


Chapter 5

Protective Factors of Well-Being Among Students in Higher Education Institutions: From a Systematic Literature Review

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ABSTRACT

Several issues affect students in higher education institutions including pressure of studies, cost of education, inadequate sleep, and stress. While mobile learning offers some advantages for the students in terms of convenience and flexibility matters, there are also disadvantages of using mobile devices, including addiction, health, distraction, and privacy because mobile phones can be distracting. The chapter indicates that protective factors also contribute to mental health as well as allow a

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person to be resilient in the face of challenges. The review also looked at different types of well-being, including emotional, physical dimension, occupational, social, spiritual, intellectual, environmental, and financial wellbeing.

INTRODUCTION

Several factors influence students at universities across the world. Common issues that are faced by university students are adjustment to new life, homesickness, pressure of studies, cost of education and finding new friends or relationships, roommates, health, and academic issues. Building and maintaining relationships with people can be challenging while poor self-care, inadequate sleep and stress may negatively affect most students. It may not be easy for people to click and get along as roommates whereas one's chosen degree significantly influences the general course of one's career. Based on the United Nations Education Scientific and Cultural Organisation, UNESCO (2021) study, the COVID-19 crisis and the sudden closure of schools resulted in rapid national shifts to replace in-person teaching with various forms of ICT-based, remote and distance education.

In France, a survey by Wathélet et al (2020), made different findings in a study of 69 054 students who experienced quarantine after being confined during the coronavirus disease 2019 (COVID-19) pandemic. It can be deduced that COVID-19 and quarantine measures raised concerns regarding their psychological effects on populations, the general population among which university students appeared to be particularly susceptible to experiencing mental health problems. Some of the main outcomes and measures included the rates of self-reported suicidal thoughts, severe distress, stress, anxiety, and depression.

Universities across the United States were struggling with the question of whether and how to reopen for the period 2020 semester. Residential colleges, with communal living arrangements, shared dining spaces, intimate classrooms, and a population of young adults anxious to socialize, posed a particular challenge (Paltiel, et al 2020). Moreover, cases of SARS-CoV-2 infection suggested that frequent screening (every 2 days) of all students with a low-sensitivity, high-specificity test might be required to control outbreaks with manageable isolation dormitory utilization at a justifiable cost. On one hand, on the part of universities and colleges, there was need to carry out screening of students every 2 days using a rapid, inexpensive, and even poorly sensitive test, with strict behavioural interventions to keep the pandemic low, and this was estimated to maintain a controllable number of COVID-19 infections and permit the safe return of students to campus. On the other hand, all these tests and behavioural interventions, including keeping students safe, success of social dis-

tancing interventions, isolation and treatment capacity would mean uncertainties and psychological effects on the part of students and university staff.

Again, in America, Wood & Turner's (2010) article highlighted findings from a qualitative study of factors affecting the academic success of African American male students in the community college. Data was collected through interviews with 28 Black male students in a midsized institution in the southwestern United States. Findings illuminated four key faculty-initiated elements that serve to create and maintain positive faculty-student relationships: namely, being friendly and caring from the onset; monitoring and proactively addressing students' academic progress; listening to students' concerns; and encouraging students to succeed. This implies that university staff are to deal with several factors that may impact university students negatively. Without university staff's interference, students might find themselves overwhelmed by workload and various concerns which the students should voice at the end of every block, as evaluation of the teaching staff and the teaching and learning methods.

Many people today heavily depend on mobile devices to support their daily activities. According to an Indonesian study by Lisana (2022), in the educational system, notably in higher education institutions (HEIs), the rapid growth of mobile technologies has impacted the students in increasing their cognitive knowledge by using their portable devices known as mobile learning (ML). Pramana (2018) defines ML as the use of mobile devices, including smartphones, notebooks, laptops, personal digital assistants, and tablets, to perform learning activities anytime and anywhere through wireless communication technologies. This promising learning method offers some advantages for the students in terms of convenience and flexibility matters (Chavoshi and Hamidi, 2019). Lisana (2022), further postulates that students may access the resources and conduct the learning process at their own pace via mobile devices without limitation of place and study time. However, there are also disadvantages of using mobile devices, including addiction, health, distraction, and privacy because mobile phones can be distracting, especially for students and those at work. In addition, prolonged use of mobile devices can lead to health issues like eye strain, neck pain and poor posture. In terms of addiction, overuse of mobile devices, including laptops, can act as a barrier to quality interactions and conversations, leading to decreased satisfaction in relationships.

Universities in South Africa face ongoing challenges with low rates of academic attainment and high rates of college dropouts, whereby the number of first-year students does not tally with the same group's final year enrolment. A study by Bantjes, et al (2021) aimed at investigating the extent to which common mental disorders evaluated early in the first year predicted academic failure at the end of the year, controlling for socio-demographic factors and established the potential reduction in prevalence of failure that could be achieved by effectively treating associated mental

disorders. In the above study, participants were assessed for six common mental disorders. Academic performance data were subsequently obtained from institutional records at the end of the year. Bivariate and multivariate logistic regression models were used to identify the best sociodemographic and mental health predictors of academic failure. Moreover, the study suggested that providing effective treatment to students with major depressive disorder and/or attention deficit hyperactivity disorder could yield a 6.5% absolute reduction in prevalence of academic failure.

Furthermore, another study by Moonasamy & Naidoo (2022), in South Africa highlighted that higher education was thrust into online learning almost instantly during the COVID-19 pandemic. Before the lockdown, online learning was not taken very seriously, and the rollout was delayed. Many higher learning institutions scrambled to switch over to online teaching and learning, and this move highlighted the disparities and profound inequalities among students, which further exacerbated the digital divide. Students in the urban areas seemed to be better off than their counterparts who live in rural areas. Students living in rural areas struggle without having proper digital devices and poor internet connectivity. The findings reveal that students are not satisfied with the current state of online learning and the key challenges confirmed the lack of digital resources, internet connectivity, availability of electricity, and high data costs. It is recommended that higher education develop strategic plans coupled with digital literacy and resources to equip both students and academics to address the digital gap.

As the year begins, most students lack mobile gadgets, and it becomes a disadvantage on their part as most work must be done online. This may be attributed to the donor syndrome that most South African parents and students have, especially those living in rural areas, that the government should provide every academic requirement to the students.

A study by Bantjes, et al (2023) revealed that there is growing concern worldwide about the mental health of university students, where anxiety and mood disorders were the most common problems reported by students in those studies and have been the focus of much of the research in this area. According to Bantjes, et al (2023), previous research suggests that student mental health problems are associated with socioeconomic status, gender, ethnicity, parents' level of education and sexual orientation, with increased risk of psychopathology among minority groups and students who face discrimination and marginalisation. In situations where parents are well-up and the student has enough provisions, normally the individual flourishes but when the student comes from a poor background and lacks basic and important requirements, the individual deteriorates or even ends up dropping out. In addition, Bantjes, et al (2023) highlights that students typically face psychosocial stressors and developmental challenges, such as leaving home for the first time, adapting to a new social environment, academic pressure, greater opportunities for substance

misuse, and financial pressure, which can exacerbate pre-existing mental health problems or precipitate new symptoms.

In addition to the normal developmental challenges of emerging adulthood, many students in South Africa face several socioeconomic stressors resulting from the political history of the country that could impact their mental health, including widespread crime, gender-based violence, poverty, inequality, and housing and food insecurity (Bantjes, et al 2023). Furthermore, Bantjes, et al, (2023) adds that since the first democratic elections in 1994, South Africa has increasingly become a more integrated and equal society, resulting in transformation of the racial and gender profile of South African university students, abolition of racially segregated universities, and the creation of new institutions of higher learning. This is testified by the big number of universities that have been opened nationwide and in every province. This is supported by Bantjes, et al (2023) who reported that transformation of higher education in South Africa since 2004 has also created seven Universities of Technology (UTs), which are institutions primarily focused on vocational education and developing students' capabilities to use technology to create products, processes, and services (South African Council on Higher Education, 2010). It is, however, unclear what if any differences there might be in student mental health needs across these different types of institutions (Bantjes, et al 2023; 218). Moreover, the South African national student mental health survey that we report on here is the first study to systematically assess the mental health care needs of a large sample of undergraduate students from 17 institutions in South Africa.

Access to higher education has been a key driver for the development of democracies in Africa. In South Africa, Eloff & Graham's (2020) study revealed that universities have been critical partners in addressing societal inequality, overcoming the ravages of apartheid, and seeking the well-being of individuals, families and broader communities by providing opportunities for talented youth. Furthermore, Eloff & Graham (2020) concluded in their study that the statistically significant decreases in the mental health and well-being of participants indicate the need for substantive interventions to support student mental health and well-being. Strong foci for well-being interventions should include self-efficacy, sense of direction, meaning and creating a sense of belonging. In universities, all this would be possible through the help of a unit like the Counselling and Careers Development Unit (CCDU) where individual and group therapy is offered by therapists. Students can also try to do self-help strategies or consult a medical practitioner to assist in managing anxiety. At one South African university, the University of the Witwatersrand, Johannesburg, the Community Psychology Clinic offers free psychotherapy and counselling services to students, and people from the surrounding community who cannot otherwise afford or access these services.

Well-Being

Well-being is a multifaceted construct, and measuring well-being, both within particular groups and at a national level, is a priority for policy and practice (Dodd, et al 2021). Dodd, et al's (2021) review concluded that there were inconsistencies in defining and measuring university student well-being, and the measures that were used in that respective study population was focused on subjective experience. In other words, the term well-being refers to the state of being comfortable, healthy, or happy. It also means a positive state experienced by individuals and societies. In agreement, Hernandez-Torrano, et al (2020), highlight that research on mental health and well-being remains a diverse and fragmented body of knowledge and that mental health and well-being are unclear concepts, and their history and development are quite complicated, with a multitude of perspectives and contributions emerging from various disciplines and contexts. Khaw & Kern (2015) argue that well-being is important for human flourishing and that people supported by close friendships, family, and support groups have higher well-being, and are found to be less vulnerable to sickness and premature death, while loneliness has been found to be an important risk factor for poor health outcomes and functional decline.

The effects of Covid-19 have been felt worldwide and one population that are of increasing concern are university students. In Europe, Allen, et al's (2022) study reported that University students have endured unique and drastic changes to their everyday and academic lives. The authors further highlighted that it was important to understand how university students in different parts of the world had been affected by the Covid-19 pandemic and how it had affected their mental health. It follows that university students' well-being had to be closely monitored so that their education would not be distracted.

Worsley et al's (2022) study in the United States highlighted that poor mental health of further and higher education students was a growing public policy concern. Research indicates that levels of common mental health difficulties, self-harm, and suicide are increasing among young people, especially young women. The research results also indicated that all university students were suffering from poor mental health and that young people's mental health is poorer during university study than before entry.

In South Africa, a study by Kanyumba & Shabangu (2021), through a qualitative research design, investigated the effect of Covid-19 on students and the living and learning spaces at a selected university in South Africa. Fifteen students and ten Residence Advisors (RAs) were telephonically interviewed. The results revealed that the living and learning spaces had been significantly transformed by the Covid-19 pandemic. The operations of these spaces had been compelled to change in order to comply with the Covid-19 regulations, such that student learning was shifted from

face-to-face to online learning. This, therefore, implies that the students' well-being had to be the university's number one concern.

Another study by Chinaza (2022) explored the learning challenges among undergraduate students in rural universities in South Africa and Nigeria. The findings of the study show that undergraduates in the African rural universities experience common learning challenges which include cognitive learning challenge, poor academic foundation, academic malpractice amongst academic staff and students, as well as lecturer-students' relationship. These are caused by lack of facilities, students' family socio-economic background, amongst others. What this implied was that the necessary facilities and structures needed to facilitate teaching and learning practices had to be provided. The study's recommendations were that more lecturers should be recruited. Cordial student-lecturer relationships should be encouraged and promoted. In addition, policies that will ensure safety on campus, adoption, and use of the most suitable language of instruction amongst others should be established. The study suggests the need for additional focus on the quality added to university education in developing African nations.

A similar study by Bantjes, et al (2023), estimated a 30-day prevalence of 11 common mental disorders among a representative sample of university students in South Africa and explored disparities in student mental health across historically segregated institutions and marginalised groups. Results of the study indicated that prevalence estimates were highest for two anxiety disorders (social anxiety disorder, PTSD) and two disruptive behaviour disorders (eating disorder, ADHD). Prevalence estimates were higher for any anxiety disorder and any disruptive behaviour disorder than for any mood disorder or any substance use disorder. These prevalence estimates varied significantly by historical segregation status of institutions, with prevalence consistently highest in Historically White Institutions (HWIs). Across all institutions, risk of any disorder was lower among oldest than younger students, and elevated among gender non-conforming, female, and sexual minority students. Black students attending HWIs had elevated risk of any disorder relative to White students.

Types of Well-Being

There are different types of well-being, including emotional wellbeing, physical dimension, occupational wellbeing, social wellbeing, spiritual wellbeing, intellectual wellbeing, environmental and financial wellbeing. According to a study by Visser & Law-van Wyk's (2021), most respondents reported that the lockdown hampered their physical health and fitness (for an example, their sleep patterns and diet changed). In terms of social connectedness, Visser & Law-Van Wyk (2021), reported that most

respondents reported a negative effect on their social functioning. Many felt lonely and isolated, but they valued connecting electronically with others.

On spiritual wellbeing, Visser & Law-Van Wyk (2021) reported that respondents reported that the pandemic affected their spiritual functioning. About a third experienced a deeper spiritual connection, whereas some felt removed from their spiritual pursuits and some questioned God. The above authors also reported on financial wellbeing that more than half of the respondents experienced financial losses and increased financial dependency. They were especially worried about increasing economic threats to possible future employment. The COVID-19 pandemic caused a lot of anxiety among people of different divides, especially university students.

Again, on hopefulness and emotional well-being, Visser & Law-Van Wyk (2021) added that about a third of respondents reported being hopeful in difficult situations, with hope decreasing their anxiety, whereas almost a fifth of the respondents reported hopelessness. On emotional well-being, majority of students reported that the pandemic restricted their emotional functioning, whereas others felt more positive and optimistic. Finally, on mental health, the same authors mentioned above reported that the respondents scored low on the mental health scale, indicating that many of the respondents were languishing rather than flourishing. Respondents expressed some sense of satisfaction with life and personal wellbeing (taking responsibility and regarding life as meaningful) but doubted society and did not feel they belonged or could contribute to society. All this could be attributed to the uncertainty of whether the pandemic was to ever come to an end.

Visser & Law-van Wyk's (2021), study highlighted that multiple regression analyses showed that some different dimensions predicted emotional difficulties or wellbeing and mental health. Visser & Law-van Wyk's (2021) further postulated that students' serious discomfort during lockdown, difficulty adjusting academically and feeling socially isolated contributed most to emotional difficulties. Females, students in their early years of study and students residing in informal settlements were most at risk of experiencing emotional difficulties. In addition, social, academic, spiritual, and physical wellbeing and positive coping strategies influenced both emotional difficulties and mental health.

Furthermore, Douwes, et al's (2023) study contributes to the body of knowledge on the well-being of students in higher education and provides suggestions for educational institutions, such as incorporating a holistic perspective on students and learning; and focus points for the development of policies and practices. The well-being of students in higher education is under attention. Students' age in full time higher education generally ranges between 17–24 years. This is also the critical age for the onset of psychological problems. Studies report that a substantial number of students in higher education are dealing with well-being issues such as

psychological and emotional distress, feelings of anxiety and depression, and an increased risk of burnout.

Furthermore, Visser & van-Wyk's (2021) study revealed that in terms of physical wellbeing, most respondents reported that the lockdown hampered their physical health and fitness, for example, their sleep patterns and diet changed and in terms of social connectedness, the majority of respondents reported a negative effect on their social functioning. Many felt lonely and isolated, but they valued connecting electronically with others. The scale score indicated average social connectedness. In addition, Visser & van-Wyk (2021) explained on spiritual wellbeing, that respondents reported that the pandemic affected their spiritual functioning. About a third experienced a deeper spiritual connection, whereas some felt removed from their spiritual pursuits and some questioned God. The scale score indicated a low level of spiritual wellbeing. On financial wellbeing, more than half of the respondents experienced financial losses and increased financial dependency. They were especially worried about increasing economic threats to possible future employment. Similarly, on academic wellbeing, although some of the respondents experienced a positive effect, many reported reduced academic ability. They feared not completing the academic year, and some had difficulty engaging in self-study and online learning. Students scored a low average on the academic wellbeing scale. Conclusively, university students needed support and finally, the pandemic came to an end and most of the students completed their studies amid the pandemic while others stopped their studies at the peak of the pandemic then commenced later.

There are different types of well-being according to different researchers. Proctor's (2014) study discovered a type of well-being called subjective well-being (SWB) which is the personal perception and experience of positive and negative emotional responses and global and (domain)specific cognitive evaluations of satisfaction with life. Diener, et al (2002, p63) defined SWB as "a person's cognitive and affective evaluations of his or her life". Philosophers, psychologists, economists, and other social scientists continue to debate the nature of human well-being and that this debate centres around five main conceptualizations of well-being: hedonic well-being, life satisfaction, desire fulfilment, eudaimonia, and non-eudaimonic objective list well-being (Margolis, et al 2021). Margolis, et al (2021) further postulate that although previous studies have compared two or three types of well-being (usually involving hedonic well-being, eudaimonia, and life satisfaction), none has compared all five types of well-being, and previous studies' choices of measures have often mapped poorly onto the philosophical conceptions.

Theoretical Frame: Seligman's Theory of Well-Being

A theoretical framework might be defined as a set of theoretical assumptions that explain the relationships among a set of phenomena (Camp, 2001). In research, an author examines theoretical literature on the relationship between theory and research from their perspective. Camp (2001) argues that an adequate theoretical framework for a research study can be built at any of the three levels, namely the grand theory, middle range theory and substantive theory. Camp (2001) contends that writers who present conceptual frameworks for their studies are actually referring to theoretical frameworks at the level of substantive theory and argues against using the term "conceptual framework" in that context. In this study, the researcher will use the theoretical framework based on Seligman's theory of well-being.

Martin Elias Peter Seligman is an American psychologist, educator, and author of self-help books. Seligman is a strong promoter within the scientific community of his theories of well-being and positive psychology. In Seligman's theory (2011), well-being is defined as a combination of cognitive happiness (i.e., satisfaction), hedonic happiness (i.e., feeling), and eudaimonia (i.e., meaning). Seligman recently introduced the PERMA model with five core elements of psychological well-being: **P**ositive emotions, **E**ngagement, positive **R**elationships, **M**eaning, and **A**ccomplishment (Kun, et al 2017; Kovich, et al (2023); Khaw & Kern (2015). The PERMA Model is a well-being theory, and it has been developed by positive psychologist Martin Seligman Furthermore, Kun, et al (2017) postulate that a multidimensional well-being assessment may be useful for understanding employees' well-being, which can then be applied when developing policy and practice to increase well-being for all employees at work. In the case of university students, as mentioned earlier on in the section on issues affecting university students, the CCDU plays an important role to increase the well-being of all students in the university.

Seligman's (2011) PERMA theory of well-being describes a multi-dimensional approach to define what it means to flourish in life (Khaw & Kern 2015). Khaw & Kern (2015), in their study, point out that while the PERMA constructs were generally represented, there were also other constructs that went beyond the PERMA model, such as religion, health, and security. Kovich, et al (2023) concur with Khaw & Kern (2015) that the PERMA model was introduced by Seligman in 2011 to increase and measure well-being. Kovich, et al (2023) further point out that mental health concerns are common in undergraduate students and may prevent them from obtaining optimal well-being. Furthermore, Kovich, et al (2023) highlight that people desire optimal well-being, but barriers and lack of societal support prevent many individuals from realizing a satisfying, meaningful life. Worse still, in undergraduate college student populations, common barriers to optimal well-being include anxiety, stress, and depression.

The PERMA model is Seligman's framework for understanding and measuring wellbeing. It is evidence-based and a valuable and powerful tool for further research and application within therapy and our personal and working lives (Seligman, 2011). In universities, therefore, students' well-being can be understood and measured from the way they interact with others and from the way they learn. It is, thus important for research to be done on university students' behaviour and well-being.

With the PERMA Model of well-being, one can achieve milestones by starting from scratch! It is possible, out of inspiration, for one to start a project, or to further their education, given that one begins with positive emotion, then they engage with positive relationships and finally accomplish something. This is supported by Seligman (2011) who points out that by focusing on the five elements on the PERMA model, we can flourish in life, and discover happiness, then subsequently, PERMA gives us the starting point for living a great life!

Seligman's (2018) study reported that Goodman, et al (2017) reported strong evidence that subjective well-being is the final common path of such elements as positive emotions, engagement, positive relationships, meaning, and accomplishment, and their data are entirely consistent with Seligman's hypothesis. It, therefore, follows that if university students work with positive emotions, engagement, have positive relationships, lead meaningful life and accomplish what they pursue in life, they can be successful and happy in life.

Proctor's (2014) study discovered a type of well-being called subjective well-being (SWB) which is the personal perception and experience of positive and negative emotional responses and global and (domain)specific cognitive evaluations of satisfaction with life. Dicner, et al (2002, p63) defined SWB as "a person's cognitive and affective evaluations of his or her life".

Literature on Protective Factors of Wellbeing Reviewed Thematically

Protective factors are qualities of individuals and conditions in families and communities that serve to preserve and promote child and family well-being. They function as buffers, mitigating risk for child abuse and neglect and promoting resilience, which is the ability to successfully and positively adapt to circumstances that threaten well-being: Walsh, et al (2015).

We can also refer to protective factors as conditions, attributes, skills, strengths, resources, supports or coping strategies that help people deal more effectively with stressful events and mitigate or eliminate risk in families and communities. Moreover, protective factors are associated with positive adjustment and development throughout the course of life-threatening conditions and cultural situations, and they contribute to mental health as well as allow a person to be resilient in the

face of challenges. Berlanda, et al (2020) gathered qualitative data analysing open-ended questions about risk and protective factors of well-being at work. The sample was made of 795 professionals answering an online questionnaire where answers were coded and analysed using the thematic analysis with an inductive approach (data-driven). Berlanda, et al (2020), identified four themes strongly affecting professional well-being in health-care staff: *Interactions*, *Working Conditions*, *Emotional Responses to Work*, and *Competence and Professional Growth*. Their findings suggest possible strategies and actions that may be effective in helping to calibrate case-specific support and monitoring interventions to improve health and well-being of healthcare staff.

In another study, Kuettel & Larsen (2019) evaluated a total of nine reviews and 43 empirical studies and reported them in three sections: sample characteristics, research design, and factors affecting elite athletes' mental health. The review showed that researchers had predominantly examined the prevalence of athletes' mental *ill*-health, for example, depression and the related factors compromising mental health. Potential protective factors such as the feeling of autonomy, positive relations in sport and private life, and adequate recovery were highlighted in the qualitative studies.

Furthermore, in the United States, Fuentes-Afflick's (2021) study draw on a life-course framework to highlight promising interventions and recommend key improvements in programs and policies to optimize health and well-being among women and children in the US. The recommendations address ensuring access, transforming health care, and addressing social and environmental determinants. According to Fuentes-Afflick (2021), each year, more than 700 women in the US die during pregnancy and childbirth, and more than 50,000 pregnant women experience a life-threatening complication. Moreover, maternal mortality is associated with racial, ethnic, socioeconomic, and geographic disparities. For example, African American women are more than three times as likely to die during pregnancy and childbirth as White women—a gap that has not narrowed in decades. In the same study, Fuentes-Afflick (2021) children and youth in the US experience higher rates of poor health and developmental outcomes, including developmental disorders, mental health conditions, severe asthma, and obesity, as well as other correlates of poor health, including poverty, hunger, poor educational outcomes, and adolescent incarceration, than their counterparts in other countries. In a case like this, protective factors, which are, attributes, skills, strengths, resources, supports or coping strategies that help people deal more effectively with stressful events and mitigate or eliminate risk in families and communities- are not catered for at all. Therefore, the authorities that be, should be answerable.

In the United States, Cherewick, et al's 2023 study points out that less research has focused on protective factors that protect mental health and promote wellbeing in diverse contexts. The study examined protective factors, for example, community

relationships, self-esteem, and autonomy among adolescent orphans, protective associations with depression, anxiety and externalizing behaviours and promotive associations with hope, happiness, and health. Results of the fitted structural equation model indicated that structural paths from protective factors to psychopathology and mental wellbeing outcomes were significant. Structural paths from risk factors to psychopathology and mental wellbeing were not significant: Cherewick, et al (2023). In their conclusion, Cherewick, et al (2023) and in a sample of vulnerable youth, protective factors (e.g. community relationships, self-esteem, and autonomy) were significantly associated with reduced depression, anxiety and externalizing behaviours and increased hope, happiness, and health in a structural equation model that included risk factors (emotional neglect, emotional abuse, physical neglect). Results suggest that strong community relationships, self-esteem and autonomy may be important modifiable factors to target in intervention programs aimed at supporting adolescent mental wellbeing.

The factors affecting the psychological well-being of Health care workers (HCW) during an epidemic outbreak are “primarily poor social support, stressful work environments, greater patient contact, inadequate training, quarantine, history of physical or mental health issues, poor coping mechanisms, high perceived risk, stigma, social isolation, and a lack of resilience” In India, Phillip & Cherian (2020; 323) further highlighted that “mental health professionals have an important role to play in mitigating the impact of these factors by extending the necessary support and professional expertise to HCW in need”. Moreover, in the U.S, Moeller, et al’s (2022) study examined changes to undergraduate emotional sentiments and psychological well-being from before to after the onset of the Covid -19 pandemic. The authors explored whether protective factors (i.e., subjective socioeconomic status, parental education, household resources) predicted students’ emotions and their intraindividual changes due to the pandemic onset. Moeller, et al (2022) compared experience sampling method data from 120 students from before and after the pandemic onset, examining intraindividual routes/paths and there was only little change in students’ emotions.

In another study, in Europe, Slimmen, et al’s (2022) study aimed to study the association of underlying stressors like academic pressure, family circumstances, side-activity pressure, and financial situation, with perceived stress and mental wellbeing, whether perceived stress mediates the association between the sources of stress and mental wellbeing and whether loneliness, self-esteem, personality and coping styles reinforce the impact of perceived stress on mental wellbeing. In the study, a total of 875 university students participated and perceived stress had a strong negative association with mental wellbeing, explaining 45% of the variance while academic pressure, side-activities, and financial pressure, all had a negative impact on mental wellbeing.

In Zambia, Masaiti, et al's (2020) study investigated the scopes of rurality and its influence on the transition to higher education amongst students with rural backgrounds. Using unstructured interviews, sixteen conveniently sampled students were examined to obtain the most in-depth lived experience information on how their rural backgrounds influenced their settling down and learning at the University of Zambia. Data collected in the study resulted in five emerging themes namely context of rurality among students, students' transitioning, challenges faced by students, coping strategies adopted by students and established support systems for students with rural backgrounds and their progression and completion rates. Results of this study suggest that students from rural communities face additional challenges to adjust to the university compared to students from urban and sub-urban areas.

In Europe, Schmits, et al's (2021) evaluated the predictive effect of factors on anxiety and depressive symptoms among students in higher education one year after the beginning of the Covid-19 pandemic. Results of the study revealed that contact with family and friends (for both anxiety and depression) as well as regular physical activity (only for depression) should provide some protection against psychological distress. The study recommended that policymakers must make a long-term investment in the well-being and positive mental health of the student community.

In a study on the well-being of students in higher education, again in Europe, Douwes, et al (20), qualitatively examined the student perspective on the topic through semi-structured interviews at a university of applied sciences in the Netherlands (n = 27). A major recurring theme was well-being as a balance in the interplay between efforts directed towards studies and life beyond studies. Students mentioned various factors that influence their well-being and the responses ranged from personal and university related factors to external factors beyond their educational institution.

In South Africa, Eloff & 's () study revealed that a survey was conducted at two time points – at the beginning and end of the academic year – at a large, urban university in South Africa. The Mental Health Continuum-Short Form, the Flourishing Scale, and the Fragility of Happiness Scale were used in the testing of undergraduate students from a variety of scientific disciplines. Results indicated a significant decline in mental health and well-being for both groups (independent and dependent) over the course of the academic year. Both follow-up groups were found to have lower psychological, emotional, and social well-being, psychological flourishing, and reduced mental health, in comparison with the baseline groups.

Protective factors are not one-size-fits-all prescriptions to the problems facing vulnerable children and families. The literature makes clear that different problems faced by children and families may require different solutions (Walsh, et al., 2015).

CONCLUSION AND RECOMMENDATION

This chapter discussed protective factors of well-being among students in higher education institutions. Based on the findings from the systematic literature review, it is concluded that common issues that are faced by university students are adjustment to new life, homesickness, pressure of studies, cost of education and finding new friends or relationships, roommates, health, and academic issues. Moreover, it can also be concluded that COVID-19 and quarantine measures raised concerns regarding psychological effects on populations, the general population among which university students appeared to be particularly susceptible to experiencing mental health problems including the rates of self-reported suicidal thoughts, severe distress, stress, anxiety, and depression. On one hand, universities and colleges, needed to carry out screening of students every 2 days using a rapid, inexpensive, and even poorly sensitive test, with strict behavioural interventions to keep the pandemic low, and this was estimated to maintain a controllable number of COVID-19 infections and permit the safe return of students to campus. On the other hand, all these tests and behavioural interventions, including keeping students safe, success of social distancing interventions, isolation and treatment capacity would mean uncertainties and psychological effects on the part of students and university staff. Without university staff's interference, students might find themselves overwhelmed by workload and various concerns which the students should voice at the end of every block, as evaluation of the teaching staff and the teaching and learning methods. In the educational system, notably in higher education institutions (HEIs), the rapid growth of mobile technologies has impacted the students in increasing their cognitive knowledge by using their portable devices known as mobile learning (ML), or the use of mobile devices, including smartphones, notebooks, laptops, personal digital assistants, and tablets, to perform learning activities anytime and anywhere through wireless communication technologies. However, using mobile devices also has disadvantages including addiction, health, distraction, and privacy because mobile phones can be distracting, especially for students and those at work. In addition, prolonged use of mobile devices can lead to health issues like eye strain, neck pain and poor posture. In terms of addiction, overuse of mobile devices, including laptops, can act as a barrier to quality interactions and conversations, leading to decreased satisfaction in relationships. Furthermore, it was concluded that Universities in South Africa face ongoing challenges with low rates of academic attainment and high rates of college dropouts, whereby the number of first-year students does not tally with the same group's final year enrolment. It was also concluded that students in the urban areas seemed to be better off than their counterparts who live in rural areas and that those living in rural areas struggle without having proper digital devices and poor internet connectivity. Furthermore, the findings revealed that students

were not satisfied with the current state of online learning and the key challenges confirmed the lack of digital resources, internet connectivity, availability of electricity, and high data costs. Another finding suggested that student mental health problems were associated with socioeconomic status, gender, ethnicity, parents' level of education and sexual orientation, with increased risk of psychopathology among minority groups and students who face discrimination and marginalisation. Some of the recommendations were providing effective treatment to students with major depressive disorder and/or attention deficit hyperactivity disorder and this could yield a 6.5% absolute reduction in prevalence of academic failure. It was also recommended that university students underwent counselling from Counselling and Careers Development Unit (CCDU) to support student mental health and well-being.

REFERENCES

- Allen, R., Kannangara, C., Vyas, M., & Carson, J. (2022, February 11). European university students' mental health during Covid-19: Exploring attitudes towards Covid-19 and governmental response. *Current Psychology (New Brunswick, N.J.)*, 1–14. 10.1007/s12144-022-02854-035194357
- Bantjes, J., Kessler, M., Lochner, C., Breet, E., Bawa, A., Roos, J., Davids, C., Muturuki, M., Kessler, R. C., & Stein, D. J. (2023, January). The mental health of university students in South Africa: Results of the national student survey. *Journal of Affective Disorders*, 321(15), 217–226. 10.1016/j.jad.2022.10.04436349649
- Bantjes, J., Saal, W., Gericke, F., Lochner, C., Roos, J., Auerbach, R. P., Mortier, P., Bruffaerts, R., Kessler, R. C., & Stein, D. (2021). Mental health and academic failure among first-year university students in South Africa. *South African Journal of Psychology. Suid-Afrikaanse Tydskrif vir Sielkunde*, 51(3), 396–408. 10.1177/0081246320963204
- Berlanda, S., de Cordova, F., Fraizzoli, M., & Pedrazza, M. (2020). Risk and Protective Factors of Well-Being among Healthcare Staff. A Thematic Analysis. *Interdisciplinary Journal of Environment and Research Public Health*. 10.3390/ijerph17186651
- Camp, W. G. (2001). Formulating and Evaluating Theoretical Frameworks for Career and Technical Education Research. *Career and Technical Education Research*, 26(1), 4–25. 10.5328/JVER26.1.4
- Chavoshi, A., & Hamidi, H. (2019). Social, individual, technological, and pedagogical factors influencing mobile learning acceptance in higher education: A case from Iran. *Telematics and Informatics*, 38, 133–165. 10.1016/j.tele.2018.09.007
- Cherewick, M., Dahl, R.E., Bertomen, S., Hipp, E., Shreedar, P., Njau, P.F., & Leiferman, J.A. (2023). Risk and protective factors for mental health and wellbeing among adolescent orphans. *Health Psychological Behavioural Medicine*. 2023; 11(1), 2219299. 10.1080/21642850.2023.2219299
- Chinaza, U. (2022). Rural undergraduate university students' learning challenges in Africa: Case study of Nigeria and South Africa. *African Identities*, 20(1), 89–117. 10.1080/14725843.2020.1813083
- Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. In Snyder, C. R., & Lopez, S. J. (Eds.), *Handbook of positive psychology* (pp. 63–73). Oxford University Press.

- Dodd, A. L., Priestley, M., Tyrrell, K., Cygan, S., Newell, C., & Byrom, N. C. (2021). University student well-being in the United Kingdom: A scoping review of its conceptualisation and measurement. *Journal of Mental Health (Abingdon, England)*, 30(3), 375–387. 10.1080/09638237.2021.187541933567937
- Douwes, R., Metselaar, J., Hendrika, G., Pijnenborg, M., & Boonstra, N. (2023). Well-being of students in higher education: The importance of a student perspective. *Cogent Education*, 10(1), 1. 10.1080/2331186X.2023.2190697
- Douwes, R., Metselaar, J., Pijnenborg, G. H. M., & Boonstra, N. (2023). Well-being of students in higher education: The importance of a student perspective. *Cogent Education*, 10(1), 2190697. 10.1080/2331186X.2023.2190697
- Eloff, I., & Graham, M. (2020). Measuring mental health and well-being of South African undergraduate students. *Global Mental Health*. 10.1017/gmh.2020.26
- Fuentes-Afflick, E., Perrin, J. M., Moley, K. H., Diaz, A., McCormick, M. C., & Lu, M. C. (2021). Optimizing Health and Well-Being for Women and Children. *Health Affairs*, 40(2), 212–218. 10.1377/hlthaff.2020.0150433476200
- Goodman, F. R., Disabato, D. J., Kashdan, T. B., & Kauffman, S. B. (2018, July 04). (2017): Measuring well-being: A comparison of subjective well-being and PERMA. *The Journal of Positive Psychology*, 13(4), 321–332. 10.1080/17439760.2017.1388434
- Hernandez-Torrano, D.H., Ibrayeva, L., Sparks, J., Lim, N., Clementi, A., Almkhambetova, A., Nurtayev, Y., & Muratkyzy, A. (2020). Mental health and well-being of university students: A bibliometric mapping of the literature. *Front Psychology, Secondary Psychology for Clinical Settings*. 10.3389/fpsyg.2020.01226
- Kanyumba, B., & Shabangu, N. (2021). The Effect of the Covid-19 Pandemic on Students and the Living and Learning Spaces at a South African University. *Journal of Student Affairs in Africa*., 9(1), 2021. 10.24085/jsaa.v9i1.1430
- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *The Journal of Positive Psychology*, 10(3), 262–271. 10.1080/17439760.2014.93696225745508
- Khaw, D., & Kern, M. L. (2015). A cross-cultural comparison of the PERMA model of well-being. *Undergraduate Journal of Psychology at Berkeley*, 1-22. <http://ujpb.org/a-cross-cultural-comparison-of-the-perma-model-of-well-being/>
- Kovich, M.K., Simpson, V.L., Foli, K.J., Hass, Z., Phillips, R.G. (2023). Application of the PERMA Model of Well-being in Undergraduate Students. *International Journal of Community Well-being*, 6(1), 1–20. 10.1007/s42413-022-00184-4

- Kuettel, A., & Larsen, C. H. (2020). Risk and protective factors for mental health in elite athletes: A scoping review. *International Review of Sport and Exercise Psychology*, 13(1), 231–265. 10.1080/1750984X.2019.1689574
- Kun, Á., Balogh, P., & Krasz, K. G. (2017). Development of the Work-Related Well-Being Questionnaire Based on Seligman's PERMA Model. *Periodica Polytechnica Social and Management Sciences*, 25(1), 56–63. 10.3311/PPso.9326
- Lisana, L. (2022). Factors affecting university students switching intention to mobile learning: a push -pull mooring theory perspective. *Education and Information Technologies*, 28, 5341-5361. 10.1007/s10639-022-11410-z
- Margolis, S., Schwitzgebel, E., Ozer, D. J., & Lyubomirsky, S. (2021). Empirical Relationships Among Five Types of Well-Being. Matthew T. Lee, Laura D. Kubzansky, and Tyler J. VanderWeele (eds), *Measuring Well-Being: Interdisciplinary Perspectives from the Social Sciences and the Humanities*. Oxford Academic. 10.1093/oso/9780197512531.003.0014
- Masaiti, G., Banda, D., Kalinde, B., & Bwalya, K. (2020). Rurality and Student Transitioning in Higher Education: An Exploration of Views of University of Zambia Students. *Zambian Journal of Educational Management, Administration and Leadership (ZJEMAL)*, 1(1).
- Moeller, J., von Keyserlingk, L., Spengler, M., Gaspard, H., Lee, H. R., Yamaguchi-Pedroza, K., Yu, R., Fischer, C., & Arum, R. (2022). Risk and protective factors of college students' psychological well-being during the COVID-19 pandemic: Emotional stability, mental health, and household resources. *AERA Open*, 8, 23328584211065725. 10.1177/23328584211065725
- Moonasamy, A. R., & Naidoo, G. M. (2022). Digital Learning: Challenges experienced by South African university students' during the COVID-19 pandemic. *The Independent Journal of Teaching and Learning*, 17(2), 77-90.
- Paltiel, A. D., Zheng, A., & Walensky, R. P. (2020). Assessment of SARS-CoV-2 screening strategies to permit the safe reopening of college campuses in the United States. *JAMA Network Open*, 3(7), e2016818. 10.1001/jamanetworkopen.2020.1681832735339
- Philip, J., & Cherian, V. (2020). Factors Affecting the Psychological Well-being of Health Care Workers During an Epidemic: A Thematic Review. *Indian Journal of Psychological Medicine*, 42(4), 323–333. 10.1177/025371762093409533402793

- Pramana, E. (2018). Determinants of the adoption of mobile learning systems among university students in Indonesia. *Journal of Information Technology Education*, 17, 365–398. 10.28945/4119
- Seligman, M. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-being*. Free Press.
- Seligman, M. (2018). PERMA and the building blocks of well-being. *The Journal of Positive Psychology*, 13(4), 333–335. 10.1080/17439760.2018.1437466
- Slimmen, S., Timmermans, O., Mikolajczak-Degrauwe, K., & Oenema, A. (2022). How stress-related factors affect mental wellbeing of university students *A cross-sectional study to explore the associations between stressors, perceived stress, and mental wellbeing*. *PLoS One*, 17(11), e0275925. 10.1371/journal.pone.027592536342914
- UNESCO. (2021). *A snapshot of educational challenges and opportunities for recovery in Africa. UNESCO COVID-19 Education Response*. UNESCO.
- Visser, M., & Law-VanWyk, E. (2021). University students' mental health and emotional wellbeing during the COVID-19 pandemic and ensuing lockdown. *South African Journal of Psychology. Suid-Afrikaanse Tydskrif vir Sielkunde*, 51(2), 229–243. 10.1177/0081246321101221938603064
- Walsh, T. B., McCourt, S. N., Rostad, W. L., Byers, K., & Ocasio, K. (2015). Promoting Protective Factors and Strengthening Resilience. In Daro, D., Cohn Donnelly, A., Huang, L., & Powell, B. (Eds.), *Advances in Child Abuse Prevention Knowledge. Child Maltreatment (Vol. 5)*. Springer. 10.1007/978-3-319-16327-7_9
- Wathelet, M., Duhem, S., Vaiva, G., Baubet, T., Habran, E., Veerapa, E., Debian, C., Molenda, S. Horn, M., Grandgenevre, P., Notredame, C.E. & D'Hondt, F. (2020). Factors associated with mental health disorders among university students in France confined during the COVID-19 pandemic. *JAMA Network Open*, 3(10). e202559110.1001/jamanetworkopen.2020.25591
- Wood, J. L., & Turner, C. S. (2010). Black males and the community college: Student perspectives on faculty and academic success. *Community College Journal of Research and Practice*, 35(1-2), 135–151. 10.1080/10668926.2010.526052
- Worsley, J. D., Pennington, A., & Corcoran, R. (2022, July 29). Supporting mental health and wellbeing of university and college students: A systematic review of review-level evidence of interventions. *PLoS One*, 17(7), e0266725. 10.1371/journal.pone.026672535905058