




ARTICLE



<https://doi.org/10.1057/s41599-026-06539-y>

OPEN

Transdisciplinary reflections for assessing the mental well-being of university undergraduates within the African context for sustainable problem-solving

Jumoke Oladele ^{1,2✉}, Ayotunde Bolatito O. Omotoso³, Vera Victor-Aigbodion⁴, Charity Neejide Onyishi^{4,5}, Oluwatosin Adebawale Adeosun⁶, Eze Fidelis Amaeze⁴, Mkpoikanke Sunday Otu⁷ & Emmanuel Tolulope Sowunmi²

Collaboration is the currency of the 21st century. It is becoming increasingly obvious that collective efforts are required for addressing contemporary problems. This is especially underscored for multifactorial problems like mental health problems. The heart of research is problem-solving. A transdisciplinary approach is a sine qua non for sustainable problem-solving in mental health research. The aim of this study was to understand the concept of mental well-being through the lens of experts in the field and to explore how it can be effectively measured in the African context, particularly among university undergraduates. The study was designed as action research and carefully deployed using a transdisciplinary research model. Experts in behavioural psychology, clinical psychology, educational psychology, medical research, educational sociology, and educational measurement were contacted, and a one-on-one interview session was scheduled with 13 consultants who consented to participate in the study via Doodle. The collected data were subjected to the analytical framework approach, which falls within a broad family of analysis methods also termed thematic analysis or qualitative content analysis. Through this approach, the data were systematically reduced to a meaningful form using jointly agreed-upon codes and quotes on mental health assessment, as supported by the literature and the World Health Organisation. Findings from the exercise unanimously revealed that the mental well-being of university undergraduates is a multidimensional construct comprising coping strategies, potential realisation, academic productivity, social interaction, school-life balance, emotional stability, healthy living, and belief systems, all of which must be considered for effective measurement. This transdisciplinary method is hoped to create a novel path for researchers by merging various forms of knowledge and closing gaps in school mental health constructs. Understanding how experts view mental health is a relevant step for sustainable problem-solving among undergraduates in Africa.

A full list of author affiliations appears at the end of the paper.

Introduction

Mental well-being signifies a condition of physical, mental, and social well-being, rather than only the absence of disease. Consequently, well-being encompasses all dimensions of mental and physical health, socio-economic factors, and environmental influences to create a comprehensive strategy for disease prevention, health promotion, and the enhancement of positive life outcomes (Idemudia & Adedeji, 2023; Oladele et al., 2024). Within the African context, mental well-being is profoundly rooted in community, spiritual, and relational frameworks (Idemudia & Adedeji, 2023). Mental well-being is interconnected with harmony among family, community, ancestors, and nature and is frequently evaluated through shared experiences rather than individual assessments. This indicates that mental well-being is understood holistically, encompassing emotional, physical, spiritual, and social well-being (Okafor et al., 2022). Conventional beliefs ascribe mental anguish to spiritual origins, including curses, ancestral discontent, or witchcraft, prompting individuals to seek assistance from elders, spiritual leaders, or traditional healers (Amuyunzu-Nyamongo, 2013). This stands in stark contrast to Western frameworks such as PERMA (Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment) or the World Health Organisation's (WHO) definition, which prioritise human autonomy, psychological resilience, and self-actualisation. Western paradigms generally position mental well-being as contingent upon an individual's ability to function and thrive both personally and socially, frequently through cognitive and behavioural perspectives (Letsoalo et al., 2024). As such, while Western approaches are more exclusive and general in their conceptualisation of self and mental well-being, African Psychology introduces the concepts of concern for others, helpfulness, and community involvement. Consequently, an individual seeking psychological assistance does not approach the therapist in isolation but necessitates communal involvement for support (Takang et al., 2021). Furthermore, there is a lot of stigma around mental health in many African cultures. This often prevents people from seeking help and encourages coping techniques that are already ingrained in the culture, such as prayer, music, storytelling, and group rituals, rather than professional therapy (Letsoalo et al., 2024). In essence, African views on mental well-being focus on issues such as spirituality, connectivity, and a sense of group identity. These views are very different from Western, generally secular, individual-centred theories of mental health. Therefore, it is essential to be aware of these distinctions in order to provide culturally sensitive mental health care in all African settings.

School mental health challenges, such as depression, anxiety, and stress, can cause disruptions in education and affect the learning process. They may also pose a challenge for educational tutors. A sudden decline in a student's academic performance may sometimes be due to psychosocial distress. Mental health surveys in school communities can be an effective way to evaluate the mental health of young people. This is because the school environment houses a representative population of young people, whose distribution mirrors that of the wider community. The fact that mental illness arises from multifactorial origins is a case for a transdisciplinary approach to mental health research in schools. Findings from Weare (2007) suggest that education plays a major role in promoting mental health by enhancing positive well-being and addressing mental health problems. The study further showed that students had significantly lower levels of anxiety by being involved in education, which promotes mental health by enhancing positive well-being and resisting mental health problems.

Trans-disciplinarity, a burgeoning area of research that has been around for approximately four decades, has emerged in

response to a critique of the standard configuration of knowledge, which was previously often limited to a single discipline (Oladele, 2022). Trans-disciplinarity involves two or more scientific disciplines working together to address a given task, where several aspects of the research problem are aligned with the contributions of the disciplines in such a way that their findings are essential to solving the issue at hand. This approach is proposed towards the merging of disciplines, how they can cross-function, and the possibilities of this field utilising the expertise, skills, and strengths of each discipline to foster the frontier of knowledge and innovation (Arnold, 2013; Lang et al., 2012; Iyer-Raniga & Andamon, 2016).

There are problems that are so complex that the interconnectedness of various fields would be required to solve them. The technical term for this phenomenon is "wicked problems" (Worosz, 2022; Lawrence et al., 2022), and transdisciplinary research is used in tackling them. "Wicked problems" are resistant, and solutions that work in one setting may not work in another. Mental health problems are "wicked problems" that call for urgent transdisciplinary intervention (Kovesi, 2018; Lilley et al., 2021). This holds as mental ill-health can affect many areas of students' lives by reducing their quality of life, academic achievement, physical health, and college satisfaction, which can also negatively influence their relationships with friends and family members (Suicide Prevention Resource Centre, 2020). When mental well-being is present, an individual experiences happiness and emotional stability (Ohrnberger et al., 2017). On the other hand, lack of mental health involves unrealistic deadlines, poor communication, workplace conflict, poor relationships, and lack of support, thus affecting various areas of functioning (Nortje, 2021). Solutions proffered could trigger a cascade of consequences in various domains (Hannigan & Coffey, 2011; Hou, Li & Song, 2022). For instance, substance use disorders among students are viewed severally by medical or moral models. Culture and religion may affect the prevalence on the one hand and reporting on the other, and influence the solutions sought in different settings (Kpanake, 2018; Omotoso et al., 2021 & 2023). Solutions in school settings could be punitive or therapeutic. While punitive measures from school authorities may serve as a deterrent, they do not solve the problem of dependence and may not reduce the prevalence of recreational drug use. Some therapeutic options include replacement with a safer substance. This solution may also pose a potential problem of addiction to the newer substance. In this way, practical solutions in school mental health could lead to other events that need to be tackled, as seen with "wicked problems". Similar examples can be made of suicidality and other mental health problems among undergraduates.

Trans-disciplinarity is relevant for global mental health, as it helps improve research practices, policy formulation, and reduce the prevalence of mental health problems (Archibald et al., 2023; Norris, 2016; Worosz, 2022). With a transdisciplinary approach, these problems can be addressed more effectively.

Mental health within the context of African Universities is influenced by multiple socio-cultural and economic factors. Unlike in Western contexts, where mental illness is often characterised by guilt, anxiety, and suicidal ideation, in African contexts, depression and distress are often expressed through physical symptoms rather than verbal acknowledgement of emotions (Binitie, 2018; Nortje, 2021). Therefore, mental health in Africa is characterised by depressed mood and motor retardation; however, in Europe, guilt, suicidal ideas, motor retardation, and anxiety are the order. Yet, both continents display a decline in interest in work and the environment. As such, mental health in Africa is deepened by cultural influence compared to

Europe, where it is characterised by suicidal ideas, motor retardation, anxiety, guilt and depression (Binitie, 2018). This makes mental health issues harder to diagnose and manage within university settings, where students might not seek help due to stigma or lack of awareness. The study highlights the necessity of adaptive intervention strategies in African universities, emphasising the importance of coping mechanisms, social interactions, academic productivity, and school-life balance as key components of student mental well-being (Karlsson et al., 2023; Khalid, 2023). This aligns with previous literature that advocates for a transdisciplinary and holistic approach to mental health research, emphasising the need for collaboration among academic, medical, and social science professionals (Archibald et al., 2023; Belcher et al., 2019; Hadorn et al., 2006). This research contributes to the growing recognition that mental health challenges are “wicked problems” requiring innovative, multi-sectoral solutions rather than isolated disciplinary approaches. By integrating African-centric perspectives, the study enhances the clarity of how mental health is conceptualised in higher education and provides a pathway for sustainable problem-solving.

Framing mental well-being through a transdisciplinary lens

This study adapts the transdisciplinary research framework for outcome spaces, as proposed by Mitchell et al. (2015), in conjunction with the four philosophical research axioms by Oladele (2022), adapted from McGregor (2014). The original outcome space research framework builds in three realms of situation, knowledge, and learning, with action added in this study. The four philosophical research axioms are ontology, epistemology, axiology and logic (Fig. 1).

Defining the ‘situation’ (ontology) of mental well-being is crucial for implementing the necessary changes. There is a WHO definition of mental health (WHO, 2021a) and a social determinant to mental well-being (Alegria et al., 2018; WHO, 2014). However, mental well-being, viewed subjectively, requires reflexive activities to jointly define it (Koshy et al., 2017; Stone & Mackie, 2013). The flow of knowledge through the synergy between disciplines is crucial for systemic relevance, facilitated by a timely feedback loop, and germane to creating change towards sustainable futures with respect to mental well-being. Alegria et al. (2018) and the WHO (2014) also emphasised the significance of social determinants in understanding the circumstances in which people live and work, which influence their health outcomes. The goal of defining the situation is to ensure positive changes, which may start small but eventually lead to revolutionary changes (Mitchell et al., 2015). Another important activity in the situation definition stage of the transdisciplinary

lens is clearly articulating the research boundary (in terms of space, time, and beneficiaries) (Munaretto et al., 2022). The African context serves as the setting for this study in the post-COVID-19 pandemic era, with university undergraduates as its beneficiaries.

Knowledge (epistemology) in the adapted framework is construed as a dynamic and purposive flow of interaction between relevant stakeholders, creating synergy between disciplines, theory, and practice, as well as between academic and professional practices, for a transdisciplinary research trajectory. The flow of knowledge is crucial for systemic relevance, facilitated by a timely feedback loop, and germane to creating change towards sustainable futures with respect to mental well-being. Mitchell et al. (2015) stressed the need for transparency and rigour, such that the quality of the work is independently assessable, opening and speeding up required accessibility (achievable through open channels of information dissemination) and inclusiveness (i.e., the artefacts are designed to be interpreted by wide-ranging audiences). For this study, knowledge about mental well-being was sought from academics and professionals through an unstructured interaction (Subjective) to gain a holistic view of the construct and inform the development of an intervention for change.

The intervention is the realm of action in the adapted framework and is considered necessary for the desired change(s). Having clearly defined the situation and acquired the requisite knowledge from relevant stakeholders, a framework for action is required to achieve meaningful change through the intervention. The change in this regard is also construed as a just transition, which seeks to ensure maximum benefits for mental well-being while providing sustainable support systems in action.

The actions taken lead to learning, which is the fourth realm in this framework. The process of transdisciplinary research must trigger learning for researchers and provide just the right amount of cognitive dissonance to facilitate a transformational learning experience, resulting in new perspectives, orientations, strategies, or tools (Marshall et al., 2018). The findings from this study will inform the design of a tool to effectively assess the mental well-being of university undergraduates in West and Southern Africa.

The problem

Mental health problems are common in sub-Saharan Africa, as one in five Nigerians and South Africans suffer from mental ill-health (Soroye et al., 2021; Wada et al., 2021; Craig et al., 2022; Wits University, 2022; World Health Organisation, 2007). The adverse effects of these mental health challenges have resulted in poor physical and social interactions among students (Obi, 2022). This situation is compounded by individuals with pre-existing neurological or substance use disorders who stand a higher risk of severe outcomes and even suicide (Bombardier et al., 2021; Jones et al., 2019; Onaemo et al., 2022). Mental challenges can impair students’ concentration, thinking ability, critical reasoning, and emotional well-being (Grøtan, 2019; Effiom et al., 2022). This has posed a significant problem in the educational sector, which needs immediate problem-solving and adaptive intervention measures. The importance of carefully examining mental health is also due to its latent nature, which makes it observable while being largely influenced by underlying and unobserved causes (Bollen, 2002; Theilig, 2020). Considering the prevalence of mental health issues in our world today, a question that seeks an answer is the extent to which people are aware of their mental well-being in Sub-Saharan Africa, a region that falls in the category of concern (WHO, 2022b). Recognising this need on the national front, a bill for an Act to provide for the establishment and regulation of mental health and substance abuse services, protect persons with mental health needs and establishment of

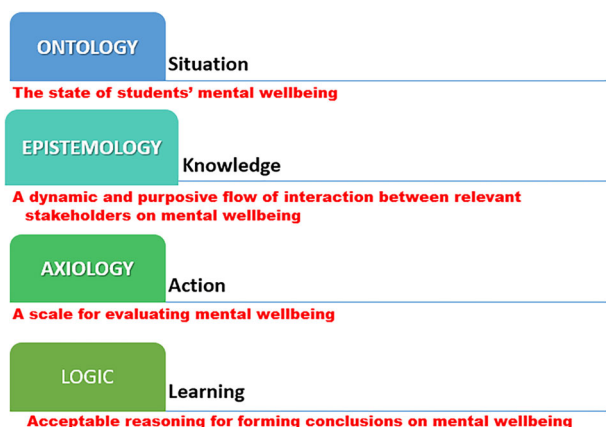


Fig. 1 Transdisciplinary framework for mental well-being assessment in Africa.

Table 1 Consultants labelling demographic information.

Label	Expertise	Gender	Cadre
Consultant 1	Educational psychology	Female	Professor
Consultant 2	Medical practitioner in psychiatry	Male	Dr. (Medical)
Consultant 3	Medical practitioner in psychiatry	Male	Professor
Consultant 4	Research and evaluation expert	Male	Associate Professor
Consultant 5	Behavioural psychologist	Male	Dr. (Academic)
Consultant 6	Research and medical expert	Female	Dr. (Academic)
Consultant 7	Research and evaluation expert	Male	Dr. (Academic)
Consultant 8	Research and evaluation expert	Male	Dr. (Academic)
Consultant 9	Educational sociology	Male	Professor
Consultant 10	Medical practitioner in psychiatry	Female	Associate Professor
Consultant 11	Educational psychology	Male	Dr. (Academic)
Consultant 12	Research and evaluation expert	Male	Dr. (Academic)
Consultant 13	Educational psychology	Male	Dr. (Academic)

Data analysis.

National Commission for Mental and Substance Abuse Services, for the effective management of mental health in Nigeria, and other related matters recently signed into law (JEO, 2022).

Additionally, there is a need for an experiential approach to conceptualising mental well-being assessment, which suggests a bottom-up approach to problem-solving (Wilson Fadiji et al., 2022). Furthermore, a major critique of well-being research in Africa, which has utilised tools from the West without determining their ecological validity, has been highlighted (Oladele et al., 2024). A transdisciplinary approach to research is regarded as a solution to the complex and messy nature of sustainability problems, which cannot be easily tackled from a single disciplinary perspective (Jeder, 2014; Mitchell et al., 2015). Transdisciplinary research is often promoted as a mode of knowledge production that is effective in addressing and solving challenges in a sustainable manner. Transdisciplinary research approaches also advocate a synergy between researchers and practice-based expertise for viewing real-life problems and proffering solutions (Belcher et al., 2019). This study aims to outline the transdisciplinary approach employed for assessing mental well-being through engagement with relevant professionals.

Methodology

This study adapted the system model of action research through a transdisciplinary framework, utilising a qualitative phenomenological design (Falaye, 2018; Owolabi, 2015). This action research model was deployed by contacting prospective mental health professionals within the university, and those in practice, and the research aim was shared with them. After this, contacts who showed interest in the study were issued a research engagement letter and a one-on-one interview session was scheduled based on individual convenience using the Doodle app. The interviews aimed to understand what was important when assessing the construct of mental well-being within the African context. The task was for the participants to speak based on their professional experience and practice, which was clearly stated before the interview began. The interviews were open-ended to ensure a free flow of discussion while being guided by the researcher to ensure alignment with the issue being discussed. The findings from the interview session informed the mapping of relevant sub-constructs in relation to the WHO conception of mental well-being (WHO, 2020), as informed by one of the study participants. Based on this, teams were set up to develop items for assessing mental well-being as a non-illness intervention. Following the item writing stage was the item validation stage, where another set of experts was engaged to ascertain the content and

construct validity of the item bank using a clearly and jointly defined rubric.

The standard transdisciplinary model was employed with experts who are seasoned professionals labelled as consultants to explore and understand mental well-being assessment in the African context, utilising a transdisciplinary approach to ensure a comprehensive, holistic, and in-depth investigation, which is a fundamental requirement for sustainable problem-solving (Mokiy, 2019; Oladele, 2022). The experts engaged from diverse backgrounds are shown in Table 1. The sub-constructs developed fell within the requirement of three to ten cases for a qualitative research design of phenomenological type (Falaye, 2018). This research design was deemed appropriate as it allowed the researchers to establish a cooperative and beneficial relationship while learning about the concept of mental wellness through clearly structured stages, based on professional practice (VanBaren, 2019).

Data collection was conducted through in-depth interviews with sampled West African professionals in the fields of education and mental health, aiming to understand the concept of school mental health. Interviews were conducted virtually using Microsoft Teams. The data collected during the sessions were transcribed using Descript and then subjected to an analytical framework approach for qualitative data analysis (Gale et al., 2013). This was achieved by organising a set of codes into outlined sub-constructs that were jointly developed by researchers. The sub-constructs were categorised into codes and quotes and arranged using the Sankey diagram structure in this analytical framework, as shown in Fig. 2. Further analysis was facilitated using *in vivo* coding, which leverages AI coding and a priori coding interpretively, where statements were closely analysed with supporting quotes, through which the process of abstraction of the data for the content analysis was carried out to describe and categorise words, phrases, and ideas that speak to the outlined sub-constructs. The analytical framework approach, deployed deductively (where themes and codes are pre-selected based on previous literature and the WHO), aided the identification of commonalities and differences in qualitative data before focusing on relationships between different parts of the data, thereby seeking to draw descriptive and explanatory conclusions clustered around themes.

The qualitative content analysis procedure commences with the formulation of explicit research questions and objectives aimed at elucidating critical elements of mental well-being among African university undergraduates, the role of transdisciplinary approaches, and the sustainable solutions arising from participants' reflections. Subsequently, interviews and focus groups were

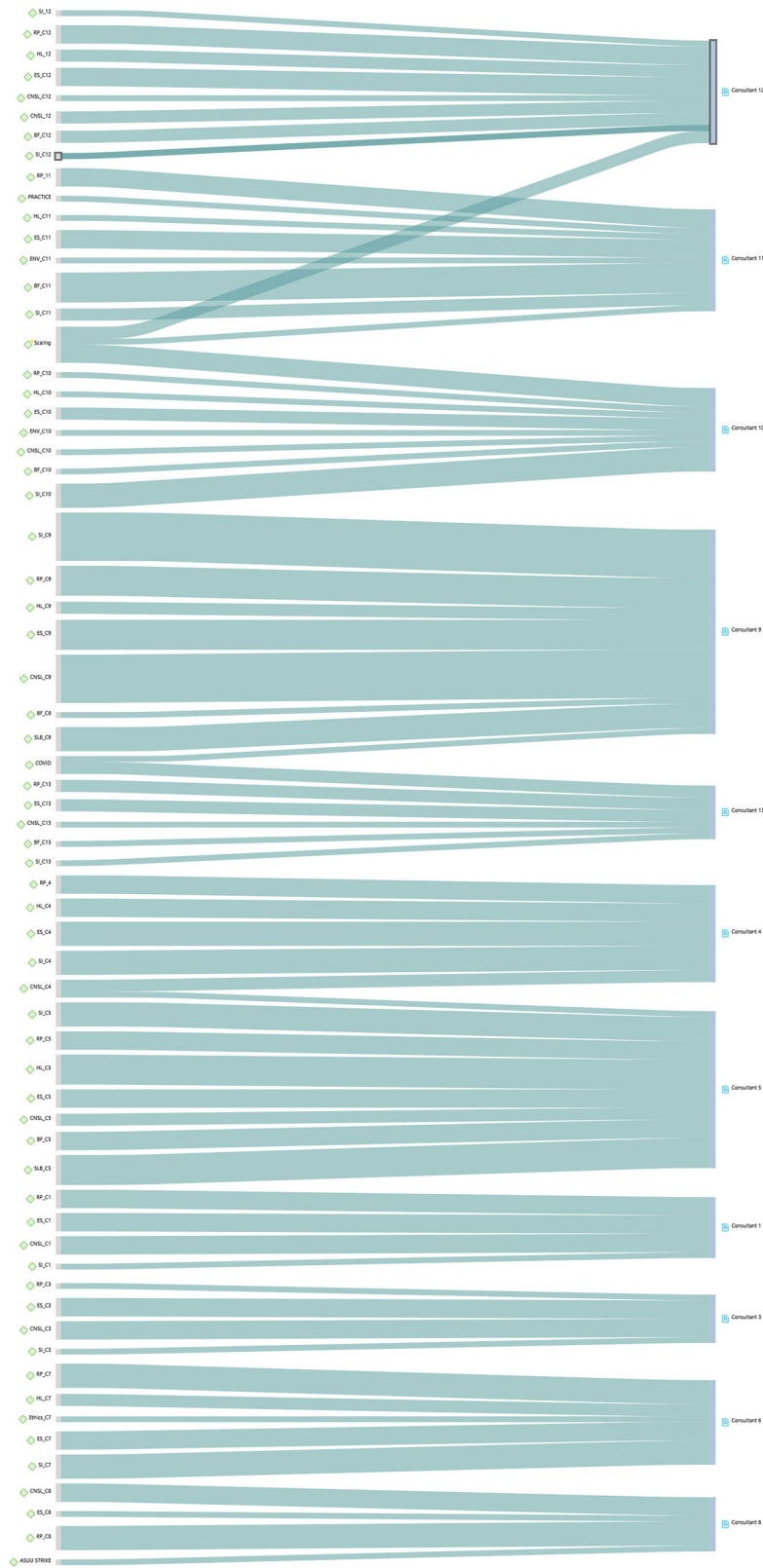


Fig. 2 Code-document Sankey diagram from Atlas-ti (the meaning of the codes is CNSL coping with normal stress of life, RP realising potentials, SP studying productively, SI social interactions, HL healthy living, SLB school-life balance, ES emotional stability, and BF belief system, respectively).

utilised as data sources. The collected data were then transcribed verbatim and anonymised for confidentiality and systematically organised using Atlas.ti (being a software for qualitative analysis). The researchers subsequently engage with the data through iterative readings, documenting observations to encapsulate

preliminary conclusions. A coding scheme was constructed by integrating deductive codes derived from established theories (e.g., WHO frameworks, African cultural models) with inductive codes that arise spontaneously from student narratives. This framework facilitates the methodical coding of all data,

Table 2 AI- code-document analysis of school mental well-being interview discussion.

Consultant labelling														
AI codes	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	Totals
Interactions	2	1	7	4	1	19	6	5	5	6	3	5	2	66
COVID-19 impact	1	0	1	0	3	2	2	1	2	0	0	0	3	15
Cultural context	2	1	4	1	11	4	3	0	7	3	0	0	2	38
Balanced lifestyle	3	4	1	2	5	5	2	6	2	10	1	2	6	49
Physical health	6	7	6	2	13	6	2	7	12	3	2	3	4	73
Achievements	3	8	14	10	5	19	7	6	13	8	8	10	6	117
Stress	3	10	3	5	17	18	4	6	11	9	1	4	6	97
Well-being	5	8	7	4	21	14	2	6	14	8	6	10	4	109
Totals	25	39	43	28	76	87	28	37	66	47	21	34	33	564

permitting the use of overlapping codes as necessary. Codes were classified into overarching categories (e.g., sources of stress, coping techniques), from which principal themes were extracted. The themes were directly connected to the study aims, emphasising disciplinary linkages and potential sustainable interventions. Findings were contextualised using current literature and cultural ideas, and examined in relation to policy, services, and curricular enhancements. Ultimately, conclusions were reached, advocating for transdisciplinary and culturally pertinent solutions. This systematic approach harmonises thoroughness and cultural awareness, utilising interdisciplinary perspectives. It additionally endorses concrete proposals designed to enhance the mental wellness of undergraduates and promote sustainable solutions in African colleges.

On the validity process, the qualitative content analysis relied on systematic textual interpretation. To ascertain credibility (Truthfulness), the viewpoints from psychology, sociology, education, and public health (a transdisciplinary methodology) were carefully synthesised to corroborate emerging patterns. All participants were granted access to the transcribed interviews to validate the precision of the researcher's interpretations. To ensure dependability, a clear audit trail was maintained that recorded all phases of data gathering and coding to guarantee reproducibility. Additionally, peer debriefing or inter-coder agreement sessions were conducted among the study participants to mitigate subjective bias. Furthermore, the study participants utilised reflexive journaling to consistently reflect on and articulate their positionality and assumptions through the functionality available in ATLAS.ti. This was done to ensure coding consistency. Lastly, a comprehensive and detailed account of the African university environment and the mental health experiences of students enables readers to assess its relevance to other contexts, which aids transferability. The sustainability aspects of the procedure were achieved through a participatory and inclusive research with relevant stakeholders (in academia and health practice) who were involved in formulating the study agenda and analysing the results. This approach aims to promote communal ownership and facilitate the sustained implementation of solutions. Additionally, cultural contextualisation was considered by ensuring African cultural interpretations of mental well-being, while employing local languages and idioms during data collection to enhance contextual relevance and applicability. In addition, the analysis aimed to generate suggestions that guide mental health legislation and action-oriented outputs as a non-illness intervention towards affordable and scalable mental health strategies suitable for resource-limited African university environments. Ultimately, this study informed the development of a sustainable intervention, encompassing peer-led wellness initiatives, stakeholder engagement programmes, and a digital mental well-being scale designed to capture students' actual experiences. This study obtained ethical approval from the Research Ethics Committee of the concerned universities. In alignment with

the approval, the study ensures ethical standards by upholding Africa-centric cultural sensitivity standards in mental health research within a cultural context. As such, this study progressed from mere informed consent to a comprehensive dedication to cultural humility, reciprocity, and contextual awareness across all phases of research – from design to data collection, interpretation, and dissemination.

Results

Preliminary Information. Thirteen (13) of the eighteen consultants contacted consented to participate, with their expertise shown in Table 1.

Stage one analysis: code-document mapping. The interviews were transcribed and analysed using AI-powered In Vivo coding through Atlas.ti. This yielded 564 codes across key thematic areas, including physical health, emotional well-being, stress, social interactions, cultural context, and others (see Table 2). These were visualised using code-document frequency tables and a Sankey diagram to show thematic weight and consultant engagement.

Code-document analysis summary. Figure 2 displays a summary of the most frequently coded domains: Achievements (117), Well-being (109), Stress (97), Physical Health (73), and Balanced Lifestyle (49). This data shows strong convergence around key factors that influence students' mental well-being in the African university context. The top three most frequently referenced constructs, such as Achievements, Well-being, and Stress, underscore their centrality in experts' framing of undergraduate mental health. Other prominent themes, such as sleep, Belief Systems, Academic Productivity, and Relationships, align with the eight refined sub-constructs discussed in the results.

At the second stage of analysis, AI-generated codes were reviewed, supported by literature, and eight sub-constructs were identified, namely: coping with normal life stresses, realising potential, studying productively and fruitfully, social interaction, school-life balance, emotional stability, healthy living, and belief system. Figure 2 illustrates an intensive engagement with consultants on the eight sub-constructs derived from a priori coding of an extensive literature review (Martin, 2012; Oladele et al., 2024). The engagement met the requirement of 3–10 participants (Falaye, 2018). Below are insights that strengthened the appropriateness of the sub-constructs.

Coping with the normal stresses of life: The discussion with Consultant 1 revealed that a seemingly minor incident could occur around students, causing them to deviate from optimal academic functioning, which could trigger a range of issues. A major stressor that students have to contend with here is the

excessive number of lectures. Consultant 2 explained that psychologists have found that we need an appreciable level of stress for normal functioning. As such, someone may fail an exam and be sad, but that does not mean the person is clinically depressed; they may regard this as a normal stress of life. He stressed that if the person is still sad after a while and is now getting worse and is losing interest in previously pleasurable activities and is losing energy, having poor sleep and because of that, the student now misses classes, thinking about committing suicide because of an incident, then it is no longer normal as in such a situation, the social and academic functioning is being affected. Similarly, Consultant 3 (a behavioural psychologist) cannot have their mental well-being assessed without considering the aspect of stress. He emphasised that what is stressful for one person may not be stressful for another. He gave the example of COVID-19, which was generally stressful for most people. But the extent of the stress also depends on students' exposure to information through the internet and the news media. The consultant also explained that an individual's mental well-being is a means by which people try to cope with life's stress while still enjoying life. Consultant 5 also regarded being able to cope with the normal stresses of life, which can be triggered by lack of sleep. In his words, "I still relate with quite a few clients who have a poor quality of life, simply by virtue of the fact that they're not getting enough sleep. They try to sleep, but sleep doesn't come, causing them a lot of distress. Indeed. There are some people who are suicidal because they have poor sleep. So poor sleep is actually a major one that can affect quality of life and work capacity". Also, in support of this sub-construct, Consultant 8 explained that mental health is said to be attained when an individual can cope with everyday activities in terms of what he/she is doing, which brings about a free mind of that individual and will be able to reduce the amount of stress that an individual may have in any given situation. Consultant 11 addressed this construct as the ability to manage stress, while emphasising the need to integrate both positive and negative indicators of well-being into the mental health assessment to gain a broader picture of functioning. Also speaking on this sub-construct, Consultant 13 mentioned coping with the normal stresses of life, specifically managing everyday activities and navigating various situations that students encounter. These submissions justify the sub-construct of coping with normal stress of life as being relevant for assessing mental well-being. Consultant 5 stressed a level of stress that is required for life to be meaningful, known as "normal stress". In the developed instrument, coping involves adjusting; otherwise, stress can be an infringement on the individual's mental, social and occupational functioning while emphasizing normalcy as key. In summary, the discussants emphasised the normal stress of life as well as stressors that affect optimal academic functioning, with examples such as COVID-19, which was particularly stressful for many students. Additionally, the need to integrate both positive and negative indicators of well-being into mental health assessments was addressed to provide a more comprehensive picture of functioning.

Realise potentials: On this sub-construct, Consultant 2 succinctly defined mental health as the state, of health, where an individual is able to realise his or her potentials which he described as the latent ability which can be measured in terms of soft skills, hard skills and the profession or the vocation of the individual or as a student, his/her academic experience or attainment in their course of study. Furthermore, he used the acronyms TALE and SWIPE to drive home his point. TALE for Talent, Abilities, Limitations, and Experiences in defining how to measure or assess potentials and SWIPE for Strengths. So, what are my strengths? Weakness: What are my weaknesses? Interest. So, what are the things that naturally come to me as interesting?

What are the things that interest me naturally? then Personality, the kind of personality, the kind of person I am and then Experience. Consultant 4 also stressed that students who learn well realise their potential, and then they work well, which enables them to contribute meaningfully to the community. Still speaking on this sub-construct, Consultant 8 pointed out that discouragement in education itself could hinder the realisation of potential. In his words, "Of course, for somebody who is schooling, he or she has some potential that is looking forward to realising based on his or her intellectual ability". Consultant 11 emphasised that the extent to which an individual is satisfied with their life significantly affects their well-being. The consultant further emphasised that people measure their achievements against what they aspire to achieve and then determine whether they are satisfied or not, which can impact their overall well-being. The consultant also reported having many clients who are discouraged because they feel they are not achieving their purpose, are not living their purpose or have not started, and this feeling makes things go bad. Consultant 4 examined the issue of building confidence in oneself, which is closely related to self-actualisation. Explaining further, he noted that building self-confidence enhances self-actualisation, a prerequisite for realising one's potential (Itai, 2008). Similarly, Consultant 10 points attention to the level of satisfaction, in terms of achievement, their optimistic outlook on life, and whether they perceive their life as pleasurable. Consultant 1 gave an experience of a student who actually broke down psychologically due to not being able to access online classes due to not being able to afford buying a smartphone, which impacted the student's mental health. This is just one of many who are anxious about being unable to cover missed lectures, with impending effects on their academic performance. Consultant 12 expressed that items which will reveal the degree to which students are able to realise their potential are key to their satisfaction with life. Consultant 13 emphasised that achieving maximum expected performance in academic pursuits is crucial in assessing a student's mental well-being. As such, it was inferred that this sub-construct refers to performing to the utmost of one's abilities; to achieve as much success as possible in realising one's potential. He emphasised that an individual with a well-motivated job is likely to be more productive than someone who lacks motivation. Consultant 9 emphasised the importance of personal growth, which he believes is a crucial factor in determining an individual's potential and, consequently, their mental well-being. In summary, potential is described as a latent ability that can be measured in terms of both soft skills and hard skills, as well as the profession or vocation of students, as well as their academic experience or attainment in their course of study. Discouragement in education was highlighted as a factor that hampers potential, drawing on lived experiences.

Studying productively: Consultant 2 explained that an individual can be said to enjoy mental well-being when they are able to study productively and fruitfully, and how much an individual is willing to invest their time in productive exercises. He further stresses that an individual who is well-motivated and satisfied with an activity is likely to be more productive than someone who is not motivated and dissatisfied, which is similar to the submission made by Consultant 1. Consultant 2 also emphasised the love for results by everybody, with a considerable level of input, which brings about an improved or optimal self-confidence, a cardinal point of mental well-being. Consultant 5 discussed the construct in terms of sense of accomplishment as a central tenet of mental wellness. Consultant 6 examined the construct in terms of gainful labour, while Consultant 9 linked the construct to the purpose of life as linked to mental well-being. These submissions demonstrate that this sub-construct is related

to the effectiveness of productive effort, particularly in school, as measured by the rate of output success per unit of input effort. In summary, the submissions on this sub-construct were related to the effectiveness of productive effort, particularly in schools, as measured by the rate of output success per unit of input effort.

Social interaction: Speaking on this sub-construct, Consultant 12 emphasised the importance of interacting effectively with people in a positive manner, both in professional and social environments, and maintaining those relationships in a healthy way, which is regarded as an important aspect in measuring mental well-being. Streamlining the discussion, Consultant 1 emphasised the importance of social relationships that students have with the support of lecturers, such as peers, classmates, or roommates. She further reiterated the need to consider what students think about their relationships as impacting their mental well-being. Another aspect considered by consultants 10 and 13 was the convergence of views on the quality of inter- (driven by self-esteem) and intrapersonal (external) relationships, which speaks to an individual's social capital even in the face of adversity. Further explaining this, she explained the social capital resources that people have, which they can bank on. Therefore, examining the quality of social capital can help serve as a buffer against mental health issues. This was also linked to the extent to which an individual can interact with and learn from the experiences of others (mentors) for improving their well-being and quality of life. In her words, "There's no way we can also talk about mental wellness without looking at other things like an individual's social networks and support system". Speaking on social relationships, Consultant 11 regarded this as a special subdomain, which relates to how an individual relates with others and the soundness of the relationship as an important factor in assessing mental wellness. A novel insight was provided by Consultant 2 regarding community participation, considering that individuals are members of various trades, professions, or religious organisations. So, meaningfully participating in any of these communities connotes social responsibility by participating regularly in programmes organised by these religious communities or professional bodies. It also includes regular payment of necessary dues and active participation in neighbourhood programmes. As such, the degree of an individual's mental wellness can be gauged through his/her willingness to engage in such an endeavour. Consultant 3 also alluded to mental well-being as being able to contribute meaningfully to discourse, while Consultant 4 looks at relating well with people or materials within the community. Within the relationship space, Consultant 5 highlighted social and personal relationships, as well as the availability of social support, as important indicators of mental well-being. In his words, "two people may be experiencing the same stressful circumstance, but one person is doing better than the other, because that person has some social support". Consultant 6 relates the sub-construct to what is happening around the person at a certain time, with reference to the company, which ranges from family to friends or both. She stressed that if those relationships are healthy and going well, making the individual happy or bringing the desired happiness, it becomes a stimulus for well-being, making the quality of relationships a key aspect in assessing this sub-construct. Similarly, Consultant 9 spoke in terms of the nature of relationships that connect with others. He emphasised in his words that, "Don't isolate yourself very much because that can be injurious to your mental health. And then build your personal confidence as an individual, because without confidence building, you can run yourself into mental difficulties. From these discussions, it is imperative to report that self-isolation can be injurious to the quality of mental health of the students. In summary, reflecting on this sub-construct revealed the

importance of interacting effectively with people (co-students, lecturers, peers, class or roommates) as a measure of mental well-being for avoiding self-isolation. Converging views emerged on the quality of inter (driven by self-esteem) and intrapersonal (external) relationships, which speaks to an individual's social capital even in the face of adversity.

School-life balance: speaking on this sub-construct, Consultant 5 stressed the need to have a smooth sail in both school and other aspects of life, as one would affect the other. However, lengthy industrial actions in Nigeria put students' lives on hold and their mental health at risk, as observed from counselling sessions of the consultants, and some students lose the zest to complete school. The example of an 8-month industrial action in Nigeria was cited. This event left students in public universities out of school for a full academic session, leaving them without a status as either students or graduates. He stressed that this event in life is almost literally putting their lives on an indefinite hold and directly impacting their mental health, as observed from counselling sessions. Consultants 4 and 6 explained that individuals should consider integrating a variety of activities, such as extracurricular activities, while pursuing academic endeavours, as a requirement for a balanced lifestyle. Consultant 1 explained that some students have issues with their mental well-being because of a strained relationship with their lecturers or with support staff, or their peers/classmates. Furthermore, she shared an experience of a student who discussed feeling guilty about things he had not done and was supposed to do, which negatively impacted his mental well-being. Consultant 9 also emphasised the importance of being comfortable with one's own life to achieve a balanced lifestyle. So, it affects them; it makes them depressed in terms of where they are expected to be now, and they are not there. He also emphasised the importance of self-autonomy, which involves knowing oneself, including one's identity and limitations, as this influences living a balanced lifestyle in any situation. Consultant 8 expressed this sub-construct in terms of being able to achieve educational goals without any form of inhibition or constraints, such as those experienced during the eight-month strike in Nigeria, leading to an unbalanced lifestyle. In his words, not being in school should impact some students so severely that they may not even want to return to school. He asks, What is the importance of going to school after all? After all, they may not even get jobs. In summary, reflections on this sub-construct revealed that sufficient effort needs to be invested in academic work while also enjoying the social, sporting, and cultural aspects of being a student.

Emotional stability: Consultant 10 construed the sub-construct as the presence or absence of certain psychological issues, stressing that practitioners do not just look for clinical diagnoses. In her words, she said, "You know that even without the clinical diagnosis, somebody could still have problems that are not up to the clinical diagnosis, but will still hinder their performance, their quality of life". Speaking on the importance of this sub-construct to overall well-being, Consultant 1 stressed that it affects students' moods, prolonged or intense feelings of irritability, cognitive and perceptive aspects of students, while identifying some of the important aspects as self-esteem, self-worth, life achievement and outlook to life, which can serve as positive or negative affect. This aligns with the submission of Consultant 13, who also stressed the relevance of the perception held about issues as determinants of an individual's emotional response. Consultant 11 explored the theory of rational emotive therapy called the A, B, C D technique, where A is an activating event or occurrence (something that happened to an individual), while B is the belief that the person has about what happened to him or her and then C is the consequence that comes out of that occurrence. He explained further that the theory states that the occurrence, that is, A is not

directly responsible for C, as the consequence is the belief that an individual has about what A is. In his words, he inferred that “most of the things that have happened to people and the results or the consequences they have are highly dependent on what they think or feel about it, which impacts an individual’s emotional stability. In addition, Consultant 11 stated that some people may appear fine externally, but internally they are not; however, this is a fact that can be discovered during counselling sessions. In the same vein, someone may appear dull physically; however, mentally they are healthy, as explained by the rational emotive therapy theory.

Consultant 12 stated that emotional stability could mean the presence of some positive things in life, or positive emotions such as happiness, known as positive affect, and negative emotions, such as depression and anxiety, also known as negative affect. Speaking on anxiety, Consultant 3 expressed anxiety as normal, but it’s excessiveness as a red flag. Consultant 13 also emphasised the importance of self-acceptance in achieving emotional stability. Other related issues highlighted are bipolar mood disorder, leading to depression. In his words, “when an individual suffering from mood disorders is left alone, they die slowly, have mood problems and negative touch with reality”. Consultant 13 also highlighted anxiety and personality disorder, making the individual nervous unnecessarily, as another determinant of emotional stability. In his words, “To fear and also to sweat”. This is apparent when students experience rapid, hard beats because of an anxiety disorder, while a personality disorder affects the pattern of thinking and functioning of an individual, which invariably impacts mental well-being. Consultant 3 discusses how a person’s feelings affect their relationship with others. Some salient questions that impact mental well-being are: Do I think I’m acceptable even when I live with others? Or do I think I’m not acceptable? Are there any things that the person is going through that others are not aware of? He stressed the need for self-expression without cultural restrictions, which makes people mask reality with expressions such as: I have a chronic sensation, my body inside is very hot. Speaking further, he noted that there is a wrong notion that Africans, Nigerians inclusive, don’t have depression. In his words, the reason for this misconception is that an average African would rather give body symptoms rather than say I am depressed. In contrast, a white man will say I am depressed, doctor or I will kill myself the next moment if nothing is done. Such a person receives help much more easily, and as a result, issues do not escalate, which makes the ability to honestly express oneself crucial to mental wellness. Consultant 4 also ascertained that the emotional side of an individual is linked to mental health, which can be determined by the individual’s behaviour driven by feelings or what motivates that individual to act in a particular way. He also stressed that another important factor in assessing an individual’s mental well-being is what motivates that individual to continue living, the inner drive that makes them act in a particular way. Consultant 5 explained that emotional wellness is not just about being happy. Rather, it’s about the person’s feelings, thoughts and behaviour compounded by environmental factors as well as the extent to which they improve an individual’s quality of life. He also emphasised the importance of body image, highlighting how an individual’s physical appearance or body structure can affect their feelings positively or negatively. In his words, “body shaming, for instance, is something that is now quite common in conversations in virtual, as well as actual communities”. He explained that this can lead to feelings of frustration, boredom, and in extreme cases, suicidal tendencies, which makes the factor important to mental wellness. Consultant 8 also alluded to the fact that the ability to control depression, anxiety, and other stressors is important for ensuring emotional stability. Consultant 9 also explained that

emotional unwellness can be triggered by specific incidents, and the ability to push it away from one’s mind helps to overcome such emotion and trauma and determines how well an individual can manage his/her mental well-being. From these submissions, this sub-construct is the predictability and consistency in emotional reactions, with the absence of rapid mood changes.

In summary, reflections on this sub-construct revealed that there is a wrong notion that Africans, Nigerians inclusive, do not have depression. The reason for this misconception is that an average African would rather give bodily symptoms rather than acknowledge their emotions. Events in school can affect the mood: “body shaming, for instance, is something that is now quite common in conversations in virtual, as well as actual communities”. This can lead to feelings of frustration, boredom, and in extreme cases, suicidal tendencies. As such, the mood of students may interfere with their well-being, even in the absence of specific disorders, which must be detected in a timely manner to prevent harm.

Healthy living: speaking to this sub-construct as impacting mental well-being, Consultant 12 explained it as being in a state of comfort or being healthy, which may not necessarily imply the absence of illness, but could also mean that. Alluding to this submission, Consultant 10 emphasised that someone could still experience problems that are not yet clinically diagnosed but will still impact their performance and quality of life. While Consultant 11 explained that mental wellness could also be determined by physical health. Categorically speaking, Consultant 2 borrowed the WHO slogan stating that there is no health without mental health, which makes this subdomain a fundamental aspect of mental health. Consultant 6 also related mental well-being to an individual’s health, as impacted by their environment and experiences at a particular time. Additionally, she emphasised the importance of regular exercise and a balanced diet for maintaining a healthy lifestyle. Therefore, this sub-construct means physical and mental health are functioning optimally. In summary, reflections on this sub-construct revealed that in many instances, physical and mental health are closely linked, so a change (good or bad) in one directly affects the other and is regarded as interdependent. Additionally, physical health can be improved through regular exercise and a balanced diet.

Belief system: Consultant 10 described this as believing in a higher power controlling things, and also defines it as an individual’s spirituality, which drives their sense of purpose and impacts their mental health. Furthermore, she noted that an individual’s belief system can influence how they perceive things and events, as well as inform their approach to dealing with adversity. She also emphasised that an individual’s belief system is integral to their value system, which is crucial to their mental well-being. Consultant 11 viewed it from the perspective that well-being is more of an internal state than an external one. Its evaluation is therefore highly dependent on an individual’s belief system. As such, regardless of any occurrence, an individual’s belief system determines their perception and how it is interpreted. Furthermore, he explained that people recover from even significant sickness just by believing they are doing the right thing in life, and this may defy medical explanation. So, what that means is most of the things that have happened to people may be dependent on their belief system. He added that a sound belief system has a way of keeping people healthy. This stand was strengthened by an example of how an event can determine well-being. A scenario of someone who does not react negatively when slapped, believing that it was a mistake, was presented. This reaction aids their well-being. However, another person may receive the same slap and decide to be bitter and angry. Judging it from the point that maybe this slap is deliberate, or claims that the slap is due to hate. Of course, when those things start coming, the well-being is already affected.

Furthermore, he stressed that a person's belief system may have much to do with what they have achieved or not but is more driven by what they think satisfies them. As such, people who appear to believe they were created for a purpose and are fulfilling that purpose exhibit better mental well-being, which should be taken into consideration when assessing mental well-being. Similarly, Consultant 12 cited the example of some people who, regardless of what comes their way, approach situations in a positive manner, which in turn has a positive impact on their mental health. Consultant 13 was categorical in expressing a belief system as subjective in the sense that an individual's perception of his/her level of satisfaction or the way the individual is perceiving the quality of his or her life impacts on mental health. Consultant 5 mentioned that "you cannot shy away from religion as it would probably be incomplete if you are not looking at their belief system with relevance within the African context. In his words, "in Nigeria, for example, people do not even complain about what is going on with them. So, if they experience pain or discomfort, which may affect their quality of life or mental wellness, you may see them saying that my enemy is in pain. According to him, issues to consider in assessing a belief system are spirituality, their religion and their personal beliefs, which all come under the psychological aspect of wellness as impacting on mental health. Consultant 9 posited that having good mental health is about being positive about oneself and about others. Further stressing God as the unifying factor, where all happenings are alluded to "God", can also impact their mental health and well-being. Therefore, this sub-construct examines the person's personal beliefs, which aid in coping with life's difficulties and how these beliefs affect mental well-being. In summary, reflections on this sub-construct revealed that an individual's belief system can influence how they perceive things and events, informing their approach to dealing with adversity and thereby affecting their mental well-being. A sound belief system has a way of promoting overall health.

Discussion

Eight of the thirteen consultants spoke on the sub-construct of coping with the normal stresses of life (CNSL), which all consultants regarded as central to mental health and well-being. Their consensus aligns with WHO (2023a), which highlights CNSL as a core indicator of mental wellness. Notably, this insight reflects the increasing understanding that moderate stress is essential for optimal functioning, while chronic or unmanaged stress becomes detrimental. Experts emphasised the need to develop adaptive coping strategies, particularly as witnessed during the COVID-19 pandemic (WHO, 2020). Studies such as those by Smallwood et al. (2021) and Barnes (2020) have affirmed that stressors—ranging from digital misinformation to family disruptions—negatively affect well-being. Similarly, Lau et al. (2022) emphasised the psychological toll of protracted work stress, underscoring the importance of proactive interventions such as quality sleep (Vandekerckhove & Wang, 2018) and stress management programmes, particularly in African university settings where socio-economic and academic pressures are particularly intense.

The sub-construct of realising potentials was discussed extensively, with participants noting that unmet academic expectations significantly impair mental wellness. The emotional toll from academic failure—exacerbated by Nigeria's rigid cognitive-based education model—can lead to discouragement and even suicide (Azeez, 2024). Abdullah et al. (2022) found that students' satisfaction or dissatisfaction with academic results directly influences their well-being. Furthermore, confidence-building and self-actualisation were seen as prerequisites for achieving personal

goals (Itai, 2008; Ingram & London, 2015). The implication is clear: addressing emotional distress linked to unmet potential enhances cognitive performance and fosters resilience.

The sub-construct of studying productively emphasised the need for self-motivation and purposeful academic engagement. Fekete et al. (2020) and McConnell et al. (2017) highlighted how effort-driven productivity boosts self-confidence and mental strength. Consultants observed that students who exhibit grit and discipline derive greater psychological satisfaction, which supports their mental health.

In the realm of social interaction, the findings underscored the importance of peer networks, faculty-student rapport, and community belonging. This aligns with Idemudia & Adediji (2023), who assert that African notions of well-being are relational and embedded in kinship and community. Acoba (2024) found that poor social support exacerbates stress, and Okoji et al. (2019) confirmed the nexus between environment and well-being. Interpersonal ties are not merely social facilitators—they are critical anchors for mental health. Hassanzadeh et al. (2016) also revealed that robust social capital helps individuals manage adversity. Conversely, isolation, especially from self-doubt, can be deeply injurious to mental health (Parkinson & Turner, 2019; Every-Palmer et al., 2020).

The findings on school-life balance stressed the interplay between academic and personal domains. COVID-19 disruptions and academic strikes were cited as destabilising events (Bamidele, 2020; Mohammed & Hammangabdo, 2022; Zakari, 2018). Extra-curricular activities, autonomy in life choices, and cultural adaptations were recommended to achieve equilibrium (Shamsudin et al., 2014; Evans, 2010). The emphasis on designing culturally appropriate mental health interventions reflects the need for grounded approaches that resonate with the lived realities of African students.

The sub-construct of emotional stability revealed associations between emotional regulation, body image, trauma, and stigma. Consultants emphasised the importance of accurate clinical diagnosis, noting that cultural pressures frequently lead to emotional suppression. Al-Khouja et al. (2022) found that authentic expression improves well-being, whereas inauthenticity leads to adverse psychological outcomes. Kwang (2022) and Chiang et al. (2019) linked suppressed emotions to psychosomatic illnesses. Consequently, African societies must prioritise safe, stigma-free spaces that allow open expression and support. On healthy living, the consultants reiterated that mental health cannot be separated from physical wellness. WHO (2020) affirms that health is not merely the absence of illness but a holistic state of well-being. This includes proper sleep, nutrition, and exercise (Yadav, 2022). Environmental stressors, poor infrastructure, and nutritional deficits were also identified as critical factors influencing psychological health (Parvizi & Hamzehgardeshi, 2014; Canadian Mental Health Association, 2016).

Finally, the role of belief systems was prominent. Consultants emphasised that spirituality, including prayer and religious practices, serves as a psychological defence, offering comfort and resilience in times of distress (Dessie, 2015). Rutjens & Brandt (2019) and Shealy (2015) highlighted that belief systems not only shape perception but also determine the meaning and emotional responses to adversity. As Villegas (2018) notes, religion provides a lens through which individuals interpret their lives, offering existential stability amid societal and personal chaos. This study's transdisciplinary approach enabled the integration of clinical, educational, psychological, and socio-cultural lenses, which is particularly apt for a latent and fluid construct like mental well-being (Bollen, 2002; Total Communication, 2019). While traditional tools are often diagnosis-centred, this research prioritises cultural fit and lived experience, enhancing both relevance and

impact. Mental health challenges among young people are a growing global concern, with data from the EU, U.S., and Asia reporting increased prevalence of stress, depression, and anxiety due to social, economic, and environmental instability (European Commission, 2022; Reinert et al., 2024; Chen et al., 2024). In Africa, 1 in 5 Nigerians and South Africans face mental illness (Soroye et al., 2021; Wits University, 2022). This study situates itself within this global discourse, while centring African realities and proposing actionable, evidence-informed solutions.

Conclusion and recommendation

This study concluded that the eight sub-constructs of the belief system, coping with everyday stress of life, emotional stability, healthy living, realising potential, school-life balance, social interactions and studying productively were relevant for assessing mental well-being. An individual's worldview, intention, expertise, and agenda will influence what is chosen for inclusion within the boundaries of analysing the construct of mental well-being. The core attributes of transdisciplinary researchers, therefore, have the potential to influence where boundaries are drawn around the situation of mental well-being, with a need for continued collaboration among stakeholders. As such, the transdisciplinary framework employed creates a pathway for action through the primary attribute of the outcome space, which is mutual and common goals, leading to the learning and clarity of purpose required for effectively assessing mental well-being. Therefore, it is recommended that various forms of knowledge be employed to close gaps in the scientific process, facilitating sustainable problem-solving and providing a novel path for researchers in Africa.

Contribution of the study

A key contribution of this study is its adoption of a transdisciplinary approach to mental health assessment, which moves beyond traditional Western-centric diagnostic frameworks that often lack ecological validity in African contexts. Prior critiques of mental health assessments in Africa note that imported models inadequately reflect local values, stressors, and expressions of distress, which could become problematic considering the heterogeneous nature of health assessment (Newson, 2020; Wilson Fadiji et al., 2022). By engaging professionals across psychology, education, sociology, and clinical medicine, this study bridges these gaps and provides a more inclusive perspective. The resulting eight-sub-construct model offers a culturally grounded framework for evaluating mental well-being in African university settings, which informed the careful design of a digitised mental well-being scale (Oladele, 2025). By integrating both universal (e.g., emotional stability, stress coping) and culturally nuanced (e.g., belief systems, community interaction) constructs, designed mental well-being scale is primed for use in educational institutions. Moreover, the study reaffirms the necessity of stakeholder engagement and multi-sectoral collaboration in addressing complex challenges, such as mental health. It advances the discourse from reactive interventions to proactive, contextually relevant strategies that resonate with the lived experiences of African youth in higher education.

Data availability

The data titled “Transdisciplinary Reflections for Assessing Mental Well-being” consisting of the interview transcripts, code report, coding concurrence analysis and the ethical approval letters, can be accessed at: <https://osf.io/82uqe>.

Received: 15 June 2024; Accepted: 15 January 2026;

Published online: 23 February 2026

References

- Abdullah NDT, Fadhil MF, Radzuwan R, Hua KP (2022) Mental well-being and its association with academic performance among final year students of the faculty of sports science & recreation, Universiti Teknologi MARA: a case study. *J Phys Educ Sport* 22(10):2306–2311. <https://doi.org/10.7752/jpes.2022.10293>
- Acoba EF (2024) Social support and mental health: the mediating role of perceived stress. *Front Psychol* 15: 1330720. <https://doi.org/10.3389/fpsyg.2024.1330720>
- Alegria M, NeMoyer A, Falgás Bagué I, Wang Y, Álvarez K (2018) Social determinants of mental health: where we are and where we need to go. *Curr Psychiatry Rep* 20(11):1–13. <https://doi.org/10.1007/s11920-018-0969-9>
- Al-Khouja M, Weinstein N, Ryan W, Legate N (2022) Self-expression can be authentic or inauthentic, with differential outcomes for well-being: development of the authentic and inauthentic expression scale (AIES). *J Res Personal* 97: 104191. <https://doi.org/10.1016/j.jrp.2022.104191>
- Amuyunzu-Nyamongo M (2013) The social and cultural aspects of mental health in African societies. *Commonw health Partnersh* 2013:59–63. https://www.commonwealthhealth.org/wp-content/uploads/2013/07/The-social-and-cultural-aspects-of-mental-health-in-African-societies_CHP13.pdf
- Archibald MM, Lawless MT, De Plaza MAP, Kitson AL (2023) How transdisciplinary research teams learn to do knowledge translation (KT), and how KT in turn impacts transdisciplinary research: a realist evaluation and longitudinal case study. *Health Res Policy Syst* 21(1):20. <https://doi.org/10.1186/s12961-023-00967-x>
- Arnold M (2013) Transdisciplinary research (Transdisciplinarity). In: Carayannis EG (Eds) *Encyclopedia of creativity, invention, innovation and entrepreneurship*. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-3858-8_337
- Azeez B (2024) 400L student kills self in Kwara over academic challenges, 10 February. *Tribune Online*. <https://tribuneonlineeng.com/400l-student-kills-self-in-kwara-over-academic-challenges/>
- Bamidele A (2020) Industrial action in nigeria: legality, causes, and consequences. *IDOSR J Curr Issues Soc Sci* 6(1):1–8. <https://www.idosr.org/wp-content/uploads/2020/06/IDOSR-JCISS-61-1-8-2020.pdf>
- Barnes SJ (2020) Information management research and practice in the post-COVID-19 world. *Int J Inf Manag* 55: 102175. <https://doi.org/10.1016/j.jinfomgt.2020.102175>
- Belcher BM, Claus R, Davel R, Ramirez LF (2019) Linking transdisciplinary research characteristics and quality to effectiveness: a comparative analysis of five research-for-development projects. *Environ Sci Policy* 101:192–203. <https://doi.org/10.1016/j.envsci.2019.08.013>
- Binitie A (2018) A factor-analytical study of depression across cultures (Africa and Europe). *Br J Psychiatry* 127(6):559–563. <https://doi.org/10.1192/bjp.127.6.559>
- Bollen KA (2002) Latent variables in psychology and the social sciences. *Annu Rev Psychol* 53(1):605–634. <https://doi.org/10.1146/annurev.psych.53.1.605>
- Bombardier CH, Azuero CB, Fann JR, Kautz DD, Richards JS, Sabharwal S (2021) Management of mental health disorders, substance use disorders, and suicide in adults with spinal cord injury: clinical practice guideline for healthcare providers. *Top Spinal Cord Inj Rehabil* 27(2):152–224. <https://doi.org/10.4629/sci2702-152>
- Canadian Mental Health Association (2016) Connection between mental and physical health. *Canadian Mental Health Association: Mental Health for All*. <https://bit.ly/4a2QVxj>
- Chen Q, Huang S, Xu H, Peng J, Wang P, Li S, Tang X (2024) The burden of mental disorders in Asian countries, 1990–2019: An analysis for the global burden of disease study 2019. *Transl Psychiatry* 14(1):167. <https://doi.org/10.1038/s41398-024-02864-5>
- Chiang JJ, Cole SW, Bower JE, Irwin MR, Taylor SE, Arevalo J, Fuligni AJ (2019) Depressive symptoms and immune transcriptional profiles in late adolescents. *Brain Behav Immun* 80:163–169. <https://doi.org/10.1016/j.bbi.2019.03.004>
- Craig A, Rochat T, Naicker SN, Mapanga W, Mtintsilana A, Dlamini SN, Norris SA (2022) The prevalence of probable depression and probable anxiety, and associations with adverse childhood experiences and socio-demographics: a national survey in South Africa. *Front Public Health* 10: 986531. <https://doi.org/10.3389/fpubh.2022.986531>
- Dessie KT (2015) Psychological and subjective well being of Ethiopian adults: correlates and socio-cultural constructions (Doctoral dissertation, PhD Dissertation. Addis Ababa University)
- Effiom BE, Ebuvara MO, Ekwok ML, Ukwieke SI, Obi JN, Undie AA, Akpama EG (2022) Emotional intelligent, critical thinking and counselling on mental

- health in calabar south local government area cross river state, Nigeria. *Br Int J Educ Soc Sci* 9(10):1-9. <https://cirdjournal.com/index.php/bijess/article/view/910>
- European Commission (2022). EU comprehensive approach to mental health. https://health.ec.europa.eu/non-communicable-diseases/mental-health_en#eu-comprehensive-approach-to-mental-health
- Evans R (2010) Children's caring roles and responsibilities within the family in Africa. *Geogr Compass* 4(10):1477-1496. <https://doi.org/10.1111/j.1749>
- Every-Palmer S, Jenkins M, Gendall P, Hoek J, Beaglehole B, Bell C, Stanley J (2020) Psychological distress, anxiety, family violence, suicidality, and well-being in New Zealand during the COVID-19 lockdown: a cross-sectional study. *PLoS One* 15(11):e0241658. <https://doi.org/10.1371/journal.pone.0241658>
- Falaye, FV (2018) *Qualitative research evaluation (basic issues and methods)* (2nd ed.). Ibadan University Press
- Fekete C, Siegrist J, Post MW, Tough H, Brinkhof MW, & SwiSCI Study Group (2020) Does engagement in productive activities affect mental health and well-being in older adults with a chronic physical disability? Observational evidence from a Swiss cohort study. *Ageing Ment Health* 24(5):732-739. <https://doi.org/10.1080/13607863.2019.1576158>
- Gale NK, Heath G, Cameron E, Rashid S, Redwood S (2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol* 13:1-8. <https://doi.org/10.1186/1471-2288-13-117>
- Grotan K, Sund ER, Bjerkeset O (2019) Mental health, academic self-efficacy and study progress among college students- the SHoT study, Norway. *Front Psychol* 10:45. <https://doi.org/10.3389/fpsyg.2019.00045>
- Hadorn GH, Bradley D, Pohl C, Rist S, Wiesmann U (2006) Implications of transdisciplinarity for sustainability research. *Ecol Econ* 60(1):119-128. <https://EconPapers.repec.org/RePEc:eee:ecolec:v:60:y:2006:i:1:p:119-128>
- Hannigan B, Coffey M (2011) Where the wicked problems are: the case of mental health. *Health Policy* 101(3):220-227. <https://doi.org/10.1016/j.healthpol.2010.11.002>
- Hassanzadeh J, Asadi-Lari M, Baghbanian A, Ghaem H, Kassani A, Rezaianzadeh A (2016) Association between social capital, health-related quality of life, and mental health: a structural-equation modelling approach. *Croat Med J* 57(1):58-65. <https://doi.org/10.3325/cmj.2016.57.58>
- Hou X, Li R, Song Z (2022) A bibliometric analysis of wicked problems: from single discipline to transdisciplinarity. *Fudan J Humanit Soc Sci* 15(3):299-329. <https://doi.org/10.1007/s40647-022-00346-w> (2019)
- Ingram D, London R (2015) The health consequences of social isolation: "it hurts more than you think". Literature review for beyond differences: negative correlates of social isolation. https://www.beyonddifferences.org/wp-content/uploads/2019/04/consequences_of_social_isolation_2015-2016.pdf
- Idemudia ES, Adedeji A (2023) Well-being and culture: an African perspective. In: Mullings J, Paul T, Dunn L, Arbor S (Eds)
- Itai I (2008) Self-actualisation: for individualistic cultures only?. *Int J Humanit Ideol* 1(02):113-139. <https://www.ceeol.com/search/article-detail?id=93219>
- Iyer-Raniga U, Andaman MM (2016) Transformative learning: innovating sustainability education in the built environment. *Int J Sustain High Educ* 17:105-122. <https://www.emerald.com/insight/content/doi/10.1108/IJSHE-09-2014-0121/full/html>
- Jeder D (2014) Transdisciplinarity - the advantage of a holistic approach to life. *Procedia Soc Behav Sci* 137:127-131
- JEO (2022) Oloriegbe records another milestone as Buhari signs mental health bill into law. 05 January, Justeventonlinepublication. <https://justeventonline.com/oloriegbe-records-another-milestone-as-buhari-signs-mental-health-bill-into-law/>
- Jones CM, McCance-Katz EF (2019) Co-occurring substance use and mental disorders among adults with opioid use disorder. *Drug Alcohol Depend* 197:78-82. <https://doi.org/10.1016/j.drugalcdep.2018.12.030>
- Karlsson L, Erlandsson LK, Cregård A, Nordgren L, Lydell M (2023) Taking control of one's everyday life: a qualitative study of experiences described by participants in an occupational intervention. *BMC Public Health* 23(1):605. <https://doi.org/10.1186/s12889-023-15515-z>
- Khalid, S (2023) How people experience work life balance: a qualitative study with three industrial sector organisations. Master's Thesis, Mälardalens universitet. <https://www.diva-portal.org/smash/get/diva2:1751665/FULLTEXT01.pdf>
- Koshy K, Limb C, Gundogan B, Whitehurst K, Jafree DJ (2017) Reflective practice in health care and how to reflect effectively. *Int J Surg Oncol* 2(6):e20. <https://doi.org/10.1097/IJ9.0000000000000020>
- Kovesi, K (2018) Transdisciplinary approach to sustainable innovation and entrepreneurship education. Proceedings in 46th SEFI Annual Conference, Copenhagen, Denmark. https://www.astep2030.eu/sites/sub_site_astep2030/files/2020-12/SEFI_2018_Sustainability_final_submission.pdf
- Kpanake L (2018) Cultural concepts of the person and mental health in Africa. *Transcult Psychiatry* 55(2):198-218. <https://doi.org/10.1177/1363461517749435>
- Kwang, HM (2022) Why is self-expression so important to our mental health? July 11, LinkedIn. <https://www.linkedin.com/pulse/why-self-expression-so-important-our-mental-health-hun-ming-kwang/>
- Lang DJ, Wiek A, Bergmann M, Stauffacher M, Martens P, Moll P, Swilling M, Thomas CJ (2012) Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustain Sci* 7:25-43. <https://doi.org/10.1007/s11625-011-0149-x>
- Lau SS, Shum EN, Man JO, Cheung ET, Amoah PA, Leung AY, Dadaczynski K (2022) Teachers' well-being and associated factors during the COVID-19 pandemic: a cross-sectional study in Hong Kong, China. *Int J Environ Res Public Health* 19(22):14661. <https://doi.org/10.3390/ijerph192214661>
- Lawrence MG, Williams S, Nanz P, Renn O (2022) Characteristics, potentials, and challenges of transdisciplinary research. *One Earth* 5(1):44-61. <https://doi.org/10.1016/j.oneear.2021.12.010>
- Letsoalo DL, Ally Y, Tsabedze WF, Mapaling C (2024) Challenging the nexus: integrating western psychology and African cultural beliefs in South African mental health care. *Psychol Soc* 66(2):45-66. <https://doi.org/10.17159/pins2024vol66iss2a6320>
- Lilley R, Pykett J, Cumming J (2021) Inclusive and transdisciplinary well-being research. New directions in urban well-being research and practice. Centre for Urban Well-being, University of Birmingham
- Marshall F, Dolley J, Priya R (2018) Transdisciplinary research as a transformative space-making for sustainability. *Ecol Soc* 23(3) <https://doi.org/10.5751/ES-10249-230308>
- Martin, CA (2012) Information literacy in interest-driven learning communities: navigating the sea of information of an online affinity space (Doctoral dissertation, The University of Wisconsin-Madison). <https://bit.ly/3UFRzXl>
- McGregor LT (2014) Transdisciplinarity and Conceptual Change. *World Futures. J New Parad Res* 70(3-4):200-232. <https://doi.org/10.1080/02604027.2014.934635>
- McConnell HK, Stull LG (2017) "Hope, life satisfaction, and motivation. *Mod Psychol Stud* 23(1):1. <https://scholar.utc.edu/mps/vol23/iss1/1>
- Mitchell C, Cordell D, Fam D (2015) Beginning at the end: the outcome spaces framework to guide purposive transdisciplinary research. *Futures* 65:86-96. <https://doi.org/10.1016/j.futures.2014.10.007>
- Mohammed I, Hammangabdo EA (2022) Investigating the effects of staff unions' industrial action on students' academic performance in Nigerian tertiary institutions. *Scholars J Arts Humanit Soc Sci* 10(7):345-357. <https://doi.org/10.36347/sjahss.2022.v10i07.005>
- Mokiy VS (2019) International standard of transdisciplinary education and transdisciplinary competence. *Inform Sci* 22:73. <https://doi.org/10.28945/4480>
- Munaretto S, Mooren CE, Hessels LK (2022) Valorisation of transdisciplinary research: an evaluation approach and empirical illustration. *Res Eval* 31(3):355-371. <https://doi.org/10.1093/reseval/rvac019>
- Newson JJ, Hunter D, Thiagarajan TC (2020) The heterogeneity of mental health assessment. *Front Psychiatry* 11:76. <https://doi.org/10.3389/fpsyg.2020.00076>
- Norris PE, O'Rourke M, Mayer AS, Halvorsen KE (2016) Managing the wicked problem of transdisciplinary team formation in socio-ecological systems. *Landsc Urban Plan* 154:115-122. <https://doi.org/10.1016/j.landurbplan.2016.01.008>
- Nortje G (2021) Culture and the expression of mental illness: an African perspective. *South Afr J Psychiatry* 27(1):1643. <https://doi.org/10.4102/sajpsychiatry.v27i0.1643>
- Obi RE (2022) Influence of psycho-social factors on students' poor mental state. *J Sch Psychol* 1(1):34-57
- Ohrnberger J, Fichera E, Sutton M (2017) The relationship between physical and mental health: a mediation analysis. *Soc Sci Med* 195:42-49. <https://doi.org/10.1016/j.socscimed.2017.11.008>
- Okafor IP, Oyewale DV, Ohazurike C, Ogunyemi AO (2022) Role of traditional beliefs in the knowledge and perceptions of mental health and illness amongst rural-dwelling women in western Nigeria. *Afr J Prim health care Fam Med* 14(1):3547. <https://doi.org/10.4102/pbfcfm.v14i1.3547>
- Okoji OO, Oladele J, Olawuni B (2019) Environmental degradation in the Niger Delta, Nigeria: implications for the well-being of host communities. *The African Resources Development. Journal* 4(1):32-41. <https://journals.out.ac.tz/index.php/ardj/article/view/738>
- Oladele JI (2022) Review of fastest for electronic item banking for standardised assessments: implications for the fourth industrial revolution and COVID-19 interjections. *J Res Rev Soc Sci Pak* 5(1):1498-1518. <https://journal.kinnaird.edu.pk/wp-content/uploads/2018/03/4.-Jumoke-I.-Oladele.pdf2022>
- Oladele JJ (2022) Feature data generation for computer adaptive testing. *Transdiscip J Eng Sci* 13. <https://www.atlas-tjes.org/index.php/tjes/index>
- Oladele JJ, Guse T, Owolabi HO (2024) A literature review of health and mental well-being indicators and their assessment in Sub-Saharan Africa (2014-2022). *J Res Health* 14(2):125-138. <https://doi.org/10.32598/JRH.14.2.2333.1>
- Oladele JI (2025) Computerised adaptive method for assessing university undergraduates' mental well-being within an African context: an open-source set-up with Concerto. *MethodsX* 14: 103140. <https://doi.org/10.1016/j.mex.2024.103140>
- Omotoso AB, Makanjuola AB, Abiodun OA (2021) Recreational use of psychoactive substances among secondary school students in North-Central Nigeria. *J Subst Use* 26(1):73-78

- Omotoso ABO (2023) ORIGINAL: psychosocial factors associated with substance use among secondary school students in Ilorin, Nigeria: West Afr J Med. 2023 Feb 28; 40 (2): 217–226. West Afr J Med 40(2):217–226
- Onaemo VN, Fawehinmi TO, D'Arcy C (2022) Risk of suicide ideation in comorbid substance use disorder and major depression. Plos One 17(12):e0265287. <https://doi.org/10.1371/journal.pone.0265287>
- Owolabi, H. O. (2015). The concept of research. In H.O. Owolabi (Ed.). In Educational Research Design. Ilorin
- Parkinson D, Turner J (2019) Alleviating social isolation through intergenerational programming: DOROT's summer teen internship program. J Intergener Relatsh 17(3):388–395. <https://doi.org/10.1080/15350770.2019.1617606>
- Parvizi S, Hamzehgardeshi Z (2014) Adolescents' view of health concept and its risk factors: a literature review. Int J Adolesc Med Health 26(3): 351–359. <https://doi.org/10.1515/ijamh-2013-0311>
- Reinert, M, Fritze, D, & Nguyen, T (2024). "The State of Mental Health in America 2024." Mental Health America, Alexandria, VA. <https://mhanational.org/issues/state-mental-health-america>
- Rutjens BT, Brandt MJ (Eds) (2019) Belief Systems and the Perception of Reality. London, UK: Routledge
- Shamsudin S, Ismail SF, Al-Mamun A, Nordin SKBS (2014) Examining the effect of extracurricular activities on academic achievements among the public university students in Malaysia. Asian Soc Sci 10(9):171. <https://doi.org/10.5539/ass.v10n9p171>
- Shealy CN (Ed) (2015) Making sense of beliefs and values: Theory, research, and practice. Springer Publishing Company. <https://media.springerpub.com/media/9780826104526/9780826104526.pdf>
- Smallwood N, Karimi L, Bismark M, Putland M, Johnson D, Dharmage SC, Willis K (2021) High levels of psychosocial distress among Australian frontline healthcare workers during the COVID-19 pandemic: a cross-sectional survey. Gen Psychiatry 34(5) <https://doi.org/10.1136/gpsych-2021-100577>
- Soroye MO, Oleribe OO, Taylor-Robinson SD (2021) Community psychiatry care: an urgent need in Nigeria. J Multidiscip Healthc 1145–1148. <https://doi.org/10.2147/JMDH.S309517>
- Soroye M, Wada A, Craig A (2021) Mental health trends in sub-Saharan Africa: challenges and opportunities. Afr J Psychol Health 13(4):210–225
- Stone AA, Mackie C (2013) Subjective well-being: Measuring happiness, suffering, and other dimensions of experience. Panel on measuring subjective well-being in a policy-relevant framework 188 <https://www.ncbi.nlm.nih.gov/books/NBK179225/>
- Suicide Prevention Resource Centre (2020) Consequences of student mental health issues. <https://www.sprc.org/colleges-universities/consequences>
- Takang KT, Daru RE, Dzingirayi P, Nyamache EK (2021) The relevance of centring the African concept of mental health in the current globalised and digital world. Int J Trend Sci Res Dev (IJTSRD) 6(1):29–34. www.ijtsrd.com/papers/ijtsrd47668.pdf
- Theilig MM, Knapp AA, Nicholas J, Zarnekow R, Mohr DC (2020) Characteristic Latent Features for Analysing Digital Mental Health Interaction and Improved Explainability. Res Sq (Preprint). <https://www.researchsquare.com/article/rs-68076/v1>
- Total Communication (2019) Transdisciplinary approach - what does it mean? October 9 <https://www.totalcommunication.com.sg/post/transdisciplinary-approach-what-does-it-mean>
- VanBaren, J (2019) What are the types of action research design? January 22. Leaf Group Media Ltd. <https://bizfluent.com/list-7608678-types-action-research-design.html>
- Vandekerckhove M, Wang YL (2018) Emotion, emotion regulation and sleep: an intimate relationship. AIMS Neurosci 5(1):1. <https://doi.org/10.3934/Neuroscience.2018.1.1>
- Villegas DL (2018) Spirituality and belief: implications for study and practice of Christian spirituality. HTS: Theological Studies 74(3):1–8. <https://hdl.handle.net/10520/EJC-122cde7d63>
- Wada YH, Rajwani L, Anyam E, Karikari E, Njikizana M, Srour L, Khalid GM (2021) Mental health in Nigeria: a neglected issue in public health. Public Health Pract 2:100166. <https://doi.org/10.1016/j.puhip.2021.100166>
- Wada A, Craig A, Soroye M (2021) Addressing mental health disparities in Nigeria and South Africa: Policy implications. Int J Public Health Res 18(3):112–126
- Weare K (2007) Linking education and mental health - a European priority. April 2007. Health Educ 107(3):245–249. <https://doi.org/10.1108/09654280710742546>
- WWilson Fadji A, Khumalo IP, Zulu NT (2022) Well-being in Africa: towards an Africa (n) centred positive psychology. In: Embracing well-being in diverse african contexts: res perspect (pp 31–49) Springer, Cham https://doi.org/10.1007/978-3-030-85924-4_2
- Wilson Fadji A, Schutte L, Wissing MP, Van De Vijver FJR (2022) Examining well-being in Africa: a critical review of conceptual and methodological approaches. J Psychol Afr 32(1):1–12. <https://doi.org/10.1080/14330237.2022.2038123>
- Wits University (2022) Mental health in SA is at shocking levels, but people are not seeking help, 14 November. <https://www.wits.ac.za/news/latest-news/research-news/2022/2022-11/mental-health-in-sa-is-at-shocking-levels-but-people-are-not-seeking-help-.html>
- Wits University (2022) Mental health crisis in South Africa: one in five has a mental illness. Wits Health Consortium Rep
- World Health Organisation (2007) WHO-AIMS Report on Mental Health System in South Africa. WHO and Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa https://www.who.int/mental_health/evidence/nigeria_who_aims_report.pdf
- World Health Organization (2014) Social determinants of mental health https://apps.who.int/iris/bitstream/handle/10665/112828/9789241506809_eng.pdf
- World Health Organisation (2020) COVID-19 is disrupting mental health services in most countries, according to a WHO survey. WHO, 5 October <https://www.who.int/news/item/05-10-2020-covid-19-disrupting-mental-health-services-in-most-countries-who-survey>
- World Health Organisation (2021) Comprehensive mental health action plan 2013–2030
- World Health Organisation (2022) Mental health: strengthening our response <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response#:~:text=Concepts%20in%20mental%20health,and%20contribute%20to%20their%20community>
- Worosz MR (2022) Transdisciplinary research for wicked problems. Agric Hum Values 39(4):1185–1189. <https://doi.org/10.1007/s10460-022-10371-w>
- Yadav M (2022) Diet, sleep and exercise: the keystones of a healthy lifestyle for medical students. JNMA: J Nepal Med Assoc 60(253):841. <https://doi.org/10.31729/jnma.7355>
- Zakari YH (2018) The causes and effects of industrial disputes by the Academic Staff Union of Colleges of Education: a case study of Federal College of Education. Zaria Int J Res Innov Soc Sci 2(1):1–7. <https://www.rsisinternational.org/journals/ijriss/Digital-Library/Vol.2&Issue1/01-07.pdf>

Acknowledgements

This publication was made possible (in part) by a grant from the Carnegie Corporation of New York with Grant Number G-20, 57628, which was deployed through the Future Africa Research Leadership programme. The statements made and views expressed are solely the responsibility of the authors.

Competing interests

The authors declare no competing interests.

Ethical approval

All requirements for studies involving human participants were adhered to in line with the ethical standards for research as outlined by the Research Ethics Committee of the University of Ilorin, Nigeria (Ref. ERC PAN/2022/07/0307), on July 19, 2022, and the University of Pretoria (Ref. EDU089/22), on 22 July 2022. The research was conducted in accordance with institutional guidelines and the principles of the Declaration of Helsinki. The ethical certificates can also be accessed at <https://osf.io/82uqe>.

Informed consent

This research involved human participants who were professionals in relevant fields. To ensure informed consent, experts designated as consultants in this study were contacted via email with detailed information about the research, clearly outlining the purpose of the study. The link to the web page with information on the study was shared through a Virtual Environment (<https://vre.futureafrica.science/projects/mentalwellbeing/info>) to ensure that participants fully understood the research and their roles. Following this, engagement contracts were issued via email by the lead researcher to consultants who had read the research details and consented to participating in the research. As proof of their consent, a signed/dated copy of the engagement contract document, along with their CV, was sent back to the researcher between 26 and 29 July 2022. Therefore, identified consultants could decline the invitation by not signing the letter, while those who signed the study invitation letter served as an indication of their consent to participate in the study, ensuring voluntary participation. During the interviews, no photographs or video recordings were taken; only audio recordings were used, which were transcribed, treated anonymously, and kept confidential. No vulnerable individuals were included in the study, and participants were informed that the data would be used solely for research purposes.

Additional information

Correspondence and requests for materials should be addressed to Jumoke Oladele.

Reprints and permission information is available at <http://www.nature.com/reprints>

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

© The Author(s) 2026

¹Future Africa Research Institute, University of Pretoria, Pretoria, South Africa. ²Department of Social Sciences Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria. ³Department of Behavioural Science, Faculty of Clinical Sciences, University of Ilorin, Ilorin, Nigeria. ⁴Department of Educational Foundations, Faculty of Education, University of Nigeria, Nsuka, Nigeria. ⁵DIPF|Leibniz Institute for Research and Information in Education, Frankfurt am Main, Germany. ⁶West African Examinations Council, Ghana, Nigeria. ⁷Department of Educational Psychology, University of Johannesburg, Johannesburg, South Africa. ✉email: oladele.jumoke@up.ac.za