College students' wellbeing during the COVID-19 pandemic:

An exploratory study

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ABSTRACT

This study explored college student wellbeing priorities and capabilities during the COVID-

19 pandemic. A total of 2213 South African undergraduate students answered an open-ended

question to elicit interpretive, reflective, analytic and evaluative written response types on the

factors that support their wellbeing at university. Two thirds of the participants were female,

almost half (48.94%) were black African, and the majority (67.46%) were between 18 and 21

years of age. Interpretive phenomenological analysis (IPA) of the data revealed COVID-19

mitigation that prioritised support from family, friends and lecturers by spending time

together and connecting online. The students also relied on a variety of spiritual coping

strategies to manage feelings of despair and despondency, and to cope with high workloads,

social distancing and online learning. The study revealed high resourcefulness of

undergraduate students in supporting their own wellbeing.

Keywords: student wellbeing, undergraduate students, pandemic, COVID-19, quality

education, SDG 3, good health and wellbeing, relationships, coping

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Introduction

Since the start of the COVID-19 pandemic and worldwide national lockdowns, tertiary institutions had to make tectonic adjustments in the learning environments of university students. Online learning has grown exponentially, curricula have been adjusted and HyFlex learning and assessments have become standard practice (Budiman, 2020; Domina et al., 2021; Faize & Nawaz, 2020; Hussein et al., 2020). Concurrent to the digitisation of learning, concerns about student wellbeing on a social-emotional level have increased during the COVID-19 pandemic. However, in-person (on-campus) university experience in and of itself provides students with social experience opportunities that go well beyond formal academic activities. As pointed out by Ziebell, Acquaro and Pearn (2020, p. 7), while "online teaching has done incredibly well, it is the social-emotional wellbeing of our young people that is [a] "concern". Concerns about student emotional wellbeing during the COVID-19 pandemic are well-founded (Dodd et al., 2021; Mahdi et al., 2020; Son et al., 2020), and more studies on student coping with COVID-19 have emerged from the developed than the developing countries. For instance, a USA study found that "less than half of the participants (n=882, 43.25%) indicated that they were able to cope adequately with the stress related to the current situation" (Wang et al., 2020, p. 1). According to Son et al. (2020, p. 1), concerns specifically included the following:

[F]ear and worry about their own health and that of their loved ones (177/195, 91% reported negative impacts of the pandemic), difficulty in concentrating (173/195, 89%), disruptions to sleeping patterns (168/195, 86%), decreased social interactions due to physical distancing (167/195, 86%), and increased concerns on academic performance (159/195, 82%).

The above is consistent with our findings from a previous study (Eloff & Graham, 2020). The current study, however, aimed to explore specifically how students from South Africa – a developing country – were coping with the COVID-19 pandemic.

The South African COVID-19 setting

South Africa has been a COVID-19 flashpoint, with early cases having been reported by early March 2020 (National Institutes of Communicable Diseases, 2020), and subsequent new variants continuing to be a challenge (World Health Organization, 2020). The hard lockdown was slightly eased from May and June onwards, and in mid-September 2020, the State President announced a further lowering of lockdown regulations. Although the country experienced excess¹ mortality rates in October, these rates were still beneath the peaks that had been experienced earlier in July 2020. By November 2020, the country remained at low-level restrictions on trading hours and international travel. When during December 2020 South Africa experienced a second wave of infections, Level 3 lockdown regulations were again announced in an effort to curb its effects. These included the closure of beaches, restricting the number of people allowed at gatherings, a ban on the sale and transport of alcohol, and evening curfews. The national state of disaster continued throughout the period of data collection for this study.

Universities around the country adjusted their respective operations during the periods of lockdown according to national regulations for the pandemic. Those institutions instructing in the face-to-face mode transitioned to online environments, except for students in the health professions and various programmes of clinical work that require in-person teaching and

¹ Excess deaths refer to the difference between the observed number of deaths and the forecast number of deaths based on historical patterns.

laboratory work. Higher education wellbeing initiatives and campaigns prioritised student safety.

Student's concerns about managing the COVID-19 pandemic

The "uncertainty caused by the pandemic" and the transition to "mostly online, environments" required students to rapidly navigate new "support networks" (Burns et al., 2020, p. 1). In the Italian context, for instance, a study that focused on the coping strategies and subjective wellbeing of participants aged 15-21 years (n=306) during the COVID-19 pandemic indicated that the majority of these young students developed new interests, planned their daily routines, and engaged in structured activities (Pigaiani et al., 2020). Similarly, students' "nurturing their own professional capital" (Raaper & Brown, 2020, p. 343) was critical to how they would engage their social networks to cope with the pandemic, along with continuous mapping of available student support networks.

Student wellbeing, COVID-19 and the Sustainable Development Goals (SDGs)

The COVID-19 mitigation is a direct threat to the UN's Sustainable Development Goals for student learning support through good health and wellbeing (SDG 3), quality education, reduced inequalities (SDG 10), and partnerships for the goals (SDG 17) (The Lancet Public Health, 2020). Universities serve students from diverse socio-economic backgrounds and, as such, act as important vehicles for poverty reduction and combatting inequality. The current pandemic may unfortunately exacerbate existing inequities and increase learning losses for vulnerable students. The interdependence of wellbeing at the systemic level has been clearly established (Mpofu, 2020) and in terms of the UN's Sustainable Development Goals, setbacks in student wellbeing can potentially impact progress with regard to the targets of the following SDGs: no poverty (SDG 1); good health and wellbeing (SDG 3); quality education (SDG 4); decent work and economic growth (SDG 8); reduced inequalities (SDG 10); and

partnerships for the goals (SDG 17). Whilst the responsibility for supporting student wellbeing will remain with the universities, students themselves have a task that is of equal importance when it comes to wellbeing.

Goal of the study

This study aimed to explore the factors that support the subjective wellbeing of South African undergraduate students, as well as their personal agency managing the COVID-19 pandemic. The following research question was formulated: What do undergraduate students perceive to support their subjective wellbeing during the COVID-19 pandemic?

Method

Participants and setting

Undergraduate students from across all faculties at a large South African university participated in the study (n=2213). Most of the participants were from the Gauteng province (the geographical location of the university). Two thirds were female students and most of the student participants were South African citizens (94.76%) between 18 and 21 years of age (67.46%). The biographical details of the participants are summarised in Table 1.

Data collection

Demographics. Students completed an online structured survey on their coping resources and wellbeing during the COVID-19 pandemic. In addition, they self-reported their sociodemographics in respect of citizenship, home province, gender, age, race, degree programme and home language.

Table 1: Biographical data of undergraduate student participants (n=2213)

	f	%		f	%
Province			Gender		
Gauteng	1296	58.56	Female	1463	66.11
Limpopo	208	9.4	Male	741	33.48
Mpumalanga	198	8.95	Other	9	0.41
KwaZulu-Natal	198	8.95	Missing	-	
Eastern Cape	75	3.39			
North West	80	3.62	Age		
Free State	55	2.49	18 – 19 years	629	28.42
Western Cape	44	1.99	20 – 21 years	864	39.04
Northern Cape	10	0.45	22 – 23 years	438	19.79
*International	49	2.21	24 or older	282	12.74
Missing values	-		Missing values	-	
Language			Ethnicity		
Afrikaans	503	22.73	African	1083	48.94
English	665	30.05	White	878	39.67
IsiZulu	201	9.08	Indian	129	5.83
Sepedi	197	8.90	Mixed race	77	3.48
Setswana	137	6.19	Other	46	2.08
Sesotho	91	4.11	Missing values	-	
Xitsonga	77	3.48			
Other	59	2.67	Citizenship		
isiXhosa	91	4.11	South African	2097	94.76
SiSwati	60	2.71	SADC	87	3.93
isiNdebele	32	1.45	Non-SADC	15	0.68
Tshivenda	45	2.03	Non-African	14	0.63
Missing values	55	2.49	Missing values	-	

COVID-19 Self-resourcing survey. Students responded to an open-ended question on what supports their wellbeing at university. The open-ended question was preceded by the following introduction: We are conducting a study on student wellbeing at the University [...]. If you are willing to participate in this study, please answer the following question by

sharing the first response that comes to your mind. Most of the students responded only briefly. Examples of responses are depicted in Figure 1.

1	What contributes to your wellbeing as a student at the University?
107	My peers
108	The support received from peers and staff
109	Stress
110	Receiving my monthly living allowances
111	Sleep and exercise
112	My family
113	My background & my goals
114	Currently I'm only struggling with the workload.
115	My friends

Figure 1: Extracts from dataset of participant responses on support for wellbeing

Trustworthiness of the study was ensured through the use of process logs. Credibility was safeguarded through iterative questioning of the data and constant returns to the dataset.

Procedure and ethics

The study was approved by the Ethics Committee of the Faculty of Humanities at the university where the study was conducted (HUM0180232HS). Participants were informed of the purpose of the study, the confidentiality of the data and the voluntary nature of the study. The participants individually consented to the study before they submitted their responses. Students completed the survey as from the first week of September 2020. The online questionnaire remained open for approximately four months, until 7 January 2021. Most responses were collected within the first two weeks of distribution of the online survey. A reminder was sent one week after the invitation to participate in the study had initially been communicated.

Data analysis

For the interpretive phenomenological analysis (IPA), the full dataset consisting of 2213 data segments and captured in an Excel spreadsheet was analysed. A line-by-line analysis was applied next, followed by the identification of the emergent patterns (themes) within the dataset (noting both the convergences and divergences within each response itself) and then also across the full dataset. Some data segments consisted of one-word answers, while others involved full paragraphs or multiple lines. Once a preliminary set of emergent themes were identified, clusters of themes were established to comprise the dominant themes.

Dependability was ensured by succeeding the IPA process with a quantitative keyword search on the main and subthemes. The keyword search confirmed the pre-eminence of the main themes that emerged from the IPA process. Confirmability was supported by creating an audit trail of the analysis.

Findings and discussion

Two themes emerged from the IPA and indicated the key factors that supported the wellbeing of undergraduate students in this study, namely Relationships and Spirituality (see Table 2).

Table 2: Factors that support undergraduate student wellbeing during a global pandemic

Main themes	Subthemes
Theme 1: Relationships	The role of family
	The role of friends
	The role of lecturers
Theme 2: Spirituality	The role of meditation
	The role of prayer

These themes are discussed next and verbatim evidence is quoted. The extracts shared are illustrative of data segments that represent the key themes that emerged from the IPA. In addition to the two key themes shown in Table 2, the theme of anxiety, depression and despair also emerged from the dataset and justifies discussion here.

Theme 1. Relationships supporting student wellbeing

The most prominent factor supporting undergraduate student wellbeing and COVID-19 mitigation proved to be students' interpersonal relationships. These primarily included relationships with family and friends, but to some extent also relationships with lecturers. Numerous students responded to the online survey question by merely answering, "Family" or "My family" [Participants 53, 83, 86, 101, 112, 166, 171, 196, 313, 321, 359, 391, 396, 422, 468, 486, 661, 763, 794, 824, 1000, 1038, 1127, 1424, 1498, 1529, 1580, 1769, 1851, 1991, 2027, 2039, 2090]. Others simply mentioned "Family support" [Participants 79, 91, 212, 786, 996, 1553, 1563, 1611, 1664, 1743, 1843, 2168], while others included "My friends and family" [Participants 1005, 1012, 1047, 1132, 1246, 1258, 1334, 1500].

The succinct nature of the responses depicts both the complexities and simplicities of where support for student wellbeing resides in a pandemic. The students reported relying on friends and family to support them during the pandemic, and the manifestations of such support probably varied from student to student, even as similarities occurred. Indications are that in general, relatedness satisfaction (a feeling of being connected to others, supported, understood and cared for) mediated the high levels of technology-based interaction that were elicited by the pandemic and that affected student wellbeing (Dimmock et al., 2021).

The role of family

When students refer to "family" as a source of support for their wellbeing, they connect this relationship to various activities that inadvertently also support their wellbeing. For some students this support included physical activity, e.g. "Family, friends, physical activity" [Participant 1548]. For others it may have been reading together or watching movies, as shown in responses such as "Reading, watching movies, and spending time with my family" [Participant 1795], or "My family and friends, Netflix and mobile games" [Participant 1944].

Some students responded innovatively by meshing together various sources of support, as is depicted in a response such as "MusicStudiesFamilyFriendsAloneTime" [Participant 1554]. The inherent stressors such as finances and access to healthy food during the pandemic also became evident in responses such as "Support from my family. Financial stability. Nutritious food. My girlfriends unwaveringly support" [Participant 1689].

In the current study among South African students, the role of the family seemed predominantly constructive and supportive. In contrast, a study conducted in Italy by Pigaiani et al. (2020) indicates that two-thirds of students found it hard to stay at home (66%), 31.7% reported family conflict and quarrels, and between 29.4% and 39.7% revaluated their family relationships.

The role of friends

Similar to relationships with family members, the role of friends also appears to be critical in supporting student wellbeing during the pandemic. Students connect friendships with additional sources of support, e.g. "Friends, unlimited internet access and lots of food" [Participant 1353]. Some students refer to a multitude of relationships as is evident from responses like "Support from family and friends, and having helpful and supportive lecturers" [Participant 1099]; "Social interaction between friends. Lecturers that provide guidance - and not only on their subject matter" [Participant 1103]; or "Family, finances, friends and people in general" [Participant 1262].

For some students, heavy workloads contribute to their stress levels and as such, they were cognisant and appreciative of the time dedicated to relationships in comparison to time working and studying. One participant made the following remark: "The amount and quality of the time i spend with friends and family or relaxing alone in comparison with the time i spend working. The heavier the workload the more it feels like life is full of things you have to

do and none you want to do. It's about meeting 6 deadlines in one week and being too exhausted to start working on next week's deadlines. Lockdown exaggerated the feelings of isolation and demotivation. Health issues also add stress and the financial position of my family is difficult. All these things create a sense of pointlessness and feelings of defeat' [Participant 1433].

In the current study, friends seemed to feature prominently in the wellbeing of students. A study by Son et al. (2020) in the US context reported a similar trend – friends played an important role in supporting wellbeing, despite a significant decrease in physical interaction.

Even though higher levels of social isolation applied, the multitude of responses that referred to friends confirm that friends continued to play a critical role in supporting the wellbeing of the participants in this study. Notable increases in both the intensity and frequency of communication and interaction with peers have been reported among undergraduate students during the pandemic (Gallè et al., 2021).

Friends are often included in a mixture of wellbeing support factors, and as a subtheme of the broader relationship theme, it occurred frequently and consistently throughout the dataset.

The role of lecturers

Students in our study had ambiguous feelings regarding the role of lecturers in their wellbeing. On the one hand, the role of lecturers was viewed as positive and constructive, with a caring attitude towards students [Participants 4, 60, 81, 129, 133, 144, 154, 168, 182, 191, 306, 325, 362, 366, 381, 424, 452, 462, 477, 500, 526, 554, 574, 605, 612, 635, 651, 694, 704, 817, 848, 851, 1016, 1084, 1099, 1106, 1141, 1247, 1274, 1284, 1302, 1331, 1369, 1401, 1436, 1445, 1573, 1622, 1663, 1669, 1682, 1724, 1787, 1821, 1958, 2076].

Students would share thoughts like "Kind lecturers/supervisor that are willing to consider you in their schedule and are concerned about your wellbeing. The gardens and plant life on

[...] campus is also a huge contributor for me. Working hard in a beautiful place makes the work seem slightly less hard and more enjoyable" [Participant 4]. The quality of online support with the caring attitude of lecturers in comments such as "Online support from lecturers, staff and the university entirely. Having access to majority if not all the resources I need to successfully complete my studies. Knowing that [the university name] cares and understands the various possible external factors that contribute in affecting my wellbeing as a student (such as internet access, loadshedding, effects of the current economic status of the country on our households etc)" [Participant 168] or "Continuous contact with lecturers" [Participant 1243]. Interestingly, it was not only the caring attitude of lectures, but also the dedication of the lecturers to their own lectures that supported student wellbeing, e.g. "Good lecturers that put effort into their lectures and teaching schedules" [Participant 672]. Another student inserted the role of lecturers into a response dealing mainly with physical health, namely "Adequate sleep, good lecturers, hydration and exercise" [Participant 809].

On the other hand, however, students also perceived lecturers as placing a severe workload on them, which was experienced as stress inducing [Participants 45, 48, 52, 114, 122, 162, 207, 272, 322, 375, 384, 454, 462, 574, 618, 650, 683, 749, 952, 987, 1017, 1146, 1158, 1165, 1195, 1196, 1260, 1371, 1421, 1433, 1478, 1537, 1575, 1579, 1684, 1766, 1805, 1807, 1826, 1827, 1938, 2012, 2037, 2071]. Students would say, "Being given time to recover between the onslaught of tests and assignments. The constant pressure does not help. Breaks are needed to preserve our sanity" [Participant 373], or "Better work allocation. We can't be dumped with 6+ assignments including 2 tests per week and still be expected to attend all lectures, be up to date and know and understand our work...BETTER WORK ALLOCATIONS" [Participant 894].

The adjusted curricula that were the result of the suspension of in-person classes at all South African universities apparently had a significant effect on student workloads towards the end of the year. This transpired from various comments such as "The amount of work that each subject puts on us is immense, Since there are no more lectures and specified time slots for subjects the work has in my opinion gotten out of hands at times with lecturers forgetting that we have other subjects to fit into our day And I personally have spent many nights not sleeping to try and complete the work" [Participant 1035]; "Receiving all tasks, test information and assignments with a decent amount of time to finish them and all our other assignments etc. for our other modules" [Participant 1060]; and "Being with my friends.

Being able to speak to my lecturers frequently. Being in res. Not having tons of deadlines on top of each other" [Participant 1135].

The pivotal role of lecturers in student wellbeing was reported also in pre-pandemic data (Eloff et al., 2021). It seems from this study that lecturers' role has gained even greater prominence during the pandemic.

Theme 2. Spirituality as a resource for student wellbeing

Students turned to spirituality to enhance their wellbeing during the pandemic. As examples, students provided singular reactions such as "God" [Participants 673, 1074, 1755, 1808], "Prayer" [Participants 714, 1294, 1301, 1320] or "Meditation" [Participants 1037, 1147, 1244, 1892]. Even though the frequency of responses within this realm was lower than that of relationships, it still presented a consistent theme throughout the dataset. Some students presented more descriptive responses like "Prayer & meditation, tea, long baths and journaling" [Participant 490], while others introduced some humour: "At this point, it's only God, my family and caramel popcorn, because wow, it's hectic!" [Participant 1659].

The role of meditation and prayer

Meditation was frequently mentioned and also intertwined with a combination of factors that all support student wellbeing. Students would say "Exercising, meditation, relaxation, getting good sleep and spending time with loved ones" [Participant 316], "Spiritual societies, family and friends support, exercising and getting involve [sic] in something that help others, e.g student support bodies" [Participant 476], or "Drinking water, managing my time, planning my day in the morning, understanding my work, meditating at least once a day, spending time with people who bring me joy" [Participant 2082]. The theme of relationships continued to present within responses that mention meditation, e.g. "Meditation, daily exercise, talking to my pastor and friends over Skype" [Participant 1255], or "Rewarding myself for hardworking, meditation and spending time with my family and friends" [Participant 1434].

Besides meditation, the students also indicated that prayer supports their wellbeing. They would say "God, my faith, family, friends and church" [Participant 680], "Prayer and continuously reading the bible helps me very much" [Participant 1393], or "Prayer, family, my work, studies and always abiding by the health rules (more cleanliness) as required by new normal we find ourselves in" [Participant 2054]. Prayers were viewed as part of a set of healthy habits that support wellbeing, as shown in responses like "Trying to keep things balanced even when academics become demanding. Praying, taking walks, sleeping enough, talking to friends and family and making time for things you enjoy doing while studying" [Participant 555], or "Praying and spirituality. We are going through a really challenging semester filled with assignments and tests and hence, not much free time. Praying helps me relax and unwind. It is the main reason for my sanity amidst feeling overwhelmed by work that needs to be completed" [Participant 992].

This theme aligns with findings in the US context that indicate a reduction in stress and the lowering of the anxiety levels of students participating in a meditation intervention during the pandemic (Lemay et al., 2021). Even though the connection between wellbeing and spirituality has been well-established in the literature (Cobb et al., 2012), the degree to which it has emerged as a theme within this population is noteworthy. Spirituality is taking various forms for various students during the pandemic, but it is consistent in its appearance within this dataset.

Additional theme: Anxiety, depression and despair

Although the study sought to explore the factors that support subjective undergraduate student wellbeing, additional themes that portray areas of concern regarding student wellbeing also emerged. There were high levels of despair among students and their consistent responses relating to high workloads (as previously discussed).

"Nothing" [Participants 43, 105, 106, 124, 146, 148, 156, 264, 290, 300, 331, 349, 358, 363, 382, 387, 399, 421, 437, 440, 445, 514, 534, 542, 562, 586, 693, 701, 709, 718, 740, 743, 841, 901, 988, 1055, 1136, 1157, 1191, 1203, 1250, 1377, 1411, 1435, 1465, 1481, 1814, 1866, 1871, 1898, 1943, 2018, 2042, 2079, 2080, 2125, 2134]. This telling one-word response offered by a multitude of participants captures the high levels of despair that undergraduate students experienced during the pandemic. It was echoed by additional responses like "Nothing. We depressed out here" [Participant 696] or "Nothing. I'm not doing well" [Participant 735]. Some students provided more illuminating responses like "Right now during this lockdown nothing except school work keeping me busy. This type of living is miserable. I miss going for face to face lectures and having on campus activities. I'm aware of the global condition but we are also social beings and still waiting for us to get a clear solution" [Participant 1265]. In fact, students indicated the lack of personal contact and

physical interaction as one of the major stressors for them. They would say, "Nothing. Can we please go back to campus already? It's not easy working from home" [Participant 1494], or state pertinently, "Physical interaction with lecturers and other students. I would like to emphasise PHYSICAL interaction" [Participant 942].

High levels of anxiety and depression were described in studies among student populations during the pandemic (Pigaiani et al., 2020; Son et al., 2020). Data indicated lower levels of mental wellbeing in comparison to pre-pandemic levels (Mair et al., 2021) in specific student populations. Common mental disorders were however reported in student populations even prior to the pandemic, with major depressive disorders often presenting as the most common problem (Bantjes et al., 2019).

Implications for student support and development in a pandemic

This study suggests that student support services should amplify coping mechanisms that focus on relationship building and spiritual strategies to support the wellbeing of undergraduate students at university during a pandemic. In both instances, the personal agency of students in terms of their own wellbeing is prioritised. This aligns with key developmental tasks during this life phase and could therefore resonate with student populations in other contexts too – perhaps specifically in developing countries.

The preponderance of expressions of dejection and hopelessness (e.g. 'nothing') in the current study probably attests to a lack of certainty about the end of the pandemic and a return to normal pre-COVID-19 conditions. It remains to be seen when the 'new normal' post-COVID-19 will arrive for student populations.

Limitations of the study

There are several limitations to this study. Firstly, it posed only a single question in order to

increase the response rates from an undergraduate student population who was asked to

participate voluntarily within the context of a global pandemic. Furthermore, we did not

include follow-up questions, which limited the data yield and subsequent conclusions. Lastly,

the study focused exclusively on undergraduate students. Graduate students may have a

different response pattern yet to be determined. In fact, students who responded to the online

survey may be different in completely unknown ways to those who chose not to respond to

the survey.

Conclusion

The findings obtained from this study present a complex and nuanced view of undergraduate

student wellbeing during a pandemic. On the one hand, the findings indicate a strong reliance

on personal relationships and a deepening of spiritual coping strategies in this group of

students. The study offers evidence of fairly high levels of personal agency, where students

actively took responsibility for their own wellbeing, activated available resources, and

reached out to others to sustain them within a context of high challenge. The students were

resourceful, and they employed multiple strategies to support their wellbeing. Based on these

findings, personal agency of undergraduate students is integral to their wellbeing in a

pandemic.

Data availability statement

The full anonymised dataset is available from the author upon request.

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References

- Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., Hwang, I.,
 Kessler, R. C., Liu, H., Mortier, P., Nock, M. K., Pinder-Amaker, S., Sampson, N. A.,
 Aguilar-Gaxiola, S., Al-Hamzawi, A., Andrade, L. H., Benjet, C., Caldas-de-Almeida, J.
 M., Demyttenaere, K., ... Bruffaerts, R. (2016). Mental disorders among college students
 in the World Health Organization world mental health surveys. *Psychological Medicine*,
 46(14), 2955–2970.
- Bantjes, J., Lochner, C., Saal, W., Roos, J., Taljaard, L., Page, D., Auerbach, R.P., Mortier,
 P., Bruffaerts, R., Kessler, R.C. & Stein, D. J. (2019). Prevalence and sociodemographic correlates of common mental disorders among first-year university students in post-apartheid South Africa: Implications for a public mental health approach to student wellness. *Bmc Public Health*, 19(1), 922–922.
- Budiman, E. (2020). Mobile data usage on online learning during COVID-19 pandemic in higher education. *International Journal of Interactive Mobile Technologies*, *14*(19), 4–17.
- Burns, D., Dagnell, N., & Holt, M. (2020). Assessing the impact of the COVID-19 pandemic on student wellbeing at universities in the United Kingdom: A conceptual analysis.

 Frontiers in Education, 5, 1–10.
- Cobb, M., Puchalski, C. M., & Rumbold, B. D. (2012). Oxford Textbook of Spirituality in Healthcare (Ser. Oxford textbooks in public health). Oxford: Oxford University Press.
- Dimmock, J., Krause, A. E., Rebar, A., & Jackson, B. (2021). Relationships between social interactions, basic psychological needs, and wellbeing during the COVID-19 pandemic.

 Psychology & Health, 1–13. https://doi.org/10.1080/08870446.2021.1921178

- Dodd, R. H., Dadaczynski, K., Okan, O., McCaffery, K. J., & Pickles, K. (2021).
 Psychological wellbeing and academic experience of university students in Australia during COVID-19. *International Journal of Environmental Research & Public Health*, 18(866), 1–12.
- Domina, T., Renzulli, L., Murray, B., Garza, A. N., & Perez, L. (2021). Remote or removed:

 Predicting successful engagement with online learning during COVID-19. *Socius:*Sociological Research for a Dynamic World, 7, 1–15.
- Eloff, I., & Graham, M. (2020). Measuring mental health and wellbeing of South African undergraduate students. *Global Mental Health*, 7, e34, 1–10. https://doi.org/10.1017/gmh.2020.26
- Eloff, I., & Guse, T. (2019). Which factors support student wellbeing at university? *ISQOLS Member Research Webinar*. https://youtu.be/F5ci_NbN3cg
- Eloff, I., O'Neil, S., & Kanengoni, H. (2021). Students' well-being in tertiary environments: insights into the (unrecognised) role of lecturers, *Teaching in Higher Education*, e1-22, https://doi.org/10.1080/13562517.2021.1931836
- Faize, F., & Nawaz, M. (2020). Evaluation and improvement of students' satisfaction in online learning during COVID-19. *Open Praxis*, 12(4), 495–507.
- Gad, N. (2011). Internet surveys. In Lavrakas, P. J. (Ed.). (2011). *Encyclopedia of Survey Research Methods* (Ser. Sage research methods online). Thousand Oaks: SAGE.
- Gallè, F., Veshi, A., Sabella, E. A., Çitozi, M., Da, M. G., Ferracuti, S., Liguori, G., Orsi, G.
 B., & Napoli, C. (2021). Awareness and behaviors regarding COVID-19 among
 Albanian undergraduates. *Behavioral Sciences*, 11(4), e1–13.
 https://doi.org/10.3390/bs11040045

- Holland, F. (2014). *Teaching in Higher Education: An Interpretive Phenomenological Analysis*. Thousand Oaks: SAGE.
- Hussein, E., Daoud, S., Alrabaiah, H., & Badawi, R. (2020). Exploring undergraduate students' attitudes towards emergency online learning during COVID-19: A case from the UAE. *Children and Youth Services Review*, 119, 1–7.
- Lemay, V., Hoolahan, J., & Buchanan, A. (2021). Impact of a yin yoga and meditation intervention on pharmacy faculty and student wellbeing. *Journal of the American Pharmacists Association*, e1-22. https://doi.org/10.1016/j.japh.2021.05.008
- Mahdi, F., Jaiswal, S., & Dandekar, S. (2020). Fostering health professional students' wellbeing during COVID-19 lockdown. *MedEdPublish*, *9*(1), 248, 1–7.
- Mair, T. S., Mountford, D. R., Radley, R., Lockett, E., & Parkin, T. D. (2021). Mental wellbeing of equine veterinary surgeons, veterinary nurses and veterinary students during the COVID-19 pandemic. *Equine Veterinary Education*, *33*(1), 15–23. https://doi.org/10.1111/eve.13399
- Mpofu, E. (Ed.). (2015). *Community-oriented Health Services: Practices across Disciplines*. Springer.
- Mpofu, E. (Ed.). (2020). Sustainable Community Health. Palgrave Macmillan.
- National Institutes of Communicable Diseases. (2020). First case of COVID-19 Coronavirus reported in SA. https://www.nicd.ac.za/first-case-of-covid-19-coronavirus-reported-in-sa/
- Pigaiani, Y., Zoccante, L., Zocca, A., Arzenton, A., Menegolli, M., Fadel, S., Ruggeri, M., & Colizzi, M. (2020). Adolescent lifestyle behaviors, coping strategies and subjective

- wellbeing during the COVID-19 pandemic: An online student survey. *Healthcare*, 8(4), 472.
- Raaper, R., & Brown, C. (2020). The COVID-19 pandemic and the dissolution of the university campus: Implications for student support practice. *Journal of Professional Capital and Community*, 5(3/4), 343–349.
- Shaw, R., Burton, A., Xuereb, C. B., Gibson, J. M., & Lane, D. (2014). *Interpretative Phenomenological Analysis in Applied Health Research*. SAGE.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative Phenomenological Analysis*. SAGE.
- Smith, J. A. (2010). Interpretative phenomenological analysis. Existential analysis. *Journal of the Society for Existential Analysis*, 21(2).
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, 22(9). https://doi-org.uplib.idm.oclc.org/10.2196/21279
- The Lancet Public Health. (2020). Will the COVID-19 pandemic threaten the SDGs? *The Lancet. Public Health*, 5(9), 460. https://doi.org/10.1016/S2468-2667(20)30189-4
- United Nations (2020). Sustainable Development Goal 3. https://sdgs.un.org/goals/goal3)
- Wang, X., Hegde, S., Son, C., Keller, B., Smith, A., & Sasangohar, F. (2020). Investigating mental health of US college students during the COVID-19 pandemic: Cross-sectional survey study. *Journal of Medical Internet Research*, 22(9), 1–11.
- World Health Organization. (2020). SARS-CoV-2 Variants.

 https://www.who.int/csr/don/31-december-2020-sars-cov2-variants/en/

- Xiao, H., Carney, D. M., Youn, S. J., Janis, R. A., Castonguay, L. G., Hayes, J. A., & Locke,
 B. D. (2017). Are we in crisis? National mental health and treatment trends in college counseling centers. *Psychological Services*, 14(4), 407.
- Ziebell, N., Acquaro, D., Pearn, C., & Tiong Seah, W. (2020). *Australian Education Survey*. *Examining the impact of COVID-19. Report Summary*. University of Melbourne.
- Zurlo, M. C., Cattaneo Della Volta, M. F., & Vallone, F. (2020). COVID-19 Student Stress Questionnaire: Development and validation of a questionnaire to evaluate students' stressors related to the Coronavirus pandemic lockdown. *Frontiers in Psychology*, 11, e1–11. https://doi.org/10.3389/fpsyg.2020.576758