring the validity and reliability of the current study, which would be repeated many times and give the same results. Data was stored according to file naming schemes: Sustainability, SDG3, development, health and wellness, and Well-being. This method is also supported by Creswell for tracking data collected to answer research questions.²⁴ While about 20 articles were reviewed, only 15 were found relevant to assist in synthesizing and developing themes discussed below.

PRESENTATION OF FINDINGS

Key Health Challenges

With high levels of poverty and inequality, South Africa's healthcare system is divided into public and private care. Approximately 80% of South Africans depend on the public healthcare sector, where there are shortages of healthcare providers, specifically in rural areas, as well as long queues and waiting

²⁰ Kirti V Das et al., "Understanding Subjective Well-Being: Perspectives from Psychology and Public Health," *Public Health Reviews* 41 (2020): 1–32.

²¹ Meiai Chen, Eila Jeronen, and Anming Wang, "Toward Environmental Sustainability, Health, and Equity: How the Psychological Characteristics of College Students Are Reflected in Understanding Sustainable Development Goals," *International Journal of Environmental Research and Public Health* 18, no. 15 (2021): 8217.

²² J. Creswell, *Qualitative Inquiry and Research Design: Choosing among Five Approaches*, 2nd ed. (Thousand Oaks, CA: Sage Publications, Inc., 2013).

²³ Jeanna Mastrodicasa and Paul Metellus, "The Impact of Social Media on College Students," *Journal of College and Character* 14, no. 1 (2013): 21–30.

²⁴ Creswell, *Qualitative Inquiry and Research Design: Choosing among Five Approaches*.

times.²⁵ Healthcare is provided at no cost to the poorest of the poor, except for a means test payable to the hospitals. South Africa faces an increasing burden of infectious diseases, such as tuberculosis (including drug-resistant TB), pneumonia, enteric fevers, blood-borne infections, and zoonotic diseases like rabies, as well as non-communicable diseases related to urbanization and lifestyle (e.g. the quadruple burden of disease comprising both non-communicable and communicable conditions and maternal, perinatal, and nutritional conditions).²⁶ While the country surpassed MDG targets for reducing child mortality and improving maternal health, the absolute number of maternal and child deaths has not shown as impressive a reduction. One in ten South African children dies before they reach their fifth birthday, with malnutrition playing a contributing factor in about 46% of these deaths. Other health concerns include the high incidence of gender-based violence (GBV). South Africa has the highest rate of intimate partner femicide in the world, and around 40% of men have admitted to raping or sexually assaulting a woman. Over 3,000 people died of COVID-19-related illnesses in the second quarter of 2022 alone, and another 90,000 HIV and AIDS infections were recorded, with more than 36,000 of them among adolescent girls and young women. Unintended pregnancy also remains a public health issue, 56% of which occurs in the 15-29-year-old age group, with pregnancy complications being the leading cause of death for girls aged 15-19 in South Africa.²⁷

Health Disparities and Inequalities

South Africa widely differs in terms of development and economy between urban and rural populations. As a result, health disparities and unequal access to healthcare facilities and resources within the same region exist. The disparity and inequalities in health status and access to health care resources are not only among various geographical regions of the country but between marginalized groups too.²⁸

According to the Reproductive Health and HIV Research Unit (RHRU) in South Africa, 80% of the healthcare resources are in urban areas, where only 40% of the population resides.²⁹ Malnutrition, communicable diseases, maternal, neonatal, and perinatal deaths, in particular, AIDS-related diseases, are the major determinants of high death rates. Even though they present as a result of social issues such as poverty, racial inequalities, and the HIV and AIDS pandemic, these are also linked to unplanned pregnancies in teenagers who may, because of societal and personal issues, self-medicate, self-harm, and have no antenatal care or services available to them. Unplanned pregnancy and natural miscarriages are also legal reasons why intimate partner and family violence is used against females.³⁰

Understanding the Role of Psychology in Promoting Health and Wellbeing

Psychological determinants are the key elements that influence individual health outcomes, especially in life stressors, conditions, and circumstances in people's lives and environment. An environment where a person is coming from should be free of stressors to strengthen the quality of life and sustain acceptable well-being. A study conducted by Migina et al. revealed that more than half of their study population reported professional burnout, namely exhaustion, depersonalization, and lack of personal achievement. They found a statistically significant relationship between emotional and psychological exhaustion and job location, employee status, Depersonalization, and employee status and position.³¹ This is evidence that the role of psychology is prominent in dealing with SDG 3 because regular psychological sessions and psychoeducation would reduce professional burnout. Psychology plays a substantive role in

²⁵ Malakoane et al., "Public Health System Challenges in the Free State, South Africa: A Situation Appraisal to Inform Health System Strengthening."

²⁶ Victor Ngobeni, Marthinus C Breitenbach, and Goodness C Aye, "Technical Efficiency of Provincial Public Healthcare in South Africa," *Cost Effectiveness and Resource Allocation* 18 (2020): 1–19.

²⁷ Ijeoma P Edoka and Nicholas K Stacey, "Estimating a Cost-Effectiveness Threshold for Health Care Decision-Making in South Africa," *Health Policy and Planning* 35, no. 5 (2020): 546–55.

²⁸ Tanja Gordon, Frederik Booyen, and Josue Mbonigaba, "Socio-Economic Inequalities in the Multiple Dimensions of Access to Healthcare: The Case of South Africa," *BMC Public Health* 20 (2020): 1–13.

²⁹ Katusha de Villiers, "Bridging the Health Inequality Gap: An Examination of South Africa's Social Innovation in Health Landscape," *Infectious Diseases of Poverty* 10 (2021): 1–7.

³⁰ Ana-Catarina Pinho-Gomes, Sanne A E Peters, and Mark Woodward, "Gender Equality Related to Gender Differences in Life Expectancy across the Globe Gender Equality and Life Expectancy," *PLOS Global Public Health* 3, no. 3 (2023): e0001214.

³¹ Lyudmila Migina et al., "Professional Burnout in Primary Health Care Workers of the Republic of Kazakhstan," *Clinical Epidemiology and Global Health* 23 (2023): 101359.

promoting health and well-being as it contributes to interaction with 'context', i.e., the environment where people are located.³² This concept also goes hand-in-hand with the WHO constitution, which describes health as having a broader look in terms of extending the atmosphere and the context where people are located.

The WHO constitution, which states that health is "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity," underscores this effort of psychology's four couples addressing indicators that speak best in the US's deliverance on SDG3, which aims to ensure healthy lives and promotes well-being for all at all ages.³³ According to Chen and Antonelli, discussing these determinants in detail is important to expand our understanding and argue that the concept has a substantive link between psychology and health.³⁴ Psychological determinants include thoughts and beliefs pertinent to enriching through adopting healthier lifestyle decisions, practices, and behaviors that maximize and improve health outcomes. Lifestyle choices refer to 'how' individuals conduct themselves and 'what' activities they habitually perform daily, such as using substances (alcohol, illicit drugs, and smoking tobacco) and the individual's muscle training exercises and sleep hygiene routines. These choices compound the overall individual's well-being in promoting or preventing the onset of diseases and illnesses.³⁵ Other psychological determinants include the level, the perceived and lived vulnerabilities, the feelings, and the beliefs stemming from individual mental states and psychological conditions in facing obstacles and adversities or everyday circumstances. These are influenced by the context, which includes the availability and accessibility of healthcare services. They also entail the degree to which communities and societies provide resources that help reduce differences between people and impact determinants of health.³⁶

Psychological Determinants of Health and Wellbeing

Health and well-being are multidimensional phenomena influenced by a range of factors. Although research indicates that health and well-being are driven not only by the absence of diseases and distress but also by physical, psychological, and social factors, biomedicine often reduces them to these dimensions.³⁷ The biomedical approach, however, is at variance with Article 25 of the United Nations' Universal Declaration of Human Rights (1948), which identifies health as a fundamental human right "to enjoy the highest attainable standard of physical and mental health" and targets for improvement in United Nations' Agenda for Sustainable Development, particularly in Sustainable Development Goal 3 in general, and SDG 3 (3.4-3.5) in particular.³⁸ A multi-disciplinary understanding of health and overall well-being ensures that relevant elements that contribute to human and societal sustainability are fully embraced and addressed in research and policy.³⁹

In South Africa, various psychological determinants contribute to individuals achieving positive health outcomes and sustainable well-being. Factors that contribute to individuals experiencing depression, anxiety, and other mood disorders, for example, form part of the anxiety and mood patient assessment scale.⁴⁰ Fuelled by primordial African perspectives on health and negative African contexts such as South Africa with the high levels of physical, psychological, societal, and environmental diseases

³² Tiffany M Powell-Wiley et al., "Social Determinants of Cardiovascular Disease," *Circulation Research* 130, no. 5 (2022): 782–99.

³³ Nikos Ntoumanis et al., "A Meta-Analysis of Self-Determination Theory-Informed Intervention Studies in the Health Domain: Effects on Motivation, Health Behavior, Physical, and Psychological Health," *Health Psychology Review* 15, no. 2 (2021): 214–44.

³⁴ Pin-Jane Chen and Marta Antonelli, "Conceptual Models of Food Choice: Influential Factors Related to Foods, Individual Differences, and Society," *Foods* 9, no. 12 (2020): 1898.

³⁵ Ntoumanis et al., "A Meta-Analysis of Self-Determination Theory-Informed Intervention Studies in the Health Domain: Effects on Motivation, Health Behavior, Physical, and Psychological Health."

³⁶ Meeke Hoedjes, Inge Nijman, and Chris Hinnen, "Psychosocial Determinants of Lifestyle Change after a Cancer Diagnosis: A Systematic Review of the Literature," *Cancers* 14, no. 8 (2022): 2026.

³⁷ Das et al., "Understanding Subjective Well-Being: Perspectives from Psychology and Public Health."

³⁸ Das et al., "Understanding Subjective Well-Being: Perspectives from Psychology and Public Health."

³⁹ Nandini Karunamuni, Ikuyo Imayama, and Dharshini Goonetilleke, "Pathways to Well-Being: Untangling the Causal Relationships among Biopsychosocial Variables," *Social Science & Medicine* 272 (2021): 112846.

⁴⁰ S Van der Walt et al., "The Burden of Depression and Anxiety among Medical Students in South Africa: A Cross-Sectional Survey at the University of Cape Town," *South African Medical Journal* 110, no. 1 (2020): 69–79.

or negativities, this paper is an attempt to explicate how a greater recognition of psychological determinants can contribute to the achievement of SDG 3 in South Africa.⁴¹

DISCUSSION

Health Challenges and Future Directions

Health is essential for individual well-being and socioeconomic growth. A health profile is a set of health issues that are a challenge in every country. South Africa has a unique health profile dictated by its location and history. The country is challenged by the burden of disease, which consists of communicable diseases, non-communicable diseases, and injuries.⁴² Key health challenges in South Africa include HIV/AIDS, tuberculosis, maternal and child health, non-communicable diseases, and universal access to health care. The overall health profile of South Africa and the role of psychology in addressing SDG3 will be described, emphasizing the unique health challenges faced by the country.⁴³ In terms of today's health profile, the World Health Organization (WHO) describes the global burden of disease and disability. It is estimated that 12 million people die from one or more of seven diseases: tuberculosis, HIV/AIDS, road injuries, unipolar depressive disorders, falls, complications of childbirth, and schizophrenia.⁴⁴ Further, it is estimated that 8 million people lose their disability-adjusted life years (DALYs) with one or more of 13 diseases: schizophrenia, obstetric conditions, substance abuse, road injuries, diabetes mellitus, war injuries, unipolar depressive disorders, cervical cancer, breast cancer, hypertension, asthma, and low birth weight.⁴⁵

Socioeconomic Determinants of Health are another challenge faced by SA health: Malakoane and colleagues, 2020 argued that the chronic disease burden, alongside the double burden of communicable and non-communicable diseases, prompts difficult socioeconomic circumstances for the public health system. South Africa's health system is characterized by limited public healthcare funding for a relatively large pool of users, alongside high-cost private healthcare, which serves only a small proportion of the population. Regardless of widespread exercise and nutrition literature, obesity is still a relevant health concern for this population and directly affects diabetes, hypertension, cancers, and cardiovascular disease. With this population group being urban, previously disadvantaged, and low-income, understanding the relationships between socioeconomic status, health behavior, weight, and health will delineate the social determinants of health that could further improve and tailor education efforts.⁴⁶

Despite the significant contributions that can be made by psychology, the barriers to integrating psychology into health systems are as complex as the application of a psychological approach to enabling the attainment of sustainable health outcomes. Barriers are recognized, and their resolution is facilitated within the context of social justice and human rights; the significant roles played by psychology can be enhanced, and the links to vision and TC can be better enabled.⁴⁷ The researcher believes that (1) in considering the state of progress, current research trajectories being pursued in the South African context following psychology's contribution towards SDG3 needs to be universal in application and the domain of Health and psychology; (2) interventions to support the target of SDG3 have been relatively neglected both for research simulation and actual intervention; and thus (3) integrating psychology more overtly into health and medical systems may facilitate the outreach of more comprehensive strategies, but psychology can play a more critical role in non-health contexts (unchanging) FIGO-accredited MDG1

⁴¹ Thejini Naidoo, Andrew Tomita, and Saeeda Paruk, "Burnout, Anxiety and Depression Risk in Medical Doctors Working in KwaZulu-Natal Province, South Africa: Evidence from a Multi-Site Study of Resource-Constrained Government Hospitals in a Generalised HIV Epidemic Setting," *PLoS One* 15, no. 10 (2020): e0239753.

⁴² C Mutyambizi et al., "Effect of COVID-19 on HIV, Tuberculosis, and Prevention of Mother-to-Child Transmission of HIV Indicators in Mopani District, South Africa," *South African Medical Journal* 111, no. 12 (2021): 1181–89.

⁴³ Tom Achoki et al., "Health Trends, Inequalities and Opportunities in South Africa's Provinces, 1990–2019: Findings from the Global Burden of Disease 2019 Study," *J Epidemiol Community Health* 76, no. 5 (2022): 471–81.

⁴⁴ Leena Susan Thomas, Eric Buch, and Yogan Pillay, "An Analysis of the Services Provided by Community Health Workers within an Urban District in South Africa: A Key Contribution towards Universal Access to Care," *Human Resources for Health* 19 (2021): 1–11.

⁴⁵ Mutyambizi et al., "Effect of COVID-19 on HIV, Tuberculosis, and Prevention of Mother-to-Child Transmission of HIV Indicators in Mopani District, South Africa."

⁴⁶ Elliot Mbunge, "Effects of COVID-19 in South African Health System and Society: An Explanatory Study," *Diabetes & Metabolic Syndrome: Clinical Research & Reviews* 14, no. 6 (2020): 1809–14.

⁴⁷ Siphelele Nguse and Douglas Wassenaar, "Mental Health and COVID-19 in South Africa," *South African Journal of Psychology* 51, no. 2 (June 8, 2021): 304–13, <https://doi.org/10.1177/00812463211001543>.

projects now expanded to include strategies for enabling disability rights and promoting educational success.⁴⁸

Health Equality and Inequality

The South African healthcare system challenges most aspects of the sector. The magnitude of the human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) pandemic, the seriousness of tuberculosis (TB) scourge particularly given the concomitant threat of tuberculosis and human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome, a population exploding through the destructive mix of youth, unhealthy lifestyles, and the various health problems associated with rural poverty, require that the government redress disparities in order to meet developmental goals. However, the demands and limited resources mean serious choices must be made.⁴⁹ Health inequalities in South Africa are determined based on predetermined socio-economic, demographic, and geographic characteristics. South Africa is one of the most unequal countries globally, revealing the people who own and control beneficial and productive social resources. Furthermore, indicators such as education, wealth, income, occupation, and residence associated with health disparities mostly overlap.⁵⁰

Despite having Primary Health Care (PHC) as the shared vision in the constitution, several issues hinder the attainment of equitable, accessible, and improved quality health. Attention should be paid to the effectiveness of the country's essential healthcare service package implementation.⁵¹ Emerging health challenges modifying the health needs of the population and widening health inequalities along with socio-economic status, geographic location, and residence are disregarded. Health issues should be highlighted, along with thorough evidence and interpretation. Health status is also linked to living conditions, environments, vulnerability to diseases, and disability.⁵²

Barriers to Integrating Psychology into Health Systems

In South Africa, the barriers to the seamless integration of psychology into health systems can be attributed to the following reasons, among others: lack of infrastructure, limited resources and available services, human resources (clinical psychologists), effective training, and existing policies.⁵³ The first barrier, concerning the lack of infrastructure, can be understood as limited availability, not always accessible or available. There are constraints in the services offered and the exclusion of a multi-disciplinary team handling interventions. Unfortunately, the national health system in South Africa does not always provide a 'fair' opportunity for individuals to have a multi-disciplinary approach to healthcare. This can be seen in various medical conditions.⁵⁴ The point here is that the person should be approached holistically, not as separate psychological and medical entities, and there is no grading or hierarchizing of practitioners.⁵⁵ The corollary is also a fundamental point concerning effective training of clinical psychologists. The first is what has been mentioned many times. It is a failure to see the bigger social picture. The current training of psychologists in South Africa, particularly non-black traditional models of clinical psychology education, locates the individual inter-subjective. The training focuses on how individual-to-individual relationships can develop. A very fundamental point is convincing one that the best treatment for anxiety is love.⁵⁶

⁴⁸ Nguse and Wassenaar, "Mental Health and COVID-19 in South Africa."

⁴⁹ Peggy Achieng Onyango, Daniel Ter Goon, and Ntombana Mc'Deline Rala, "Knowledge, Attitudes and Health-Seeking Behaviour among Patients with Tuberculosis: A Cross-Sectional Study," *The Open Public Health Journal* 13, no. 1 (2020).

⁵⁰ Onaiwu T Ohiengbomwan et al., "Cross-sectional Community-based Assessment of Knowledge, Attitude and Practices on Tuberculosis in Osun State, South-west, Nigeria," *Health & Social Care in the Community* 30, no. 5 (2022): e3171–83.

⁵¹ David S Barnes, *The Making of a Social Disease: Tuberculosis in Nineteenth-Century France* (Univ of California Press, 2023).

⁵² Barnes, *The Making of a Social Disease: Tuberculosis in Nineteenth-Century France*.

⁵³ Gbotemi Bukola Babatunde, Arvin Bhana, and Inge Petersen, "Planning for Child and Adolescent Mental Health Interventions in a Rural District of South Africa: A Situational Analysis," *Journal of Child & Adolescent Mental Health* 32, no. 1 (2020): 45–65.

⁵⁴ Nguse and Wassenaar, "Mental Health and COVID-19 in South Africa."

⁵⁵ Sharon Kleintjes et al., "Strengthening the National Health Insurance Bill for Mental Health Needs: Response from the Psychological Society of South Africa," *South African Journal of Psychology* 51, no. 1 (2021): 134–46.

⁵⁶ Kleintjes et al., "Strengthening the National Health Insurance Bill for Mental Health Needs: Response from the Psychological Society of South Africa."

Psychological Interventions and Strategies

Yuyun et al. argue that non-communicable and chronic diseases have an enormous impact on both individuals and national economies regarding healthcare expenditure and work absenteeism.⁵⁷ It is reported that stroke and heart attack are some of the most common chronic illnesses in South Africa. As a result, men, women, and children alike are experiencing increased levels of stress, anxiety, and depression.⁵⁸ Given that these are highly treatable mental health problems, one cannot ignore how improving mental health can benefit individuals and societies at large. Therefore, from a health systems perspective, managing mental well-being can slow the progression of these diseases and create better health outcomes for patients, either by facilitating earlier diagnosis and treatment or as an adjunct to treating physical diseases.⁵⁹

Future South African intervention and strategy planning must integrate psychological and biophysical approaches; otherwise, the country will never effectively address its triple disease burden. For psychological intervention and strategies, the management of the major problems affecting the country, such as COVID-19, HIV infection, tuberculosis, violence, road traffic accidents, and drug and alcohol addiction, should be addressed through psychological interventions.⁶⁰ Psychologists who can work within or complement primary healthcare services linked to the NHI should be trained and capacitated at departmental and country levels if research supports their utility. Psychological interventions aimed at peace and the reduction of violence in South Africa are desperately needed, including providing support to individuals when violence occurs and developing interventions to address the social, community, and structural factors that are the breeding grounds of violence and gender-based violence.⁶¹

Community-Based Mental Health Programs

In recent years, there has been a focus on district-based mental health programs as well as local-based programs. Mpumalanga is a province that is served by various mental health teams that provide specialist and support services at its psychiatric hospitals that serve its catchments.⁶² Transnational services are provided specifically as part of community-based mental health programs and the comprehensive health package to provide appropriate care to the populations within these areas.⁶³ Two examples of community-based mental health programs have been included, illustrating the scope and outcomes of services provided. Given that the recommendations request a focus on learning, another reason for including these particular cases is that the program relied entirely on new collaborating partners providing core mental health services for the first time. It can, therefore, be said to be a unique model of collaboration seeking improved psychology education and practice.⁶⁴

Family orientation days were held for children attending schools involved in the education program. These days were designed to create a supportive and empowering learning environment to strengthen the family.⁶⁵

⁵⁷ Matthew Fomonyuy Yuyun et al., "Cardiovascular Diseases in Sub-Saharan Africa Compared to High-Income Countries: An Epidemiological Perspective," *Global Heart* 15, no. 1 (2020).

⁵⁸ Peter M Mphahlele et al., "Hypertension Prevalence and Determinants among Black South African Adults in Semi-Urban and Rural Areas," *International Journal of Environmental Research and Public Health* 17, no. 20 (2020): 7463.

⁵⁹ Leopold Ndemnge Aminde et al., "Estimation and Determinants of Direct Medical Costs of Ischaemic Heart Disease, Stroke and Hypertensive Heart Disease: Evidence from Two Major Hospitals in Cameroon," *BMC Health Services Research* 21 (2021): 1–13.

⁶⁰ Dörte Bemme and Laurence J Kirmayer, "Global Mental Health: Interdisciplinary Challenges for a Field in Motion," *Transcultural Psychiatry* (Sage Publications Sage UK: London, England, 2020).

⁶¹ Bronwynne J Coetzee et al., "Re-Visiting the Relevance and Importance of Health Psychology in South Africa," *South African Journal of Psychology* 53, no. 1 (2023): 57–67.

⁶² Cheryl Nelson and Sphiwe Madiba, "Barriers to the Implementation of the Ward-Based Outreach Team Program in Mpumalanga Province: Results from Process Evaluation," *Journal of Primary Care & Community Health* 11 (2020): 2150132720975552.

⁶³ Nelson and Madiba, "Barriers to the Implementation of the Ward-Based Outreach Team Program in Mpumalanga Province: Results from Process Evaluation."

⁶⁴ Sophie Witter et al., "Opening Decision Spaces: A Case Study on the Opportunities and Constraints in the Public Health Sector of Mpumalanga Province, South Africa," *Plos One* 19, no. 7 (2024): e0304775.

⁶⁵ Nene, *School-Based Support Teams' Experiences in Identifying and Supporting Vulnerable Learners in Rural Schools of Mpumalanga Province*.

Psychological Support in Healthcare Settings

There are well-planned infant mental health programs in universal healthcare systems in the UK. Children living in South Africa face a disproportionately higher range of risk factors compared with rich countries. They would benefit greatly from state investment to promote good mental health.⁶⁶ Another psychological support identified addresses the development and evaluation of a two-tier psychological treatment for emetophobia (fear of vomiting) that can be delivered in low-resource countries such as South Africa. This work has potential benefits to the individual but also has important public health benefits. Functional gastrointestinal disorders are associated with poor psychological and physical health, resulting in healthcare utilization. Fear of vomiting (emetophobia) is a common feature of this and is described as being highly prevalent in South Africa. This fear can greatly increase the distress from these common gut symptoms.⁶⁷ In the developed world, people with emetophobia are reluctant to consult their primary care physician. Even after repeated investigations to exclude organic disease, many people still have symptoms (45%), suffer from a reduced quality of life (25%), and have either been diagnosed as having non-gastrointestinal symptoms (45%) or discharged (25%). Kerry and Gurbutt, are of the view that it has been proven that psychologically based programs can substantially improve the quality of life of those with emetophobia.⁶⁸

Psychological Determinants of Health

A healthy population is a fundamental precondition for reaching economic and social goals. The Xhosa ethnic group population, which resides primarily in the eastern part of South Africa, has a multitude of sociolinguistic and cultural traditions that differ from other ethnic groups. This combination of cultural and socio-ecological contextual factors can affect the perception of health, health risk behaviors, and coping strategies. Nonetheless, the Western vision of a healthy individual has dominated in South Africa, and the perception of mental well-being as health is rarely used. Understanding the cultural and local meanings of quality of life can provide better insights into the needs and expectations for health.⁶⁹

Stress and Coping Mechanisms

Stress, generally defined as a discrepancy between environmental demands and the resources available to cope with those demands, is a significant concern in South Africa due to issues related to poverty, unemployment, violence, health issues, and political changes. For instance, in an attempt to reduce poverty, low-income households have relocated to the outskirts of cities. There, they reside in informal settlements without access to basic amenities such as electricity, water, sanitation, schools, stores, or transportation. Those communities are often affected by crime and violence, and people often spend hours traveling to work. These changes represent increased environmental demands and can be expected to lead to increased stress.⁷⁰

In a study conducted by Van Warmelo and Manona, there is much evidence that the living conditions of low-income South Africans expose people to high levels of stress, which could lead to increased paranoia when coupled with risk factors. It is, however, also important to consider the individual's resources.⁷¹ It is expected that beliefs regarding whether stress is manageable (locus of control) and whether it has positive or negative effects (benefit finding) represent stress-coping resources. Locus of control or expectancies regarding control has been found to be related to paranoia. Instead of perceiving life events as beyond their control, individuals who have an internal locus of control would be more likely to make active efforts to cope with those events.⁷²

⁶⁶ Benn Sartorius et al., "Spatial-Temporal Trends and Risk Factors for Undernutrition and Obesity among Children (< 5 Years) in South Africa, 2008–2017: Findings from a Nationally Representative Longitudinal Panel Survey," *BMJ Open* 10, no. 4 (2020): e034476.

⁶⁷ Hannah Jane Kerry and Russell Gurbutt, "Dimensions of Living with Emetophobia," *Mental Health and Social Inclusion*, 2024.

⁶⁸ Kerry and Gurbutt, "Dimensions of Living with Emetophobia."

⁶⁹ Sibulele Nombebe, "Distinctive Cultural Attitudes of Xhosa People towards Adoption" (North-West University (South-Africa), 2023).

⁷⁰ Mthokozisi Moyo and Agnes Nombembe, "The History of Xhosa Toponyms in Mbembesi," *Marang: Journal of Language and Literature* 35 (2022).

⁷¹ Nicolaas J Van Warmelo, "The Classification of Cultural Groups," in *The Bantu-Speaking Peoples of Southern Africa* (Routledge, 2024), 56–84; C W Manona, "Ethnic Relations in the Ciskei," in *Ciskei* (Routledge, 2022), 97–121.

⁷² Van Warmelo, "The Classification of Cultural Groups"; Manona, "Ethnic Relations in the Ciskei."

RECOMMENDATIONS

Using the availability of human resources to strengthen existing primary healthcare systems has the potential to break down some of the resistance that healthcare workers express toward adopting a more psychologically informed practice.⁷³ Evidence suggests that art and play therapy and group work can promote resources, including resilience and social support, that enhance conditions necessary for sustainable human development and thereby contribute to the realization of SDG3. More particularly, interventions that foster an active internal locus of control, emotional literacy, and greater "take-charge" ability will enhance clarity of thought and facilitate optimal information processing, enabling better decision-making.⁷⁴ Given the multi-faceted nature of the healthcare settings and the recognition that different sectors aim to achieve similar goals, integrated care models that foster collaboration in the implementation process are more likely to translate into policy and uptake.⁷⁵

CONCLUSION

The convergence of psychology and SDG3 in South Africa highlights the urgent need to prioritize both physical and mental health as fundamental elements of holistic well-being. Mental health awareness is crucial; it involves not only educating the public about mental health issues but also reducing the stigma attached to seeking help. Engaging with communities means actively listening to their unique challenges and perspectives, ensuring that solutions are tailored to their specific needs. Furthermore, advocating for supportive policies is essential in creating an environment where mental and physical health services are accessible and effective for all individuals. This includes addressing social determinants of health such as poverty, education, and employment, which significantly influence the overall health of communities. Psychology has the potential to make a profound impact on achieving SDG 3 by 2030, but this requires the concerted efforts of psychologists, healthcare providers, policymakers, and community leaders. A collaborative approach will be vital to overcoming the myriad challenges currently faced in the sector, thereby transforming the health landscape in South Africa into one that promotes the well-being of all its citizens.

Suggestions for Future Research

The identified barriers to the role of psychology include a lack of adequate human resource capacity to engage in research and policy development, resistance by practitioners to evidence-based practice, and existing political tensions between dispositional and situational explanations of social behavior. In the future, context-specific and more generalizable research should be conducted to comprehensively understand the healthcare system, evaluation processes, and challenges impeding progress in realizing SDG3 within and across communities.⁷⁶ As shown in the results, there was a substantial lack of knowledge among various levels of management as to the role of psychology and other non-communicable disease-related work in supporting those goals. This can be addressed through interaction with the broader government and organizational level priorities of many communities, thus integrating the role of psychology and, ultimately, those working toward achieving SDG3 on nationwide and organizational agendas.⁷⁷

BIBLIOGRAPHY

Achoki, Tom, Benn Sartorius, David Watkins, Scott D Glenn, Andre Pascal Kengne, Tolu Oni, Charles Shey Wiysonge, Alexandra Walker, Olatunji O Adetokunboh, and Tesleem Kayode Babalola.
 "Health Trends, Inequalities and Opportunities in South Africa's Provinces, 1990–2019: Findings

⁷³ Chen, Jeronen, and Wang, "Toward Environmental Sustainability, Health, and Equity: How the Psychological Characteristics of College Students Are Reflected in Understanding Sustainable Development Goals."

⁷⁴ Mariappanadar, "Improving Quality of Work for Positive Health: Interaction of Sustainable Development Goal (SDG) 8 and SDG 3 from the Sustainable HRM Perspective."

⁷⁵ Chen, Jeronen, and Wang, "Toward Environmental Sustainability, Health, and Equity: How the Psychological Characteristics of College Students Are Reflected in Understanding Sustainable Development Goals."

⁷⁶ Jessica Wyllie et al., "EHealth Services and SDG3: Increasing the Capacity of Care," *Australasian Marketing Journal* 30, no. 2 (2022): 131–41.

⁷⁷ Sugumar Mariappanadar, "Improving Quality of Work for Positive Health: Interaction of Sustainable Development Goal (SDG) 8 and SDG 3 from the Sustainable HRM Perspective," *Sustainability* 16, no. 13 (2024): 5356.

- from the Global Burden of Disease 2019 Study.” *J Epidemiol Community Health* 76, no. 5 (2022): 471–81.
- Alkhatib, Ahmad, Lawrence Achilles Nnyanzi, Brian Mujuni, Geoffrey Amany, and Charles Ibingira. “Preventing Multimorbidity with Lifestyle Interventions in Sub-Saharan Africa: A New Challenge for Public Health in Low and Middle-Income Countries.” *International Journal of Environmental Research and Public Health* 18, no. 23 (2021): 12449.
- Allen, Donna, Deb Carlson, and ‘Chelle Ham. “Well-Being: New Paradigms of Wellness—Inspiring Positive Health Outcomes and Renewing Hope.” *American Journal of Health Promotion* 21, no. 3 (2007): 1–12.
- Aminde, Leopold Ndemnge, Anastase Dzudie, Yacouba N Mapoure, Jacques Cabral Tantchou, and J Lennert Veerman. “Estimation and Determinants of Direct Medical Costs of Ischaemic Heart Disease, Stroke and Hypertensive Heart Disease: Evidence from Two Major Hospitals in Cameroon.” *BMC Health Services Research* 21 (2021): 1–13.
- Babatunde, Gbotemi Bukola, Arvin Bhana, and Inge Petersen. “Planning for Child and Adolescent Mental Health Interventions in a Rural District of South Africa: A Situational Analysis.” *Journal of Child & Adolescent Mental Health* 32, no. 1 (2020): 45–65.
- Barnes, David S. *The Making of a Social Disease: Tuberculosis in Nineteenth-Century France*. Univ of California Press, 2023.
- Bemme, Dörte, and Laurence J Kirmayer. “Global Mental Health: Interdisciplinary Challenges for a Field in Motion.” *Transcultural Psychiatry*. Sage Publications Sage UK: London, England, 2020.
- Cannizzaro, Emanuele, Luigi Cirrincione, Walter Mazzucco, Alessandro Scorciapino, Cesare Catalano, Tiziana Ramaci, Caterina Ledda, and Fulvio Plescia. “Night-Time Shift Work and Related Stress Responses: A Study on Security Guards.” *International Journal of Environmental Research and Public Health* 17, no. 2 (2020): 562.
- Carlsen, Lars, and Rainer Bruggemann. “The 17 United Nations’ Sustainable Development Goals: A Status by 2020.” *International Journal of Sustainable Development & World Ecology* 29, no. 3 (2022): 219–29.
- Chen, Meiai, Eila Jeronen, and Anming Wang. “Toward Environmental Sustainability, Health, and Equity: How the Psychological Characteristics of College Students Are Reflected in Understanding Sustainable Development Goals.” *International Journal of Environmental Research and Public Health* 18, no. 15 (2021): 8217.
- Chen, Pin-Jane, and Marta Antonelli. “Conceptual Models of Food Choice: Influential Factors Related to Foods, Individual Differences, and Society.” *Foods* 9, no. 12 (2020): 1898.
- Coetzee, Bronwyne J, Lodewyk Vogel, Susan Sander, Courtney Field, Ashraf Kagee, and Rizwana Roomaney. “Re-Visiting the Relevance and Importance of Health Psychology in South Africa.” *South African Journal of Psychology* 53, no. 1 (2023): 57–67.
- Creswell, J. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 2nd ed. Thousand Oaks, CA: Sage Publications, Inc., 2013.
- Das, Kirti V, Carla Jones-Harrell, Yingling Fan, Anu Ramaswami, Ben Orlove, and Nisha Botchwey. “Understanding Subjective Well-Being: Perspectives from Psychology and Public Health.” *Public Health Reviews* 41 (2020): 1–32.
- Edoka, Ijeoma P, and Nicholas K Stacey. “Estimating a Cost-Effectiveness Threshold for Health Care Decision-Making in South Africa.” *Health Policy and Planning* 35, no. 5 (2020): 546–55.
- Gordon, Tanja, Frederik Booysen, and Josue Mbonigaba. “Socio-Economic Inequalities in the Multiple Dimensions of Access to Healthcare: The Case of South Africa.” *BMC Public Health* 20 (2020): 1–13.
- Halkos, George, and Eleni-Christina Gkampoura. “Where Do We Stand on the 17 Sustainable Development Goals? An Overview on Progress.” *Economic Analysis and Policy* 70 (2021): 94–122.
- Hoedjes, Meeke, Inge Nijman, and Chris Hinnen. “Psychosocial Determinants of Lifestyle Change after a Cancer Diagnosis: A Systematic Review of the Literature.” *Cancers* 14, no. 8 (2022): 2026.
- Jong, Eileen De, and Marjanneke J Vijge. “From Millennium to Sustainable Development Goals: Evolving Discourses and Their Reflection in Policy Coherence for Development.” *Earth System*

- Governance* 7 (2021): 100087.
- Karunamuni, Nandini, Ikuyo Imayama, and Dharshini Goonetilleke. "Pathways to Well-Being: Untangling the Causal Relationships among Biopsychosocial Variables." *Social Science & Medicine* 272 (2021): 112846.
- Kerry, Hannah Jane, and Russell Gurbutt. "Dimensions of Living with Emetophobia." *Mental Health and Social Inclusion*, 2024.
- Kleintjes, Sharon, Daniel Hilbrand Den Hollander, Suntosh R Pillay, and Anne Kramers-Olen. "Strengthening the National Health Insurance Bill for Mental Health Needs: Response from the Psychological Society of South Africa." *South African Journal of Psychology* 51, no. 1 (2021): 134–46.
- Malakoane, B, J C Heunis, P Chikobvu, N G Kigozi, and W H Kruger. "Public Health System Challenges in the Free State, South Africa: A Situation Appraisal to Inform Health System Strengthening." *BMC Health Services Research* 20 (2020): 1–14.
- Manona, C W. "Ethnic Relations in the Ciskei." In *Ciskei*, 97–121. Routledge, 2022.
- Mariappanadar, Sugumar. "Improving Quality of Work for Positive Health: Interaction of Sustainable Development Goal (SDG) 8 and SDG 3 from the Sustainable HRM Perspective." *Sustainability* 16, no. 13 (2024): 5356.
- Mastrodicasa, Jeanna, and Paul Metellus. "The Impact of Social Media on College Students." *Journal of College and Character* 14, no. 1 (2013): 21–30.
- Mbunge, Elliot. "Effects of COVID-19 in South African Health System and Society: An Explanatory Study." *Diabetes & Metabolic Syndrome: Clinical Research & Reviews* 14, no. 6 (2020): 1809–14.
- Migina, Lyudmila, Ayan Myssayev, Serik Meirmanov, and Assem Uristemova. "Professional Burnout in Primary Health Care Workers of the Republic of Kazakhstan." *Clinical Epidemiology and Global Health* 23 (2023): 101359.
- Moyo, Mthokozisi, and Agnes Nombembe. "The History of Xhosa Toponyms in Mbembesi." *Marang: Journal of Language and Literature* 35 (2022).
- Mphekgwana, Peter M, Nancy Malema, Kotsedi D Monyeke, Tebogo M Mothiba, Mpsanyana Makgahlela, Nancy Kgatla, Irene Makgato, and Tholene Sodi. "Hypertension Prevalence and Determinants among Black South African Adults in Semi-Urban and Rural Areas." *International Journal of Environmental Research and Public Health* 17, no. 20 (2020): 7463.
- Mutyambizi, C, J Dunlop, C Maluleke, L Ranoto, T Chetty, R Ndou, H Struthers, J A McIntyre, and K Rees. "Effect of COVID-19 on HIV, Tuberculosis, and Prevention of Mother-to-Child Transmission of HIV Indicators in Mopani District, South Africa." *South African Medical Journal* 111, no. 12 (2021): 1181–89.
- Naidoo, Thejini, Andrew Tomita, and Saeeda Paruk. "Burnout, Anxiety and Depression Risk in Medical Doctors Working in KwaZulu-Natal Province, South Africa: Evidence from a Multi-Site Study of Resource-Constrained Government Hospitals in a Generalised HIV Epidemic Setting." *PLoS One* 15, no. 10 (2020): e0239753.
- Nelson, Cheryl, and Sphiwe Madiba. "Barriers to the Implementation of the Ward-Based Outreach Team Program in Mpumalanga Province: Results from Process Evaluation." *Journal of Primary Care & Community Health* 11 (2020): 2150132720975552.
- Nene, Nomonde Hildah. *School-Based Support Teams' Experiences in Identifying and Supporting Vulnerable Learners in Rural Schools of Mpumalanga Province*. University of Johannesburg (South Africa), 2023.
- Ngobeni, Victor, Marthinus C Breitenbach, and Goodness C Aye. "Technical Efficiency of Provincial Public Healthcare in South Africa." *Cost Effectiveness and Resource Allocation* 18 (2020): 1–19.
- Nguse, Siphelele, and Douglas Wassenaar. "Mental Health and COVID-19 in South Africa." *South African Journal of Psychology* 51, no. 2 (June 8, 2021): 304–13.
<https://doi.org/10.1177/00812463211001543>.
- Nkosi, Mbhekeni Sabelo. "Political Economy and the Socio-Cultural History of Land Dispossession, Proselytization, and Proletarianization of African People in South Africa: 1488–1770 (Part 1)." *Philosophical Perspectives on Land Reform in Southern Africa*, 2021, 39–59.

- Nombebe, Sibulele. "Distinctive Cultural Attitudes of Xhosa People towards Adoption." North-West University (South-Africa), 2023.
- Ntoumanis, Nikos, Johan Y Y Ng, Andrew Prestwich, Eleanor Quested, Jennie E Hancox, Cecilie Thøgersen-Ntoumani, Edward L Deci, Richard M Ryan, Chris Lonsdale, and Geoffrey C Williams. "A Meta-Analysis of Self-Determination Theory-Informed Intervention Studies in the Health Domain: Effects on Motivation, Health Behavior, Physical, and Psychological Health." *Health Psychology Review* 15, no. 2 (2021): 214–44.
- Ohiengbomwan, Onaiwu T, Isaac O Komolafe, Semiu Alayande, Bernard E Njor, Deborah F Onisile, and Judith Oguzie. "Cross-sectional Community-based Assessment of Knowledge, Attitude and Practices on Tuberculosis in Osun State, South-west, Nigeria." *Health & Social Care in the Community* 30, no. 5 (2022): e3171–83.
- Onyango, Peggy Achieng, Daniel Ter Goon, and Ntombana Mc'Deline Rala. "Knowledge, Attitudes and Health-Seeking Behaviour among Patients with Tuberculosis: A Cross-Sectional Study." *The Open Public Health Journal* 13, no. 1 (2020).
- Pinho-Gomes, Ana-Catarina, Sanne A E Peters, and Mark Woodward. "Gender Equality Related to Gender Differences in Life Expectancy across the Globe Gender Equality and Life Expectancy." *PLOS Global Public Health* 3, no. 3 (2023): e0001214.
- Powell-Wiley, Tiffany M, Yvonne Baumer, Foster Osei Baah, Andrew S Baez, Nicole Farmer, Christa T Mahlobo, Mario A Pita, Kameswari A Potharaju, Kosuke Tamura, and Gwenyth R Wallen. "Social Determinants of Cardiovascular Disease." *Circulation Research* 130, no.5 (2022): 782–99.
- Puras, Dainius. "Report of the Special Rapporteur on the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health." *Phil. LJ* 95 (2022): 274.
- Sartorius, Benn, Kurt Sartorius, Rosemary Green, Elizabeth Lutge, Pauline Scheelbeek, Frank Tanser, Alan D Dangour, and Rob Slotow. "Spatial-Temporal Trends and Risk Factors for Undernutrition and Obesity among Children (< 5 Years) in South Africa, 2008–2017: Findings from a Nationally Representative Longitudinal Panel Survey." *BMJ Open* 10, no. 4 (2020): e034476.
- Thomas, Leena Susan, Eric Buch, and Yogan Pillay. "An Analysis of the Services Provided by Community Health Workers within an Urban District in South Africa: A Key Contribution towards Universal Access to Care." *Human Resources for Health* 19 (2021): 1–11.
- Villiers, Katusha de. "Bridging the Health Inequality Gap: An Examination of South Africa's Social Innovation in Health Landscape." *Infectious Diseases of Poverty* 10 (2021): 1–7.
- Walt, S Van der, W S Mabaso, Eugene Lee Davids, and P J De Vries. "The Burden of Depression and Anxiety among Medical Students in South Africa: A Cross-Sectional Survey at the University of Cape Town." *South African Medical Journal* 110, no. 1 (2020): 69–79.
- Warmelo, Nicolaas J Van. "The Classification of Cultural Groups." In *The Bantu-Speaking Peoples of Southern Africa*, 56–84. Routledge, 2024.
- Wise, Sarah K, Yasmin Hamzavi-Abedi, Paavali A Hannikainen, Mahesh Padukudru Anand, Tracy Pitt, Marine Savoure, and Elina Toskala. "Rhinitis Disease Burden and the Impact of Social Determinants of Health." *The Journal of Allergy and Clinical Immunology: In Practice* 12, no. 6 (2024): 1449–61.
- Witter, Sophie, Maria Van Der Merwe, Rhian Twine, Denny Mabetha, Jennifer Hove, Stephen M Tollman, and Lucia D'Ambruoso. "Opening Decision Spaces: A Case Study on the Opportunities and Constraints in the Public Health Sector of Mpumalanga Province, South Africa." *Plos One* 19, no. 7 (2024): e0304775.
- Wong, Emily B, Stephen Olivier, Resign Gunda, Olivier Koole, Ashmika Surujdeen, Dickman Gareta, Day Munatsi, Tshwaraganang H Modise, Jaco Dreyer, and Siyabonga Nxumalo. "Convergence of Infectious and Non-Communicable Disease Epidemics in Rural South Africa: A Cross-Sectional, Population-Based Multimorbidity Study." *The Lancet Global Health* 9, no. 7 (2021): e967–76.
- World Health Organization. *Guidance on Community Mental Health Services: Promoting Person-Centred and Rights-Based Approaches*. World Health Organization, 2021.
- . *Improving Early Childhood Development: WHO Guideline*. World Health Organization, 2020.
- . *WHO Guidelines on Mental Health at Work*. World Health Organization, 2022.
- Wyllie, Jessica, Jamie Carlson, Milena Heinsch, Frances Kay-Lambkin, and Alicia McCoy. "EHealth

Services and SDG3: Increasing the Capacity of Care.” *Australasian Marketing Journal* 30, no. 2 (2022): 131–41.

Yuyun, Matthew Fomonyuy, Karen Sliwa, Andre Pascal Kengne, Ana Olga Mocumbi, and Gene Bukhman. “Cardiovascular Diseases in Sub-Saharan Africa Compared to High-Income Countries: An Epidemiological Perspective.” *Global Heart* 15, no. 1 (2020).

Zyl, Sanet Van, Willem H Kruger, and Corinna M Walsh. “Chronic Diseases of Lifestyle Curriculum: Students’ Perceptions in Primary Health Care Settings.” *African Journal of Primary Health Care & Family Medicine* 15, no. 1 (2023): 3775.

ABOUT AUTHOR

Ntombophelo Sithole-Tetani is working as a Lecturer in the Department of Psychology, Faculty of Law, Humanities and Social Sciences, Walter Sisulu University. She holds a BA degree in Psychology, Honours in Psychology, and an MA in Psychology from Walter Sisulu University. She is concluding her PhD in Psychology. She also holds a diploma in Psychological Counselling. She also holds a Post Graduate Diploma in Psychological Counselling (PGDip) at the University of KwaZulu Natal. She is also a registered psychological counsellor. She has also been involved in a community engagement programme focusing on COVID-19 awareness in 2020, offering counselling services and training in lay counselling. Her research interests are in issues of parenting, children, female health and mental health, HIV, and Autism. She has also supervised many students for their honours and Masters in Psychology.