Sustainable Health in Pedagogical Contexts in Distance E-Learning: Learning from COVID-19

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Abstract

Student wellness is an important aspect of sustainable health concerns. The COVID-19 pandemic has exacerbated existing emotional and academic stresses in students. Much learnt from the COVID-19 pandemic can be transferred to the distance learning context. In this study, I explored two dimensions of student wellness, namely, intellectual and emotional wellness. Factors within these dimensions were categorised as having a positive or negative impact on student wellness. I collected the data in this case study using an electronic questionnaire and voice-note interviews. Thirty students from years one and two in one department of a faculty at a university participated in the study. The findings include that group work can have a positive impact on intellectual wellness whereas an imbalance in considering student learning styles could have a negative impact. Closeness of the due dates of tasks has a negative impact on intellectual wellness. Flexibility of learning times and independence in distance learning were positive factors associated with emotional wellness. Learning stresses, which included workload and insufficient instructor support, were identified as negative factors. In the study, I confirm that wellness is multidimensional and recommend that instructors take this conceptualisation into account when planning for the micro-teaching and learning environment in distance learning.

Keywords: wellness; group work; distance online learning

Introduction

The COVID-19 pandemic has increased stressors among many sectors of society, including students and young adults, and disrupted lifestyles (Giuntella et al. 2021; Mudiriza and Lannoy 2020). The pandemic prompted a focus on wellness and wellness behaviour in different populations (Harrison et al. 2021). However, there is a lack of information about exploring wellness factors in higher education. Wellness is a holistic concept inclusive of physical health. Wellness is described as having interdependent and multidimensional wellness aspects, such as physical, social, emotional, intellectual, spiritual, occupational, environmental and psychological/mental aspects (Oliver, Baldwin, and Datta 2018; Stoewen 2017). Pedagogy is more than cognition and content;
it also encompasses factors which influence cognition within pedagogical contexts; there is a need to balance academic work with well-being as a core priority (Kern and Wehmeyer 2021). The wellness of students in higher education therefore cannot be underplayed in their academic pursuits as students and as future economic role players. A number of integrated factors have an impact on student wellness and include pedagogical (group work, learning styles, assessment) and coping (emotional stress) factors. This paper responds to the research question: which pedagogical and emotional factors are likely to have a positive or negative impact on student wellness in distance learning?

**Literature Review**

Wellness is a dominant focus in health issues as it intersects across numerous life domains; however, there is no categorical agreement on the definition as the concept seems to evolve (Oliver, Baldwin, and Datta 2018). A common ground is that wellness is multidimensional, holistic and interconnected (Miller and Foster 2010; Odrovakavula, Mohammadnezhad, and Khan 2021). The concepts of wellness and well-being are often used interchangeably and extend beyond the discipline of physical health; they are often framed in discourse practices within disciplines (Jarden et al. 2021; McMahon, Williams, and Tapsell 2010). In this paper wellness and well-being are used interchangeably. The definition of wellness by the World Health Organization frames wellness as an absence of illness, a state of well-being and encompasses both positive and negative elements within a holistic body–mind framework (Miller and Foster 2010). In this paper, I focus on the intellectual and emotional dimensions. The intellectual dimension encompasses education – the processes of acquisition and sharing of knowledge and the value of education (Miller and Foster 2010). The emotional dimension includes factors of stress, coping, self-concept, attitude and support relationships (Miller and Foster 2010). The theoretical model that underpins the study in this paper is the holistic wellness model which acknowledges that wellness is not a static state with influence of positive and negative factors and deserves continuous attention (Hales 2011).

Distance learning enables students to study remotely and includes all pedagogical aspects such as assessment, without the physical presence of instructor and students on a campus (Tërstena and Deda 2019). With the advent of technology and learning platforms, distance learning can now be offered synchronously (instructions happen in real time) and asynchronously (instructions and studies happen for individuals at different times) (Alamer and Alharbi 2021). A characteristic of distance learning is that it makes learning opportunities more flexible for students (Zhang, Burgos, and Dawson 2019).

Distance learning also prompts the higher education fraternity to rethink through pedagogical strategies. Group work, albeit the associated challenges of implementation, is valued for academic development and preparation for teamwork in future
employment (Cartwright et al. 2021; Govender and Pillay 2018). However, despite the positive social, cognitive and motivational benefits of group work, it requires intensive planning (Chang and Brickman 2018). Learning styles is about learners’ individual preferences of the way in which they learn rather than what they learn (İlçin et al. 2018; Killen 2016). Understanding learning styles helps instructors in designing activities and is more likely to provide motivation for active participation by students (İlçin et al. 2018).

Biological inheritance in human beings exhibit the strong need for belonging and social connectedness making the quality of social connections core to well-being (Ledertoug and Paarup 2021). The pandemic lockdowns had caused feelings of anxiety and isolation in communities all over the world. The COVID-19 crises had caused students to experience changes which affected their studies and everyday life and increased their emotional stresses (Holzer et al. 2021). Crises such as the COVID-19 pandemic which resulted in a shift to online teaching and learning also presented opportunities to rethink well-being concerns and pedagogical strategies (Pather and Cupido 2020). Much reimagined from the COVID-19 crises can therefore be considered in open and distance learning.

Methodology

A case study is useful to study a context in depth; although the findings may not be generalised, learnings can be transferrable to other contexts (Kumar 2014). In this case study, I implemented two data collecting strategies to get an in-depth understanding of student wellness in distance learning during the COVID-19 pandemic. In the first strategy, the students were invited to respond individually to an electronic questionnaire. In the second strategy, the students were invited to participate in audio interviews using voice notes. Electronic technology was appropriate as the country was under COVID-19 lockdown regulations which restricted face-to-face interaction with students. Initially, the students were home-based and engaged in online lessons. The questionnaire had closed and open questions to elicit their “voices”. Voice notes were appropriate to circumvent data costs associated with online video calls. There are challenges in using voice notes as it interrupts the flow of the conversation. However, it was important to get students’ verbal articulation on aspects of wellness. The participants were undergraduate students from years one and two in one department of the university. In all, thirty students from ninety-one students responded to the questionnaire (a 33% response) with five students being interviewed.

I used a mixed-method approach to analyse and interpret the data. A mixed-method analysis involves both quantitative and qualitative analysis (Ivankova, Creswell, and Clark 2016). The closed questions in the questionnaire were expressed quantitatively as descriptive statistics by tallying student responses to the specific choices given on wellness. The open questions in the questionnaire and the interview responses were analysed qualitatively (content analysis) through coding and thematic analysis of the
responses. An example of the thematic categories included coping, stress and source of emotional challenges.

Two factors could have affected the responses to the questionnaire. First, virtual or electronic means is dependent on student access to the internet and data availability. Second, it is likely that students did not respond as it was a voluntary questionnaire. I observed ethical protocols in this study which was registered under a research project with the university research directorate.

Findings
The results below are presented according to two broad wellness factors, namely, intellectual factors related to pedagogical approaches and emotional factors as shown in Figures 1 and 2 respectively.

**Intellectual Wellness Factors Related to Pedagogical Approach**

Education is a component of intellectual wellness (Henrico 2022). The education process contain pedagogical factors which have an impact on wellness. The three pedagogical factors explored in this study were group work, learning styles and task due dates (refer to Figure 1).

![Figure 1: Pedagogical factors (1a: Group work, 1b: Learning style, 1c: Task due dates)](image)

Intellectual stimulation is an important aspect of wellness (Miller and Foster 2010). The literature acknowledges that there are advantages and disadvantages of group work. More than 53 per cent of the students indicated that they enjoy doing group work (Figure 1a). As pointed out in the literature, group work has advantages in the learning process and later work life. The students’ favourable responses to group work in the open question in the questionnaire (Q) and to the interview (I) included:

> The primary thing in my group is that all members of the group learn something new which is great and builds the principle of teamwork. (Student 11 (Q))
That is where I interact with my colleagues sharing knowledge about different opinions and facts. (Student 4 (Q))

I like doing group work there is always interaction. (Student 5 (I))

Reason being is that we are able to combine ideas and make sure that the work is done on time (Student 1 (I))

The learning style is an important aspect of students’ individualised participation in the learning process and has an impact on the planning of academic activities (Hu et al. 2021). The results indicate that there are different preferences for learning; most students (67%) indicated a preference for written learning and 30 per cent indicated verbal means (talking).

Students in distance learning, as in face-to-face learning, also register for more than one module in a semester. A larger percentage of students (64%) indicated that they felt the task due dates were too close to each other (Figure 1c). This was also expressed in the open question, ie the closeness of tasks in modules (Student 10) and across modules (Student 13). In the interview it was expressed that the closeness of due dates adds pressure to the workload (Student 4).

Due dates most of the time – it is always close – so I don’t get enough time do it accordingly because I have other modules as well. (Student 10 (Q))

Too many assessments within the week. (Student 13 (Q))

The workload can be unbearable sometimes. (Student 4 (I)).

**Emotional Wellness Factors**

Emotional wellness factors include stress impact, coping, maintaining a positive attitude toward life, optimism, motivation, and a positive self-concept (Miller and Foster 2010). A total of 83 per cent of the students indicated that the shift to distance online learning during COVID-19 increased their independence as learners (Figure 2a). Whereas 30 per cent of the students were neutral, 56 per cent indicated that they preferred flexible learning hours (Figure 2b). Reasons for preference to flexible learning hours indicated in the questionnaire included the following:

So I get a chance to pause where I don’t understand and resume when I am ready to continue. (Student 8 (Q))

In that way you get to study in the time that is suitable to you. (Student 11 (Q))

A larger percentage of the students (63%) were self-motivated in that tasks were not done to fulfil the requirements of the lecturer (Figure 2c). Emotional stress refers to an emotional interruption of the state of mind, can be acute or chronic and could trigger a
physical response in physiology (Altay et al. 2014). A total of 77 per cent of the students indicated that they experience stress in relation to their learning (Figure 2d). This was also expressed in the open question: why do you feel stress in relation to your learning (if you do)?

I feel that there is so much of work to do in such a small space of time . . . and everyday it keeps piling up . . . and I feel I am drowning . . . at the same time I don’t want to let myself and my family down. (Student 3 (Q))

I am facing difficulty when it comes to learning. They [the organisation] will not be paying the debt and then the school is busy sending me many messages informing me that I am owing about R27 000 . . . something like that and I’ll be like learning . . . it stresses me out that I might not graduate because the debts have not been paid. (Student 3 (I))

Aside from stresses associated with learning, other factors impacting on learning were expressed. These include financial challenges [Student 3 (I)], the pressure for self-success and to please one’s family. (Student 3 (Q))

Figure 2: Emotional factors (2a, 2b: Coping, 2c: Motivation, 2d, 2e: Stress)

Most students (47%) talk to their peers when stressed while 37 per cent talk to a nuclear family member. None indicated that they talk to their lecturers (Figure 2e). Responses
in an open follow-up question in the questionnaire and in the interviews indicated reasons for not talking to lecturers.

I feel like they will not understand what I’m going through. (Student 2 (Q))

Because I don’t think lecturers would care about my frustrations . . . they will think I just don’t like to do schoolwork. (Student 3 (Q))

No. Because I once did before, and it was not productive . . . sometimes they do not respond . . . they will tell you they don’t have the kind of help you are looking for they refer you to someone and then you go to that person and that person is not helpful at all so I decided not to bother myself doing that anymore. (Student 3 (I))

I don’t discuss my stresses with my lecturers. I just never considered them as people I can talk to. I always think they are too busy for that to pay attention to my stresses. (Student 4 (I))

The student responses confirm findings in the literature that in distance online learning students did experience emotional challenges which had various sources of initiation. However, in this study the source for seeking support for frustrations experienced excluded the lecturer for various reasons.

Discussion

Students in higher education experience different stressors, which include academic and common feelings of hopelessness (Hales 2011). Beiter et al. (2015) reported that in a study done in the United States of America (USA) student requests for counselling had doubled from 2008 to 2013. A more recent study in the USA indicated that stress (33.2%), anxiety (26.5%) and sleep difficulties (21.8%) were the top three factors that had an impact on student’s academic life (American College Health Association 2018). A wellness study in Fiji revealed that many factors affect students (Odrovakavula, Mohammadnezhad, and Khan 2021). Although these studies reveal wellness issues in face-to-face contexts, much can be related to distance learning contexts. With the impact of COVID-19 and the shift to distance online learning (albeit temporary, some spanning over two years), the demands on students and universities had increased (Henrico 2022). Prevention efforts are necessary to support stress reduction (Hales 2011). However, over a decade ago, Hales (2011) raised the question of who should take responsibility for student wellness.

An important component of sustainable development and health is the human component, which encompasses social interactions, education and the promotion of human health (Strzelecka 2021). In the context of education there is a relationship between the instructor and the student. Hales (2011) indicated that instructors can be reinforcing agents to promote wellness in the education context. This study identified intellectual factors related to the educational relationship between instructor and student
which could have a positive or negative impact on wellness. While there was a divide in engaging in group-work activities (in the online context), 53 per cent agreed to enjoying group work tasks with the remainder (47%) made up of neutral, disagree or no responses. This reveals that group work has the potential to have a positive influence on students. Group work promotes social interaction and develops social skills (Govender and Pillay 2018) and social health is an important component of wellness (Hales 2011). University students are regarded as a special social group with active lifestyles and different forms of social interactions. COVID-19 and distance learning had changed these interactions characterised by much isolation (Villani et al. 2021). Wellness can be described as a continuous state rather than a juncture (Goss, Cuddihy, and Tomson 2010). In distance learning group work could contribute to this continuous state and may therefore be a positive factor contributing to wellness.

Intellectual wellness enhances learning and the striving to realise one’s potential (Goss, Cuddihy, and Tomson 2010). Personalising learning styles could support the realisation of one’s potential and satisfaction (Hu et al. 2021). Although there may be a combination of learning styles in students, some may be dominant. In this study, 30 per cent of the students indicated a preference for learning through talking. This significantly raises concerns in the contexts of distance asynchronous learning of how much of this learning style is being dealt with in the learning arrangement, if any at all. An imbalance in accommodating learning styles could be a negative factor affecting the intellectual wellness of students.

Emotional wellness is a significant component in the dynamic balance of the individual (Kirkland 2014). Stress is inevitable in the academic journey. However, there are compounding factors to stress in and outside the academic journey (American College Health Association 2018). In this study, sources of student stress related to learning included unfriendly due dates for academic task submission, high workloads, and limited time available. Limited cross planning of instructors for student submission dates could be perceived as a negative factor rather than a reinforcing factor to intellectual wellness. According to the student responses, independence, flexibility and self-motivation offered in the distance learning context can be categorised as positive factors influencing emotional health. Instructors could be perceived as a negative factor affecting emotional wellness, as students indicated insufficient support or appropriate direction from them during stressful times.

Conclusion

Many factors have an impact on wellness in the wellness continuum. This study confirmed that intellectual and emotional wellness of students are influenced by the teaching and learning interaction and the instructor’s role. Instructors could play a significant role in reinforcing positive factors by reflecting on potential factors that could have a negative impact on student wellness in distance learning. Factors that require attention include: group work, learning styles, task due dates and the instructor’s
role in dealing with student stresses through appropriate empathic response or further direction. It is recommended that in distance learning student wellness assume a holistic perspective and be given significant attention within the micro-teaching and learning context.

References


