

Full Length Research Paper

Well-being and academic workload: Perceptions of Science and technology students

Karma Yangdon^{1*}, Kezang Sherab², Pema Choezom¹, Sangey Passang¹ and Sonam Deki¹

¹College of Science and Technology, Royal University of Bhutan, Bhutan.

²Paro College of Education, Royal University of Bhutan, Bhutan

Received 9 September, 2021; Accepted 15 November, 2021

University students need to find a balance between their physical, mental, social, and emotional state to do well in their academics. Student's well-being should be one of the top priorities for any academic institute. The present study employed a sequential mixed methods approach to provide insights into students' perceptions of well-being and academic workload. An online survey (n = 385) was conducted in the first phase, followed by collection of qualitative data through course assignments (n = 119) in the second phase for in-depth information. The findings showed that the students are not satisfied with college life, particularly in terms of academic workload as well as basic facilities and services. Furthermore, the results demonstrate that students have issues coping with negative emotions, which is likely to impact their overall well-being and health. Therefore, it is crucial that the colleges implement strategic interventions to address these issues.

Keywords: College student, well-being, academic workload, social life, basic services, personality.

INTRODUCTION

There has been a growing interest over the last few decades in trying to understand the well-being of university students and their academic performance (Agolla and Ongori, 2009; Ansari and Stock, 2010; Balikis and Duru, 2017; Bordbar et al., 2011; Borgonovi and Pál, 2016; Dahlin et al., 2010; Gerrard et al., 2017; Kember and Leung, 2006; Leontopoulou and Triliva, 2012). The published research suggests that student well-being is affected by dissatisfaction with the learning environment, high academic workload, insufficient feedback, inadequate resources, low motivation, poor academic performance, and overcrowded lecture halls amongst others. The nature of the university setting with semester-long

learning and evaluation create an environment where students are faced with ongoing challenges, meeting deadlines, and maintaining high performance (Flinchbaugh et al., 2012) leading to academic stress (Angolla and Ongori, 2009; Abdulgani et al., 2011). Although the state of being well is subjective, researches have shown that this has been positively correlated to the mental health and behavioural issues of the university students (Baik et al., 2019; Jones et al., 2021; Leontopoulou and Triliva, 2012; Schuelka et al., 2021) and also that it negatively impacts their academic performance (Ansari and Stock, 2010).

Subjective well-being refers to the overall quality of

*Corresponding author. E-mail: karmayangdon.cst@rub.edu.bt.

ones' experience and functioning in terms of three interactive dimensions: psychological (one's subjective experience), physical (bodily health), and social (relational experience) (Grant et al., 2007). According to the PISA 2015 Report, (Borgonovi and Pál, 2016). Student well-being is the result of interactions among four distinct but closely related domains: psychological, social, cognitive, and physical. Each dimension can be considered both as an outcome and as an enabling condition concerning the other dimensions, and ultimately with students' overall quality of life (Borgonovi and Pál, 2016). The student well-being in this study refers to being satisfied with both the social and academic aspects of the college life.

The College of Science and Technology (CST) offers degree programmes in engineering (civil, electrical, communication, information technology and architecture) with a vision to achieve excellence in the field of science and technology, enriched with Bhutan's development philosophy of Gross National Happiness (GNH) values (RUB, 2018). At CST, students remain academically engaged (lectures/tutorials/ practical) for more than 12 h a day and the college apparently seems to lack state-of-the-art facilities. Such practices could lead to a negative impact on student well-being and ultimately hamper their performance. Bhutanese college students experience mental health issues such as depression, stress, suicidal ideation, suicide attempt, drugs, and unsafe sex (Sherab et al., 2017; Sherab et al., 2019; Schuelka et al., 2021). This is an indication amongst others that generally there appears to be a lack of well-being among the university students in Bhutan. Recent research has claimed that there is not much support or resources for the mental health and well-being needs of the university students (Schuelka et al., 2021). However, it is currently unknown if the well-being needs of the CST students are being met and how this might impact on their college life.

Existing literature indicates that, in particular, technical students in 'technical' faculties/colleges tend to face a higher level of stress due to the complex nature of the discipline (Gerrard et al., 2017). Kember and Leung (2006) further argue that "while some amount of stress is desirable as a sign of study commitment, high distress level during studies is related to poor academic performance and declining empathy" (p.186). As a result, there could be an increasing trend in the student dropout rate, and an increase in anxiety and stress levels. For instance, the exam cell officer at CST has noted that, "we usually have more dropouts in the Autumn semester which has a combination of more difficult modules where the failure rate is higher (T. Denkar Personal Communication, October 30, 2021). Additionally, the exam result coordinator mentioned that approximately 5 to 6 students drop out every year (P. Dema, Personal Communication, October 30, 2021).

On the other hand, research suggests that students high in well-being demonstrate superior decision-making

skills, better interpersonal behaviours, and receive higher overall performance ratings than those low in well-being (Wright and Cropanzano, 2004). This is an indication that the university student well-being matters. Students may suffer due to exhaustion and lack of interest. Anecdotal evidence suggests that such issues are common in Bhutanese colleges, particularly in technical colleges. Stress is a parameter that is often ignored in academic institutes in Bhutan. Hence, the 'Happiness and Well-being' centres are being established at all college campuses to address the issue of student well-being (Schuelka et al., 2021) through various interventions. Interventions and necessary supports that enhance the students' abilities to handle stress can lead to improved functioning and an improvement in overall well-being that often leads to higher goal attainment by individuals (Bewick et al., 2010; Ryan and Deci, 2000).

There are issues in identifying measures of importance in this area. For example, The actual workload is a concept that is difficult to measure with any precision (Kember, 2006; Kember and Lueng, 2006). It could be defined as the scheduled class contact hours and the time required for understanding the course content and completing assignments (Kember 2006; Kember and Lueng, 2006; Kember et al., 2006). In this study, academic workload means the number of face-to-face teaching contact hours, assignments and projects, and independent study hours per week for a semester. Existing literature suggest that the student perceptions of heavy workload influenced students towards surface approaches to learning (Lizzio et al., 2002). At CST, a student has to fulfill an average of 60 credit hours per semester which is equivalent to five modules (12 credits each). A student has to dedicate 8 hour per module in a week including lecture, tutorial, practical, and independent study. In a typical week, a student will have 40 hour for their studies. Until the COVID-19 pandemic, teaching-learning in the Bhutanese context was mostly face-to-face. It is more likely that due to busy schedule in the college, stress is more prevalent among students. Such practices imply that the class hours add more to perceptions of overload than independent learning hours. Time spent on independent study decreases as contact hours increases and the data proved to have a negative exponential curve (Loeng, 2020; Kember, 2006). These results infer that decreasing class contact hours and increasing independent study hours improve learning outcomes. To enable adults to focus on self-directed learning that entails individuals taking initiative and responsibility for their own learning, teachers must be facilitators of learning not transmitters (Loeng, 2020, para.12). In addition, the way of teaching and the standard scheduled contact hours need to be addressed together in a curriculum design. The impact of academic workload on student well-being at CST is a grey area that has never been studied. Therefore, this research was designed to empirically find out if there is any link

Table 1. Demographic (N=385).

Characteristic	Category	n	%
Gender	Male	250	39.5
	Female	135	60.5
Year of study	1st year	187	48.6
	2nd Year	61	15.8
	3rd Year	64	16.6
	4th Year	54	14.0
	5th Year	19	4.9
Programme of study	Civil Engineering	125	32.5
	Architecture	94	24.4
	Electrical	15	3.9
	Information Technology	45	11.7
	Electronics and communications	51	13.2
	Instrumentation	24	6.2
Student status	Geology	31	8.1
	Pre-service	378	98.2
College tuition fee support	In-service	7	1.8
	Self-funding	90	23.4
	Government	288	74.8
	Others	7	1.8

between academic workload and well-being of CST students. Thus, the following research question was formulated: What is the CST students' perception of their academic workload and well-being?

MATERIALS AND METHODS

This study employed a sequential mixed-methods approach (Cohen et al., 2011; Cooksey and MacDonald, 2019; Creswell and Plano, 2011; Ivankova et al., 2006) to capture the overall student perceptions of their well-being and academic workload. In the first phase, an online survey (n = 385) to understand the students' general perceptions on academic workload was carried out followed by a collection of qualitative data (n = 119) through course assignments in the second phase (the initial idea of face-to-face interview was not possible due to the Covid 19 restrictions). This assignment in the Academic Skills Module taught by the Principal Researcher was designed to generate detailed information about the issues identified in the survey results.

The online survey was designed and developed based on five prominent themes adapted from the 'Conceptual Model of Quality of College Life' (Sirgy et al., 2007) which includes- demographic information; social aspects of college life (27items); students' satisfaction level with college facilities and basic services (24items); and academic aspects of the college (44items). These themes were measured using a five-point scale (1=Very Dissatisfied; 2=Dissatisfied; 3= Somewhat Satisfied; 4= Satisfied and 5= Very Satisfied) for each item. It was designed to identify physical, social, and psychological well-being and understand the on-campus learning environment. The last set of questions contained several

single-item measures of well-being (13items), negative coping style (3items) and personality (10 items) and support system (3items). Each of these items were measured by a ten-point scale beginning with 'disagree strongly (1) to 'agree strongly' (10) the different aspects of a student's college life and their feelings about student well-being adapted from Williams et al. (2017) Students Well-being Questionnaire.

The online survey was completed by 385 students from a total of 1030 students in the college (response rate = 37.4%). Qualitative data in the form of student course assignment was collected from 119 students. The assignment question was titled: "*Academic workloads have detrimental effects on well-being and academic performance of students. To what extent, do you agree or disagree with this statement.*" Each student had to submit the response within 700–800-word limit.

Descriptive analysis was carried out for the survey data using SPSS and student academic essays were thematically analysed (Cooksey and McDonald, 2019). The assignment responses were used to identify patterns and to investigate the relationship between the students' general perceptions on academic workload and their well-being. Qualitative data were coded for the emergent themes with keywords/phrases and grouped into concepts. Prior ethics permission was obtained from the College authority and the informants were provided an information sheet. To ensure confidentiality, pseudonyms are used in the report.

RESULTS AND DISCUSSION

Demographics

A total of 385 students representing all study programmes responded to this survey (Table 1).

Table 2. Social aspects of college life.

S/N	Theme	N	Mean	SD
1	Satisfaction with Housing (12items)	385	3.25	0.81
2	Satisfaction with Sports (7items)	384	3.25	0.88
3	Satisfaction with Recreational activities (5items)	383	3.08	0.92
4	Satisfaction with Spiritual programme (3items)	383	3.35	0.94

Table 3. College facilities and basic services.

S/N	Theme	N	Mean	SD
1	Satisfaction with Library (11items)	385	3.54	0.83
2	Satisfaction with On-campus facilities (10items)	385	3.38	0.92
3	Satisfaction with Tutor support (4items)	384	3.16	1.04

Presentation of themes

The findings are presented in terms of the following pre-identified themes from the survey instrument measuring various aspect of college life: *social aspects of college life, college facilities and basic services, academic aspects of the college, student well-being, negative coping style, personality, and support system*. The thesis statements of 119 assignments demonstrated that 90% of the students agreed that academic workloads do impact their well-being and academic performance while only 10% disagreed. The assignment was assessed for a total of 30 marks. The essays were broadly put into two categories - high (21.42 - 28 marks) and low (13-18 marks). There were a total of 45 students ranging from the least and the highest. Most of the points were extracted from the thesis, claims/arguments, topic sentences, examples, and conclusion for thematic analysis. Some of the emerging themes are presented along with the quantitative themes were - *Time management and deadlines, mental and physical health, academic achievement and dishonesty, workload and dropout rate*.

Social aspects of college life

The overall mean for this category is 3.23 (SD = 0.76) which is just above average (somewhat satisfied) with most students having a similar perception indicated by lower standard deviations (Table 2). This is an indication that these students are not satisfied with the college housing (room quality, location and convenience, water supply, electricity, cooling system, furniture, toilets, washing area, and Wi-Fi); sports (infrastructure, equipment, competitions, sports for all); recreational activities (concerts, cultural programmes, social gatherings, intramural sports, and other co-curricular activities); and spiritual programmes (spiritual life, worship, and ritual conduct (*choeshy layrim*)).

College facilities and basic services

The overall mean for this theme is 3.36 (SD = 0.83). The mean scores indicate that the tutor support (financial, sports, club activities, and counselling) was minimal as compared to the services provided by the library (staff, reference section, reserve desk, books, Wi-Fi, online databases, print journals, newspapers, and periodicals) and on-campus facilities such as cafeteria, shops, infirmary, ATM, Wi-Fi, bookstore, computer labs, workshops for practical, club activities, and counselling (Table 3). The slightly higher standard deviations also suggest that the students have differences in their perceptions when it comes to tutor support.

Academic aspects of the college

Faculty, teaching-learning methods, course content, student workload, and classrooms are important elements to enhance students' academic performance. The overall mean for this category is 3.43 (SD = 0.77). Student workload (M = 2.83; SD = 1.01) and academic performance (M = 3.42; SD = 0.91) scored the least (Table 4). This is an indication that students are not satisfied with the assignments, class schedule, personal study time, time demand for each module, and the impact of on-going tests. However, the scores for other academic aspects are also not encouraging as all sub-themes such as satisfaction with faculty, teaching methods, course content, classroom, and academic performance scored below satisfactory level.

Qualitative data from student assignments revealed several academic related issues such as time management, assignment deadlines, academic achievement and dishonesty, workload, and dropout rate. It is evident that many students find it difficult to manage their time as they have to submit many assignments at around the same time. More than six students found it

Table 4. Academic aspects of the college.

S/N	Theme	N	Mean	SD
1	Satisfaction with Faculty (17items)	384	3.58	0.91
2	Satisfaction with Teaching methods (11items)	385	3.55	0.85
3	Satisfaction with Course content (3items)	385	3.70	0.90
4	Satisfaction with a Student workload (7items)	385	2.83	1.01
5	Satisfaction with Classroom (7items)	385	3.51	0.87
6	Satisfaction with Academic performance (5items)	385	3.42	0.91

illogical that the amount of time required for the students to study and the number of academic tasks does not intersect, which puts them under pressure, and they even become self-suspicious of their abilities. One student commented, "when numerous tasks are assigned and all the deadlines are on the same day, it becomes difficult for us to complete on time. As a result, it causes a feeling of nervousness or anxiousness and stress". Many students tend to work beyond their physical limits to meet assignment deadlines, study for examinations, and manage other works, which weakens their concentration levels and perform poorly in academics. Discussing the heavy academic workload and how it impacts their leisure time, a student argued: "heavy academic workload has negative impact, as it put students under constant pressure, limits our leisure time which leads to the deterioration of health. With much time spent on workload, we do not find enough leisure time, which is necessary since it helps us to relax".

Furthermore, many students shared that the academic workload restricts their ability to participate in other co-curricular activities. They are apparently left with limited free time to talk to their friends and family, nor do they have enough time to explore subjects of interest. The 1st year students faced difficulties assimilating a vast amount of academic material in a short period, and they were required to develop effective study techniques and habits to cope with the volume of materials assigned to them. One student wished that "if a student had 100% energy and resources such as time and willpower to work on a single assignment at a time, the quality of that assignment would be excellent." However, a few students shared that the reality at CST is that students have to complete a written assignment, make a presentation, and simultaneously prepare for the test, which forces them to divide their energy and resources and submit poor quality work. Another student is of the view that when they have to meet the academic demands at the cost of their leisure time, it impacts on time for developing interpersonal skills and maintaining social relationships. In the long run, some students may develop health problems and, their academic performance gradually decreases. One of the students stated that, "excessive hours of engagement in the [academic] work can lead to exhaustion which will

lead to deterioration of the physical and mental health." According to some of these students, the heavy academic workload also contributes to poor performance as they have to complete and submit the assignments in haste, without acquiring proper knowledge of the topic.

One of the disadvantages of the heavy workload that became evident in this study is academic dishonesty. One student said that "due to a busy schedule, we are in hurry to complete the assignments and copy-paste from other sources for the sake of submitting the task." Similarly, another student reveals, "the academic workload is a root cause of plagiarism." Another student supports, "when students experience a heavy workload with less time for completion, they copy works of others" or let others do it for them. Two students indicated that when they have many tasks, they prefer doing nothing, or sometimes they do it for the sake of doing and will have little to takeaway.

Thus, some students view the academic tasks as something that must be completed on designated dates rather than as a means to learn. Furthermore, one student articulated an important societal issue of how Bhutanese parents pressurise their children when it comes to academic performance and even how society judge students according to their examination marks. Now that Bhutan is experiencing high internet use, a few students raised the issue of how they become dependent on the internet for their assignments without much learning.

According to some students, mental and physical health issues caused by the heavy workload have led to an increase in the dropout rates in the College. Another student was of the view that "workload is the main factor that affects students' mental health and academic achievement. This is mainly because most of the students consider academic workload as burdensome making them tensed and some even had to drop out of the university." Heavy workload often leads students to question their decision to pursue higher education when they could do small side hustles and have time to learn other skills. A few students also raised a concern that great numbers of their peers have lost their life to unmanageable academic workloads and when they fail to live to the expectations of family, teachers, and

institutions. Moreover, many students shared that they lose interest to learn, procrastinate, adopt bad learning approaches, and some even withdraw. One student argues, "When students easily doubt their ability at a young age and decide to drop out, it not only affects their life but is a great loss to the nation."

Student well-being

There were thirteen sets of questions related to their self-esteem, depression, their relation to self and others, their perspective to their future, and attitude in their community. A composite mean of 6.2 and SD 1.35 supports that most of the students have perceptions that their overall well-being is above average. However, there are opportunities to improve self-esteem, look forward and enjoy things that they do, get along well with friends, experience positive feelings, be optimistic, feel confident about one's ability, avoid being laid-back about one's work, show interest in new ideas, and avoid negative feelings. It is apparent from the qualitative findings that heavy workload can affect the mental and physical well-being of students. According to one student, "we have to struggle without enough sleep, which leads to loss of weight, exhaustion, stomach problems, headaches, and fatigue. Students who are doing more work do not mean that they are learning more." Many students do seem to understand that lack of sleep, anxiety, and depression affects their self-esteem and self-confidence, and weakens immune system, impacting the overall well-being. There is also evidence to show that students experience stress, nervousness and anxiousness, depression, and low self-esteem.

Many students were also of the view that prolonged and severe stress may be psychologically damaging in that it may hinder a person's ability to engage in effective behaviour. Fear and anxiety of failure due to consistent workload make students skip regular meals. Such practices could be detrimental to students' overall health. The impact of heavy workload has been well summarised by one of the students. Students run to make it to class on time. Since classes are scheduled one after another, there is little or no time to eat withstanding the work and assignments one has, and one becomes overwhelmed, nervous, depressed, and unmotivated, which can lead to sleep deprivation and behavioural changes. It would also push a student to see academics as a negative part of his/her life.

A number of students believed that the excess academic work may help them achieve successful grades in the short term, but it is pertinent to realise that they may struggle with health issues, and their academic performance could be affected in the long term.

One student commented, "I do agree that we tend to get much more works in college than we were in high school." When students graduate high school and enrol

in colleges, the whole system of teaching-learning is different. Students may not be ready for such a huge change. Another student argued, "the workload imposed upon the students can reduce their productivity. When the workload is too large, the task starts becoming difficult, which leads to stress and loss of concentration." Such concerns are genuine and stakeholders need to understand that more is not always better. Many students are aware that, "stress is the causative agent for all sorts of diseases." There is also evidence that when students are not able to cope with their workload, they resort to alcohol and drugs to relieve their mind and body, which can be associated with changes in their attitudes toward life and studies. According to some students, mental health has become a serious issue as there is an increase in suicide incidents among youths in Bhutan. Not being able to cope with these problems, they tend to seek relief by abusing drugs and alcohol, while some even have suicidal ideation. The presence of stress amongst the college students became evident when one student reported, "during the general briefing of the college, councillors greeted and welcomed us to the college as *College of Severe Tension*."

In addition, some students noted that mental and physical health issues caused by the heavy workload have led to an increase in the dropout rates in the college. Another student is of the view that "workload is the main factor that affects students' mental health and academic achievement. This is mainly because most of the students consider academic workload as burdensome making them tensed and some even had to drop out of the university." Heavy workload often leads students to question their decision to pursue higher education when they could do small side hustles and have time to learn other skills. A few students also raised a concern that great numbers of students have lost their life to unmanageable academic workloads and when they fail to live to the expectations of family, teachers, and institutions. Moreover, many students shared that they lose interest to learn, procrastinate, adopt bad learning approaches, and some even withdraw. One student argues, "When students easily doubt their ability at a young age and decide to drop out, it not only affects their life but is a great loss to the nation."

Negative coping style

Most students do not seem to cope well during stressful situations (Table 5). They may blame themselves, look forward to a miracle to happen, or try to avoid the situation, hoping that the situation will disappear by itself, or all of these. Such findings suggest that college students need to learn positive coping strategies during stressful situations by not avoiding the situation, seeking support, socialising, and doing something worthwhile.

Table 5. Negative coping style.

Theme	N	M	SD
14. Blame self- When I find myself in stressful situations, I blame myself (such as, I criticize or lecture myself, I realise I brought the problem on myself).	385	6.50	2.38
15. Wishful thinking- When I find myself in stressful situations, I wish for things to improve (such as, I hope a miracle will happen, I wish I could change things about myself or circumstances, I daydream about a better situation).	385	7.63	2.16
16. Avoidance- When I find myself in stressful situations, I try to avoid the problem (such as, I keep things to myself, I go on as if nothing has happened, I try to make myself feel better by eating/drinking/smoking).	385	6.29	2.51

Table 6. Personality (happy, anxious, and stress).

Item	N	M	SD
24. On a scale of one to ten, how happy would you say you are in general?	385	6.64	1.87
25. On a scale of one to ten, how anxious would you say you are in general? (such as, feeling tense or 'wound up', unable to relax, feelings of worry or panic)	385	6.44	2.13
26. Overall, how stressful is your life?	385	6.71	2.17

Personality

Personality related topics included their attitude to learning, openness, sympathy, optimism, relaxation, reliability, creativity, and satisfaction in life. Without many variations among the participants, the average mean is 6.43 with SD 1.16. This is an indication that CST students on average have reliable personalities and are satisfied with their life. However, students could still improve their personality by being more optimistic, sympathetic, reliable, not being jealous, open to new ideas, contended with life, and being sociable.

Personality- happy, anxious, and stress

Personality traits such as how happy and stressful were measured by three items (Table 6). The mean scores for being happy, anxious, and stressful were on a higher side indicating that the students were happy, did not feel anxious, and stressed. However, the findings also indicate that the college could do more to make the students happier and avoid tension and stress.

Support system

Support during stressful time is a basic need for students and with a mean of 7.43 and SD 1.85, most of the students had at least a person who supports them during their difficult times.

DISCUSSION AND RECOMMENDATIONS

This study is the first of its kind to attempt to understand the CST students' perceptions of well-being and workload. As shown by the existing literature, dissatisfaction with the learning environment, heavy workload, and insufficient feedback are associated with problems for student well-being (Dahlin et al., 2010; Schuelka et al., 2021). Similarly, the findings of this study provide insights into the existing practices at CST. Like many, if not most, educational environment around the world, the College could consider strategic interventions and revamp some of the practices to address the mental health needs of students.

First, findings from this study demonstrate that the students were not satisfied as they could be with their college social life. This is an indication that the College might explore ways of improving the quality of on-campus housing (room quality, maintenance, water in the dorms, cooling system, furniture, toilets, washing area, and Wi-Fi); sports infrastructure, and 'sports for all, recreational activities (cultural programmes, concerts, social gatherings, sports, and co-curricular activities); and spiritual programmes at the earliest as the college student's social well-being is of utmost importance. As indicated by the existing literature poor infrastructure is likely to negatively impact the academic performance of the students (Walker, 2009). However, it is beyond the scope of this study to ascertain the relationship between social well-being and the academic performance of the students. This may be of interest to future researchers.

Second, findings indicate that there are issues related to college facilities and basic services. There appears to be some concern around tutor support in terms of finance, sports, club activities, and counselling. This may be because of low teacher-student interaction in the class or outside the classroom. Without positive student-teacher interaction, it is unlikely that teachers understand the problems students face. Students also raised some issues with the library (staff, availability of books and references, Wi-Fi, availability of periodicals and non-periodicals) and other on-campus facilities (cafeteria, shop/s, infirmary, ATM, bookstore, labs, and workshops). The course demands students to spend about three quarters of their day in theoretical and practical work, leaving limited off hours to discuss or raise and explore their doubts and concerns. While conducting this study, most students attended offline classes from Monday to Saturday without a break in between for both teachers and students to compensate for the teaching-learning hours lost during the COVID-19 pandemics. This may be one of the valid reasons for students to find classes overwhelming and stressful as significantly noticed from the respondents' experiences. Sometimes, minor or elective module tutors would also let major subject tutors conduct their classes during off-hours to complete the syllabus. Lessons were taught in two modes of delivery as; tutorial and lecture classes. Despite having access to WiFi, Library references, or books; students still preferred to have more counselling programmes, sports, and club activities as their recreational activities after their class hours. The college has two volleyball courts, one football field, one basketball court, two badminton courts, and three table tennis boards in the hostels. These playing areas are mostly occupied by the male staff and/or male students. This situation appears to have possible remedy with students and staff engaging in exploring options together.

Third, the finding reveals that many students were not happy with their *workload* in terms of a number of assignments, time for personal study, class schedule, time demand for each module, and the ongoing tests. The majority of the students agreed that academic workload has a detrimental effect on student well-being and academic performance. As many respondents resorted to plagiarising from apparently credible source without comprehending the topic assigned. Findings indicate that due to excessive hours of engagement in academic works, there are mental and physical health issues such as exhaustion, stress, depression, suicidal thoughts, dropouts, and lack of social life. This corroborates with earlier findings of Gerrard et al. (2017) that technical students are stressed with academic workload. The heavy workload and stress also lead to reduced productivity (Kember and Leung, 2006) as students are not able to concentrate on a particular task. Lizzio et al. (2002) found that student perceptions of heavy workload lead to a superficial approach to learning.

This raises concerns that heavy workloads lead to academic dishonesty in completing the tasks which has further implications.

The student perceptions of other academic aspects of the college such as satisfaction with faculty (overall quality, teaching quality, subject knowledge, commitment, empathy, role model, feedback, caring, patience); teaching methods (individual differences, student-centred methods, technology, teaching-learning materials); course content (relevancy to the job market); classroom (furniture, location, lighting, class size, cooling system, Wi-Fi); and academic performance were somewhat more positive, although there seems to be plenty of opportunities for improvement. It was indicated that most students had difficulty in adjusting to the timing and meeting of their requirements to prepare for the tests or assignments efficiently. It is likely that when the tutors have more than three modules to teach, this could apparently lead to a lack of preparedness and ineffective delivery of their lessons; more lecture and less activity-based teaching classes. When it comes to classroom strength, as compared to other programmes, the Civil Engineering Department has more students and classes are mostly conducted in the lecture theatre comprising more than 70-80 students. Such practice could lead to an ineffective learning environment. Through general observation most minor modules such as science, mathematics, and humanities are also taught in large in large groups. The hard-core technical modules are taught in small groups or sections as per the academic calendar. Although there is no research carried out, it is evident that students taught in large groups perform at below average levels. "One of the merits of small class teaching reform is that teachers can better handle individual differences in the classroom" (Pow & Wong, 2017, p.74) This issue requires consideration for better overall outcomes.

Fourth, as per the findings, apart from teaching-learning; students might be inclined to ignore or devalue their self-esteem, depression, their relation to self and others, prospective to their future, and attitude in their community that might lead to poor academic performance. However, it was found that student perception on overall well-being is above average but could benefit from an increased emphasis on ways to improve students' self-esteem, supporting them while carrying out any events, and motivating them to be optimistic and confident about the future, and appreciating for the kind of work they do and new ideas. For instance, some work was done to trace the employment rate of graduate students of CST. While the college programmes are based on current market job requirements, internal research has indicated that employment outcomes vary greatly. The study indicated that 98% of students from Information and Technology (IT) Department were employed; comparatively, more than Departments of Electronics and Communication

Engineering (ECE) with 75%, Electrical Engineering (EE) with 79%, and Architecture and Civil Department with 81% (T. Lhendup, personal communication, March 18, 2021). This invites the educators to question, examine and investigate why other departments could not be at par.

Fifth, findings from the current study indicated that many undergraduate students were experiencing difficulties in coping with negative emotions during stressful situations. Therefore, it is crucial students be assisted to develop robust coping mechanisms rather than blaming themselves, waiting for a miracle to happen, or avoiding the situation and hoping that it will disappear by itself. Students need to feel encouraged and supported to acquire positive coping strategies to help confront stressful situations, seek support and counselling, engage in positive socializing, and keep engaged in activities, be more reliable, optimistic, open minded, content and sociable. The findings on the personality trait of students reveal that they need to be specifically more reliable, optimistic, open-minded, and sociable with contented ideas.

Sixth, it is apparent that colleges such as CST can develop a better learning environment for those students who experience stressful situations by adapting formative assessments with less reliance on summative assessments. To address some of the current practices at CST, students sit for two-term tests, several assignments, and internal semester examination; in addition, lab/practical work, report writing, and case studies. Therefore, when students have too much on their plates, they may prepare and write/respond exams or tests on a surface level. To minimise their take-home tasks as and when their module tutor demands; a few heads of the departments have maintained assignment deadline schedules to do away with clashes and align with students' assignments timings. Due to this, most students also submit their assignments without proper layout or meaningful paper development/write-up just before deadlines and submit like the draft especially for language papers. In the context of academic procrastination and academic performance, Balkis and Duru (2017), noted that the students who procrastinate would have poor academic performance and are more likely to complete assignments after submission deadlines and prepare for examination at the last minute. As a result, the essence and quality is compromised and students below average or less. Stevens (2018) recommends that it is important to provide meaningful learning opportunities; instructors need strategies for balancing educators' workloads at the same time. There are five strategies for creating assignments and activities that promote learning without overwhelming instructional workload such as: anticipating student questions when writing assignments, creating reusable formative assessments, scaffolding assignments, creating choices for summative assessments and encouraging student

collaboration. These strategies practice the constructivist approach where learning is considered as an active practice in which learners construct their knowledge. Designing strategic interventions, for instance, student well-being interventions such as stress management techniques, has been found effective with university students (Flinchbaugh, et al., 2012; Ryan & Deci, 2000).

Conclusion

The current study examined the college students' perceptions of academic workload and well-being. Evidence from the study raises concerns that a lack of attention to student well-being and health can lead to both short-term and long-term impacts that can be life-threatening. It is timely that all RUB colleges now have established 'Happiness and Well-being Centre' where students are provided with support services. In addition, it is important for the College to seriously consider some of the issues identified such as campus facilities, academic workload, student assignments, faculty, and social life. These are critical elements of a university student that must be provided utmost attention; otherwise, the consequences would be fatal. It is apparent that some of these issues may not even appear during the college days but much later in their life, which would be too late to address by then.

CONFLICT OF INTEREST

The authors have not declared any conflict of interest.

REFERENCES

- Abdulgani H, Alkanhal A, Mahmoud SK, Alfaris F (2011). Stress and its effects on medical students: A cross-sectional study at a College of Medicine in Saudi Arabia. *Journal of health population and nutrition* 29(5):516-522.
- Ansari EIW, Stock C (2010). Is the health and wellbeing of university students associated with their academic performance? Cross-sectional findings from the United Kingdom. *International Journal of Environmental Research and Public Health* 7(2):509-527.
- Agolla JE, Ongori H (2009). An assessment of academic stress among undergraduate students: The case of University of Botswana. *Educational Research and Reviews* 4(2):063-070.
- Baik C, Larcombe L, Brooker A (2019). How universities can enhance student mental wellbeing: The student perspective. *Higher Education Research and Development* 38(4):674-687. <http://doi.org/10.1080/07294360.2019.1576596>.
- Balkis M, Duru E (2017). Gender differences in the relationship between academic procrastination, satisfaction with academic life and academic performance. *Electronic Journal of Research in Educational Psychology* 15(1):105-125.
- Bewick B, Koutsopouloub G, Milesc J, Slaad E, Barkham M (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education* 35(6):633-645.
- Bhatti M, Rasli A, Haider M, Imran M, Qureshi IM (2018). Relationship between personality traits and academic stress among postgraduate students in Pakistan. *The European Proceedings of Social and*

- Behavioural Sciences, AIMC pp. 583-591.
- Bordbar TF, Nikkar M, Yazdani F, Alipoor A (2011). Comparing the psychological well-being level of the students of Shiraz Payame Noor University in view of demographic and academic performance variables. *Procedia - Social and Behavioural Sciences* 29:663-669.
- Borgonovi F, Pál J (2016). A Framework for the Analysis of Student Well-Being in the Pisa 2015 Study: Being 15 In 2015, OECD Education Working Papers, No. 140, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jlpszwghvnb-en>
- Cohen L, Manion L, Morrison K (2011). *Research methods in education* (7th ed.). Routledge, Taylor and Francis Group.
- Cooksey WR, McDonald G (2019). *Surviving and thriving in postgraduate research* (2nd ed). Springer.
- Creswell JW, Plano CVL (2011). *Designing and conducting mixed methods research* (2nd ed). Sage.
- Dahlin M, Fjell J, Runeson B (2010). Factors at medical school and work related to exhaustion among physicians in their first postgraduate year. *Nordic Journal of Psychiatry* 64(6):402-408.
- Flinchbaugh CL, Moore EW, Change YK, May DR (2012). Student well-being intervention: The effects of stress management techniques and gratitude. *Journal of Management Education* 36(2):191-219.
- Gerrard D, Newfield K, Asli NB, Variawa C (2017). Are students overworked? Understanding the workload expectations and realities of first-year engineering. *American society for engineering education*.
- Grant AM, Christianson MK, Price RH (2007). Happiness, health, or relationships? Managerial practices and employee well-being trade-offs. *Academy of Management Perspectives* 21(3):51-63.
- Ivankova LN, Creswell JW, Stick SL (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods* 18:20-23. DOI:10.1177/1525822X05282260.
- Jones E, Priestley M, Brewster L, Wilbraham SJ, Hughes G, Spanner L (2021). Student wellbeing and assessment in higher education: The balancing act. *Assessment and Evaluation in Higher Education* 46(3):438-450.
- Kember D (2006). Interpreting student workload and the factors which shape students' perceptions of their workload. *Studies in Higher Education* 29(2):165-184.
- Kember D, Sandra Ng, Tse H, Wong TTE, Pomfret M (2006). An examination of the interrelationships between workload, study time, learning approaches and academic outcomes. *Studies in Higher Education* 21(3):347-358.
- Kember D, Leung DYP (2006). Characterising a teaching and learning environment conducive to making demands on students while not making their workload excessive. *Studies in Higher Education* 31(2):185-198.
- Loeng S (2020). Self-directed learning: A core concept in adult education. *Education Research International*. <https://doi.org/10.1155/2020/3816132>
- Leontopoulou S, Triliva S (2012). Explorations of subjective wellbeing and character strengths among a Greek University student sample. *International Journal of Wellbeing* 2(3):251-270. doi:10.5502/ijw.v2.i3.6.
- Lizzio A, Wilson K, Simons R (2002). University students' perceptions of the learning environment and academic outcomes: Implications for theory and practice. *Studies in Higher Education* 27(1):27-52.
- Pow J, Wong M (2017). Effect of workplace factors in professional teacher development on the implementation of small class teaching. *Journal of Education and Training Studies* 5(8):68-76. <https://doi.org/10.11114/jets.v5i8.2441>.
- Royal University of Bhutan (RUB) (2018). *The Royal University of Bhutan Strategic Plan 2018-2030*. <https://www.rub.edu.bt/images/rub/Key-Documents/Strategic-Plan/Strategic-Plan-2018-to-2030.pdf>
- Ryan RM, Deci EL (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* 55:68-78.
- Schuelka MJ, Braznell M, Leavesly M, Dorji S, Dorji K, Nidup K, Latsho P (2021). Happiness, wellbeing, and mental health in Bhutanese higher education: Exploring student and staff experiences and perceptions within a framework of Gross National Happiness. *Journal of International and Comparative Education* 10(1):33-50.
- Sherab K, Howard J, Tshomo S, Tshering K (2017). Substance use, mental health, and sexual behaviour of college students in Bhutan. *Journal of Applied Youth Studies* 2(2):3-17.
- Sherab K, Howard J, Tshomo S, Tshering K, Passang D (2019). An exploratory study of sexual risk behaviour among university students in Bhutan. *Sexuality Research and Social Policy* 16(4):455-462.
- Sirgy JM, Grzeskowiak S, Rahtz D (2007). Quality of college life (QCL) of students: Developing and validating a measure of well-being. *Social Indicators Research* 80:343-360. <http://DOI 10.1007/s11205-005-5921-9>.
- Stevens J (2018). Finding the balance: Creating meaningful assignment without overwhelming instructional workload. <https://www.semanticscholar.org>.
- Walker PM (2009). The role of sleep in cognition and emotion. *Annals of the New York Academy of Sciences* 1156(1):168-197.
- Williams G, Pendlebury H, Thomas K, Smith AP (2017). Student well-being process questionnaire (WPQ). *Psychology* 8(11):1748-1761. <http://DOI: 10.4236/psych.2017.811115>.
- Wright AT, Cropanzano R (2004). The role of psychological well-being in job performance: A fresh look at an age-old quest. *Organizational Dynamics* 33(4):338-351.