

# IMPACT OF THE COVID-19 PANDEMIC ON THE ACADEMIC LIFE OF HIGHER EDUCATION STUDENTS: A RURAL SOUTH AFRICAN PERSPECTIVE FROM A GLOBAL STUDY

**J. K. Alex**

Mathematics Education

Walter Sisulu University

Mthatha, South Africa

<https://orcid.org/0000-0002-0118-760X>

## ABSTRACT

Globally, the COVID-19 pandemic has become a greatest challenge in all sectors of life in the 21st Century. Due to worldwide lockdown and social distancing regulations, higher education institutions who offer face-to face classes had to go online to provide educational services to their students, which had major impacts on student lives. To study the immediate effects of it, a global study on the life of higher education students, initiated by University of Ljubljana (with international partners) was conducted as a voluntary and anonymous online survey across the world started on 5 May 2020. The survey targeted higher education students – on what student life looks like during the COVID-19 pandemic, in different parts of the world. This article reports on part of that global study, reporting on the teaching and learning aspect of a sample of 274 undergraduate students from a South African rural higher education institution (HEI) who participated in the study. Thus, this article highlights the immediate impacts of the pandemic during 5 May – 15 June 2020 of the rural HEI. The study is important as the student perspective can have an impact on post-COVID academic policies of HEIs with similar contexts.

**Keywords:** COVID-19, university student, academic life, online learning, rural university

## INTRODUCTION

The COVID-19 pandemic triggered by the novel coronavirus is said to have originated in China in December 2019. It spread across the world at the beginning of 2020 and has drastically changed the lives of people globally. This has also affected higher education students' lives, work and their physical and mental well-being (Aristovnik et al. 2020a). To contain the wide-spread of the COVID-19 pandemic, as advised by the World Health Organization (WHO), governments around the world agreed to close educational institutions (UNESCO 2020).

The coronavirus pandemic has interrupted educational activities worldwide. According to Sahu (2020), by 25 March 2020, 150 countries and educational institutions were closed affecting the academic activities of over 80 per cent of the world's student population. In their report, UNESCO (2020) stated that as of 1 April 2020, 1.598 billion students from 194 countries

had to stay at home. Thus, the reports from different parts of the world talk of the pandemic and its effect on their educational systems and WHO continuously gives the up-to-date information on the global statistics (see <https://www.worldometers.info/coronavirus/>). The global crisis of the continuous spread of the pandemic, strict isolation measures and delays in starting educational institutions had far reaching implications on the mental health of its students (Cao et al. 2020). Aristovnik et al. (2020a) further articulate that students' academic work and life was affected. Students were faced and challenged with online learning, no access to campus facilities, new assessment methods, different workloads, different channels of communications and operations of academic work and studying from home (Aristovnik et al. 2020a).

The emergence of the pandemic adversely affected the African continent leading to the closure of its HEIs. South Africa reported the first suspected case of COVID-19 on 5 March 2020 (National institute for Communicable Diseases (NICD) 2020) followed by a declaration of "National State of Disaster" by the President of South Africa on 15 March 2020. To contain the spread of the virus, measures such as travel restrictions and the closure of schools was declared from 18 March by the President. A national lockdown was announced on 23 March 2020. The lockdown began on 26 March 2020. Students from all higher education institutions had to evacuate residences and move to their homes. This was governments' strategy to curb the spread of the virus.

To capture the instant effects of this global crisis in the HEIs, University of Ljubljana in Slovenia (Aristovnik et al. 2020a) initiated a global study. The study targeted students in HEIs – on how student life was during the COVID-19 pandemic. This study included teaching and learning, social contacts, as well as how students are enduring emotionally with the situation (Aristovnik et al. 2020b). The author of this article joined the global study to contribute towards a comprehensive large scale global survey by South African HEIs. The author was particularly interested in knowing and understanding the academic life of her university's students in comparison with their counterparts nationally and globally. This study is novel and is significant to policy recommendations and strategies to online learning and teaching and student support during and post-COVID-19 for HEIs in similar contexts.

COVID-19 has affected the education landscape in the world as a whole in terms of instructional and infrastructural underpinnings of online learning and teaching. Online learning and teaching have been adopted as a temporary measure to save the academic year; it also has its challenges in the context of present-day face-to face instructional designs. Lev Vygotsky, John Dewey, and Jean Piaget's focus on social constructionism describe and explain teaching and learning as complex interactive social phenomena between students and teachers (Picciano 2017). John Dewey defined learning as a sequence of practical social experiences in which

students learn by doing, collaborating, and reflecting with others (Picciano 2017). This is assumed to be the cornerstone of teaching and learning activities in most of the face-to-face educational setup in the 20<sup>th</sup> century. In the same vein, even learning theories on online learning such as “community of inquiry” model for online learning environments developed by Garrison, Anderson and Archer (2000) also is based on the concept of three distinct “presences” namely cognitive, social, and teaching, where “presence” is a social phenomenon and manifests itself through interactions among students and teachers (Picciano 2017, 173). Thus, whether it is face-to-face learning or online learning, instructional and infrastructural designs need to focus on interactions between students and teachers. Thus, the learning necessitated by online teaching and learning by the pandemic need to be revisited for how best we can adopt it for future by supporting this interaction between students and instructors through instructional designs supported by infrastructure. Therefore, in the meantime, while all sectors of civil society are collaborating to help humanity soften the setback of the very significant event in recent history, academics need to find solutions to safeguard the future effects of the pandemic in the education sector, more especially to the higher education sector by formulating policies and strategies on online teaching and learning. This can be best achieved by gathering information on the academic life of students during the COVID-19 pandemic, while challenged with the realities of online teaching and learning.

Thus, this article reports on part of the study which is built on the reflections of students on their academic life during the COVID-19 pandemic, while faced with online teaching and learning. For this article, the research question addressed is: What evidence can be gathered from students in a rural South African HEI on the impact of COVID-19 on their academic life?

## **TEACHING AND LEARNING IN SOUTH AFRICAN HIGHER EDUCATION INSTITUTIONS DURING COVID-19 AND THE RURAL UNIVERSITY’S CONTEXT**

In 1994 South Africa became a democratic country. Higher education institutional landscape was restructured by means of mergers of institutions, and three main types of HEIs were formulated, namely, comprehensive universities, traditional universities, and universities of technology (HESA 2009). This resulted in 26 public higher education institutions. 96 per cent of the student population in the South African HEIs are fulltime students (excluding private universities and open learning universities (see <https://www.usaf.ac.za/public-universities-in-south-africa/>). The institution where the study is conducted is a comprehensive university, which was founded on 1 July 2005 through the merger of three institutions in Eastern Cape (see [www.wsu.ac.za](http://www.wsu.ac.za)). The merger was undertaken under enormous challenges, and it has been documented that, as compared to urban based institutions rural based universities had to

undergo unique developmental obstacles and hindrances (HESA 2009). This comprehensive university in the Eastern Cape strives to offer quality education to over 30, 000 students across its campuses through courses and programs leading to mainly bachelor degrees which are officially recognized higher education degrees in various areas of study. It is a non-profit public higher-education institution with its main and largest campus located in the small city of Mthatha (population range of 50,000–249,999 inhabitants) of Eastern Cape. This HEI provides access to knowledge for a diversity of students from mainly rural, impoverished, and underprivileged communities of the Eastern Cape (see [www.wsu.ac.za](http://www.wsu.ac.za)).

Since South Africa confirmed its first case of COVID-19, and the urgent need for closure of HEIs, universities had to undergo totally unforeseen changes in the operations and its functions especially the way they deliver their academic programmes (Universities South Africa 2020). Due to the national lockdown, HEIs had to embark on wide-scale emergency teaching and learning methods to save the 2020 academic year (Universities South Africa 2020). According to Kokutse (2020), the Association of African Universities (AAU) embarked on a large-scale capacity building for lecturers to teach online. More than 1,500 lecturers from 13 African countries, namely, Kenya, The Gambia, Niger, Benin, Ghana, Malawi, Burkina Faso, Nigeria, Côte d'Ivoire, Togo, Djibouti, Uganda, and Senegal received online training on teaching and learning strategies. This was their efforts to mitigate the disruptive effects of COVID-19 within the higher education landscape. Similarly, in South Africa lecturers and academic support staff had to be capacitated and prepared for remote/online teaching. For the successful implementation of online teaching most HEIs prepared remote teaching guides, created norms and standards for online teaching and conducted workshops and webinars to support course convenors and lecturers to optimise their online course site and/or other tools to enable content delivery, engagement, and assessments. Across the globe the impetus was to ensure that all students at universities or higher learning institutes complete their semester uninterrupted. Behari-Leak and Ganas (2020) state that online teaching guides, videos, webinars, and resources were being prepared in rapid fire to support academics as they upskill to migrate to remote teaching platforms or go fully online.

Due to the pandemic and the closure of HEIs, South African universities had to adopt full online teaching, irrespective of the lack of appropriate infrastructure to support this mode of teaching and learning. This had a major impact on rural HEIs in the country. It is also worth noting that Eastern Cape is also severely affected by lack of health care system, and rural communities have significantly poor levels of health due to socio-economic conditions exacerbated by lack of healthcare resources or the means to access the available healthcare resources as stated by Morris-Paxton, Reid, and Ewing (2020). If students had to have face to

face contact due to the lack of appropriate infrastructure, the health care system would not be able to support them. To avoid suppressing the already strained health care system, and to abide by the pandemic lockdown regulations, the HEI had to opt for the complete shutdown of the campuses and resort to online teaching and learning. Dill et al. (2020) reported that when the United States' cases of infections grew, University of Washington officials made the pronouncement of moving all classes online as a precautionary measure to safeguard the students and the community. The rural HEI, Walter Sisulu University (WSU 2020), also followed suite of other HEIs and prepared documents and guidelines regarding minimum standards for programme/course/module development, design, and the delivery of quality online instruction. The minimum standards were prepared to ensure that the quality of online teaching to be equivalent to the quality delivered via face-to-face/residential instruction (WSU 2020). The phasing in of online teaching and learning was slower than anticipated, due to the lack of appropriate infrastructure development and training of lecturers.

As a participant of the global study, it provided the author with an opportunity to gather evidence on the immediate impact of COVID-19 on students' academic life. It was important to know and understand students in the global arena are coping with their academic life under the extremely difficult and unanticipated strained conditions of the pandemic. It is expected that this evidence can impact on post-COVID academic policies of HEIs with similar contexts.

## **RESEARCH METHODS**

The principal investigator from the University of Ljubljana, Slovenia initiated the main global study. His institution, with partners from different parts of the world embarked on a comprehensive survey on the impacts of the COVID-19 pandemic on students' life on 5 May 2020. The survey was open through many platforms and by 15 June 2020, 30,877 students from 129 countries in six continents and from which 150 universities took part in the survey (Aristovnik et al. 2020c). The author of this article, from a rural HEI in South Africa partnered with the principal investigator in data collection for the above global research study. The target population was the student population of the rural HEI, who were at least 18 years old, comprising of students from all faculties. For this quantitative study, data were collected through an on-line anonymous survey from students. Students were given the link to participate, and their participation was voluntary, and students could withdraw from the study without any consequences. The students could preview the on-line questionnaire (One Click Survey: [www.1ka.si](http://www.1ka.si)). The students also had the option at the end of the survey questionnaire to leave their e-mail address in case they would like to receive the results of the survey. To take part in the global study, permission was obtained in the form of a gatekeeper letter after obtaining

ethical clearance (Ethical Clearance Number: REC/ST01/2020) from the institution. Thus, all the ethical requirements were met. The data collection ended on 15 June 2020.

The questionnaire titled “Impacts of the COVID-19 Pandemic on Life of Higher Education Students” composed of 39 items under seven sections which included items on socio-demographic, academic and social life, which is based on and extending “The European Students’ Union survey (2020)” (Aristovnik et al. 2020c). For this article only items pertaining to socio-demographic and academic characteristics are included. The items are listed as follows (as from the original questionnaire, Aristovnik et al. 2020c):

- Section 1. Socio-Demographic and Academic Characteristics – 8 items on socio-demographic and academic characteristics of students, namely, country and institution of study, field of study, study level, citizenship, age and gender.
- Section 2: Academic life – 12 items on how the COVID-19 pandemic affected student’s experiences with teaching (lectures and tutorials/seminars), supervisions/mentorships, assessment and workload, teaching and administrative support as well as student performance and expectations.
  - 2.1 Lectures (about lectures)
  - 2.2 Tutorials/Seminars and Practical Classes
  - 2.3 Supervisions/Mentorships
  - 2.4 Assessment and Workload
  - 2.5 Satisfaction with Teaching and Administrative Support
  - 2.6 Student Performance and Expectations
- Section 3: Infrastructure and Skills for studying from home-2 questions on conditions to study from home (workspace, equipment, internet connection etc.) and students’ computer skills.
- Section 7: General Reflections (This was an open-ended item in the questionnaire, for the participants to respond on general reflections on the COVID-19 pandemic). Sections 4–6 were mainly on social and emotional life and are excluded from the analysis for this article.

The Slovenian research team analysed the global data centrally. The data from the rural HEI were made available for further analysis as per the collaboration agreement. The central data analysts scored the responses on Microsoft Excel 2016, and it was further analysed for the sample from the rural HEI. Participation in the study was voluntary and it was not compulsory to provide responses to all the questions in the questionnaire. The number of responses varied

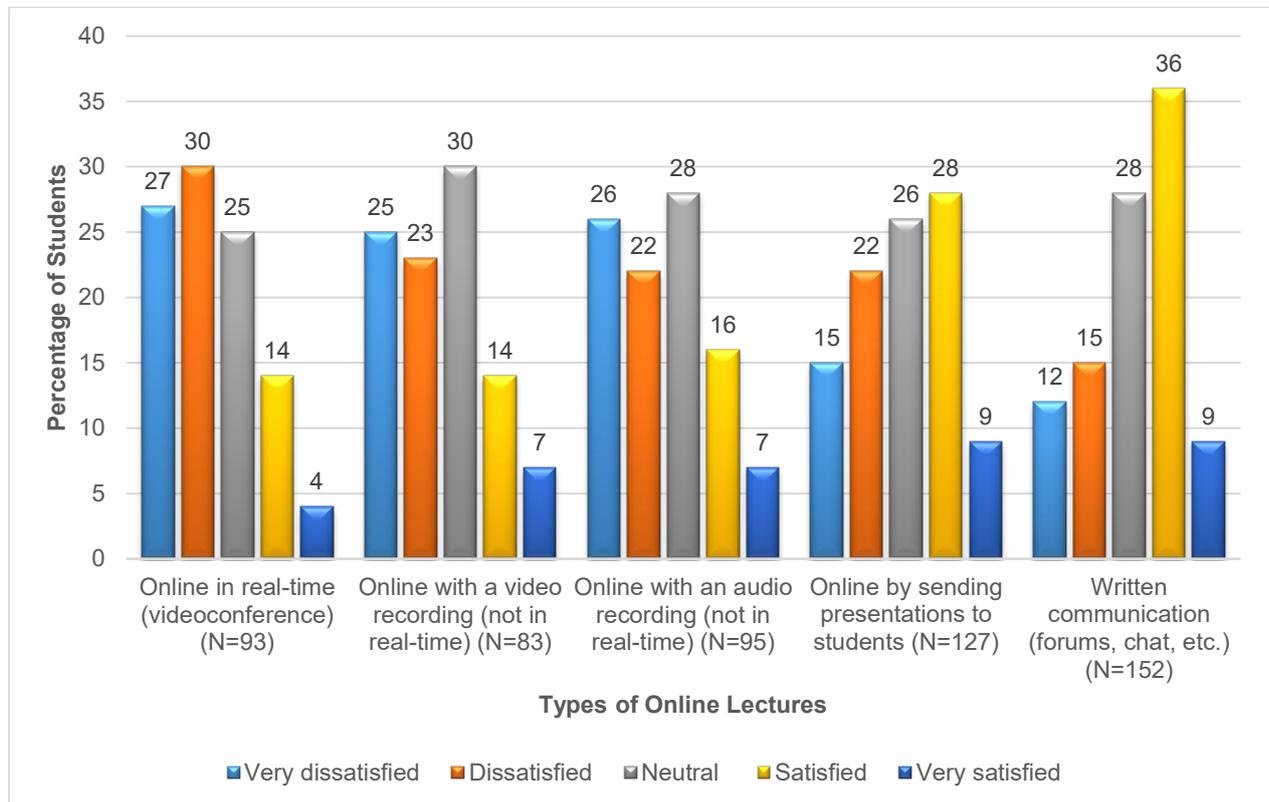
as a result across different items in the questionnaire. Since the remote and rural areas experience problems with lack of electricity and poor internet connectivity which could have resulted in many students not completing all items. Students from all levels of study (undergraduate, masters and doctoral levels) participated in the survey, but only undergraduate students' data are presented for this article. The omission of postgraduates was considered as many postgraduate courses are research based and are mostly done remotely through emails and block-oriented teaching and laboratory practicals. In the case of undergraduate participants, a complete case analysis statistical method was used to sample those students who responded to Q3 (citizen of the country), Q4 (full time student), and Q5 (undergraduate courses). The responses from a total of 274 undergraduate participants used in this study, which included 114 males and 157 females, three students did not disclose their gender. These students were drawn from Arts and Humanities (11%), Social Sciences (67%), Applied Sciences (10%) and Natural Sciences (12%).

## **DATA ANALYSIS AND RESULTS**

The following tables and figures are drawn from items pertaining to academic life of undergraduate students. The questionnaire was mostly comprised of Likert Scale items with five options (Very dissatisfied, Dissatisfied, Neutral, Satisfied and Very satisfied). For better interpretation of the data, the author combined the five-point Likert scale (Very dissatisfied, Dissatisfied, Neutral, Satisfied and Very satisfied) into three categories: Satisfied (i.e., Satisfied and Very satisfied), Neutral (i.e., neither Satisfied nor Dissatisfied) and Dissatisfied (i.e., Dissatisfied and Very dissatisfied) in reporting the percentages of student responses from the tables and figures. Items on student supervision and mentoring are omitted as they are not relevant to undergraduate courses. Hereafter, in the write up, students mean, the sample of undergraduate students of the HEI. For analysis purposes, the item names are kept as it was in the original questionnaire which is also available from the central data system managed under [www.covidsoclab.org](http://www.covidsoclab.org).

### **Student satisfaction with online lectures**

For most of the undergraduate course in HEIs, the teaching and learning is predominantly conducted through face-to face lectures. Due to the pandemic, onsite face-to-face classes were cancelled and most HEIs were forced to conduct lectures online. Two items in the survey questionnaire required students to comment on their satisfaction on the different forms of online lectures as a means of teaching and learning (Items 10 and 11). Figure 1 gives the details.



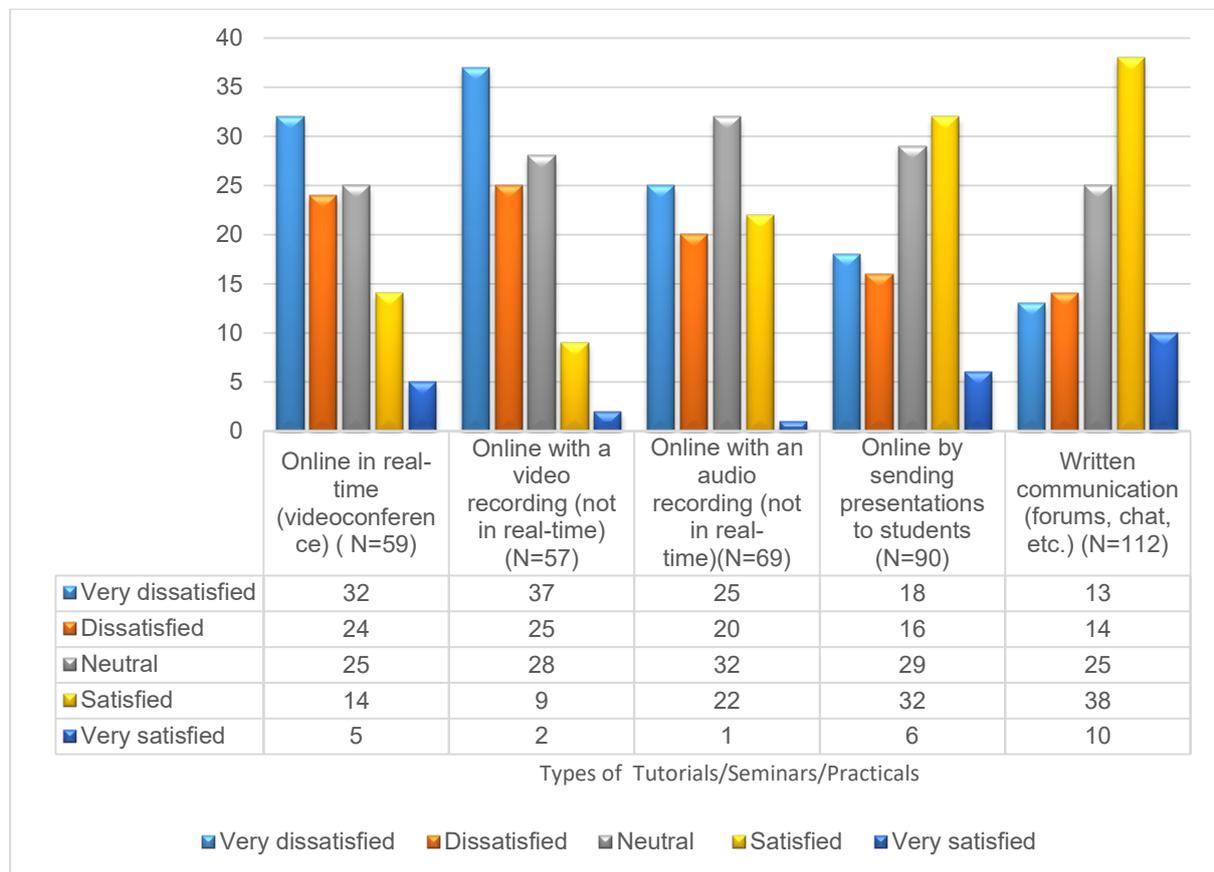
**Figure 1:** Student satisfaction with online lectures

From the available data for each item as specified as in the [www.covidsoclab.org](http://www.covidsoclab.org) for the central data system, which are commonly used for online lectures (Online in real-time (videoconference), Online with a video recording (not in real-time), Online with an audio recording (not in real-time), Online by sending presentations to students, Written communication (forums, chat, etc.)), the data suggest that the students were mostly unsatisfied (57%, 48%, 48%, 37%, 27% respectively). Only a small population of the sampled students were satisfied with the online lecturers (18%, 21%, 23%, 37%, 45% respectively).

It is also noted that the most prevalent mode of online lecture was through written communication and 45 per cent of the students who had that experience found it satisfactory.

### **Student satisfaction with tutorials/seminars and practical classes**

In most undergraduate courses in HEIs, tutorials/seminars and practical classes are part of the academic activities. Due to the pandemic, since on-site classes were cancelled, the organization of tutorials/seminars and practical classes had to change. Several different forms of online tutorials/seminars and practical classes were available to students and the students were requested to assess their level of satisfaction with each form (Items 12 and 13). Figure 2 gives the details.



**Figure 2:** Student satisfaction with Tutorials/Seminars and Practical Classes (%)

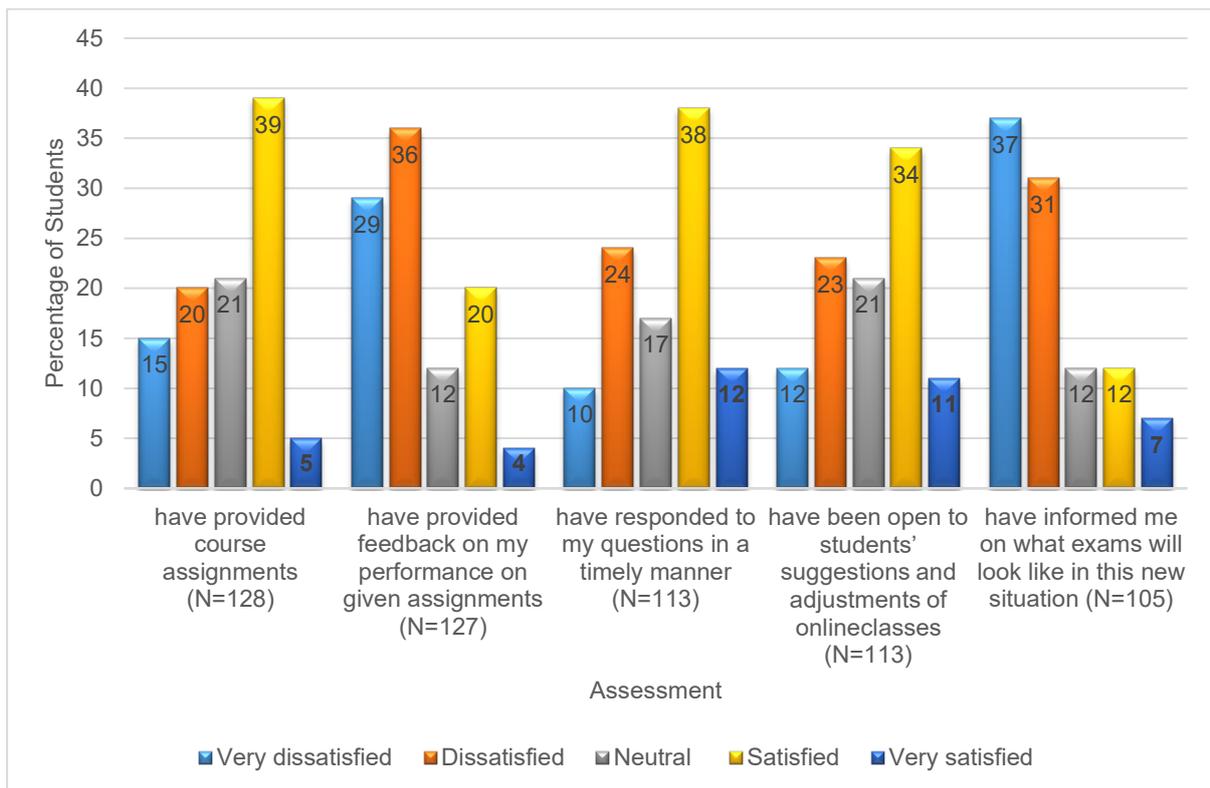
From the available data for each item, for conducting Tutorials/Seminars and Practical Classes online, (Online in real-time (videoconference), Online with a video recording (not in real-time), Online with an audio recording (not in real-time), Online by sending presentations to students, Written communication (forums, chat, etc.)), the data suggest that the students were mostly unsatisfied (56%, 62%, 45%, 34%, 27% respectively). A low percentage of students were satisfied with the online Tutorials/Seminars and Practical Classes (19%, 11%, 23%, 38%, 48% respectively).

It is also noted that out of the different modes of online tutorials/seminars and practical classes, the most prominent one was through written communication and 48 per cent of the students who had that experience found it satisfactory.

### Student satisfaction with assessment

Due to the cancellation of on-site classes the assessment of learning was conducted online. Lecturers were meant to provide course assignments (e.g., readings, homework, quizzes), feedback on the performance. Since online teaching is a new mode of teaching and learning, it is advisable that, lecturers should be open and willing to students' suggestions regarding assessments and examinations. Students were asked to comment on the agreement on

assessment. Figure 3 shows the students’ agreement with the above statements.



**Figure 3:** Student agreement on Assessment (%)

From the available data for each item, the students agreed that the lecturers provided assignments (e.g., readings, quizzes or course work) (44%), timely responded to posted questions (50%) and open to students’ suggestions (45%). On the contrary, the students were not in agreement that the lecturers have provided feedback on performance on the given assessments (24%) and providing the information about exams in the new situation (19%).

### Comparison of workload before and during online learning

Students were asked to compare the workload before on-site classes were terminated to the workload during the online learning. Table 1 gives the details.

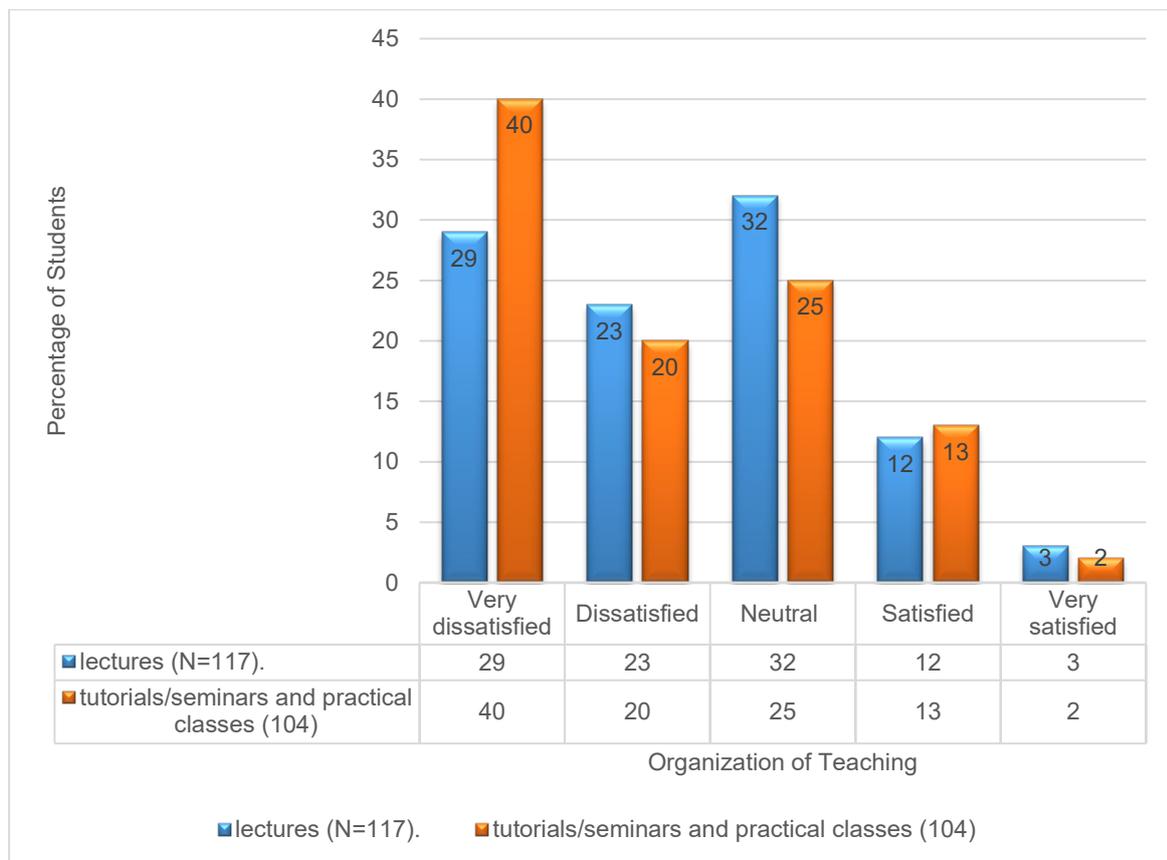
**Table 1:** Comparison of Workload before and during online learning

| Comparison of Workload before and during online learning (N= 145) | Percentage (%) |
|---|----------------|
| Significantly smaller   | 25             |
| Smaller   | 12             |
| The same  | 18             |
| Larger  | 19             |
| Significantly Larger  | 26             |

According to the sampled students, a significant percentage of students (45%) indicated that compared to the workload before the cancellation of on-site classes, the study workload during online learning has been much greater.

**Satisfaction with the organisation of online teaching**

Online learning and teaching was a new phenomenon in the rural HEI; therefore, it needed many efforts in terms of organisation, planning, management and delivery. The students were asked to comment on their satisfaction of lectures and tutorials, seminars, and practical classes.



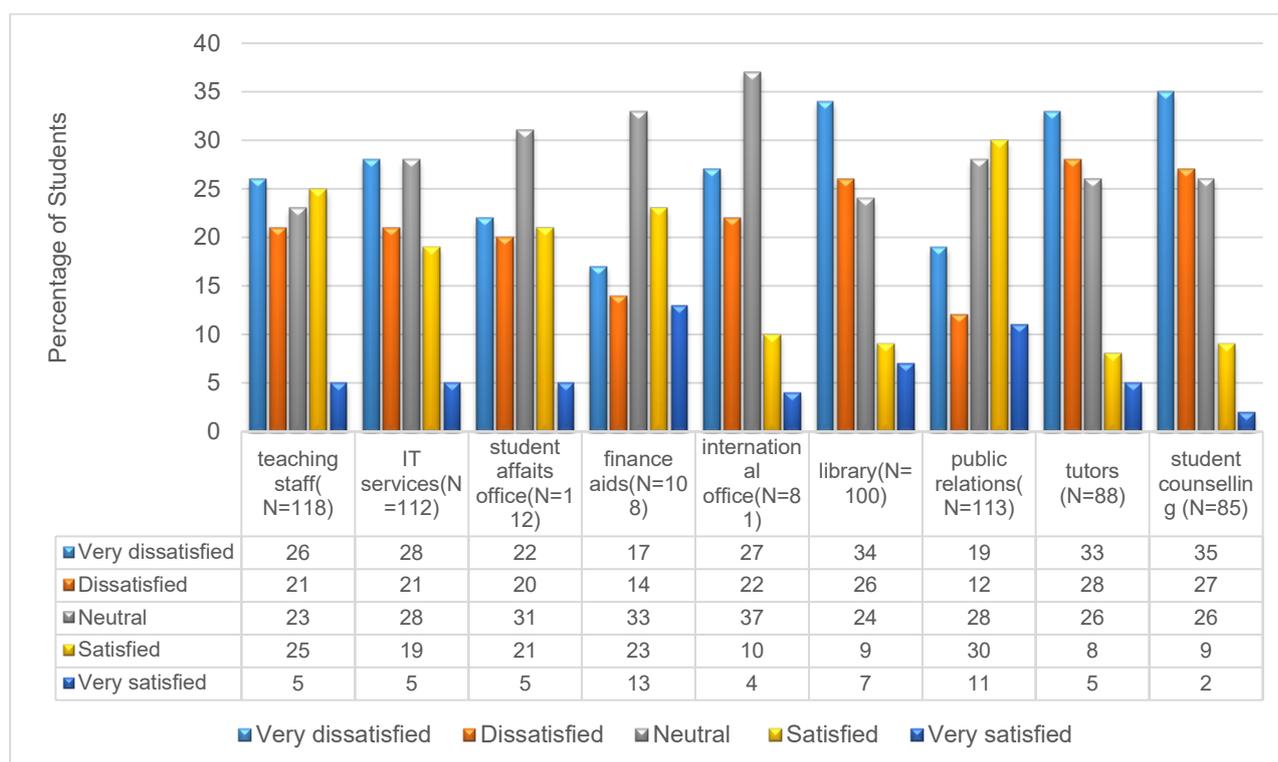
**Figure 4:** Student satisfaction with the organisation of Lectures and Tutorials/Seminars/Practicals

More than half (52%) of students were dissatisfied with the organisation of the lectures and only a small percentage (15%) were satisfied with the organising of seminars, tutorials, and practical classes.

**Satisfaction with the support systems**

Campus life is supported by various systems and support staff such as teaching staff, student affairs office, IT services, international offices, finance aids, public relations, library, tutors and student counselling. When the students were moved on to online teaching mode, they were

asked to respond to the support they received from the listed systems at the university.



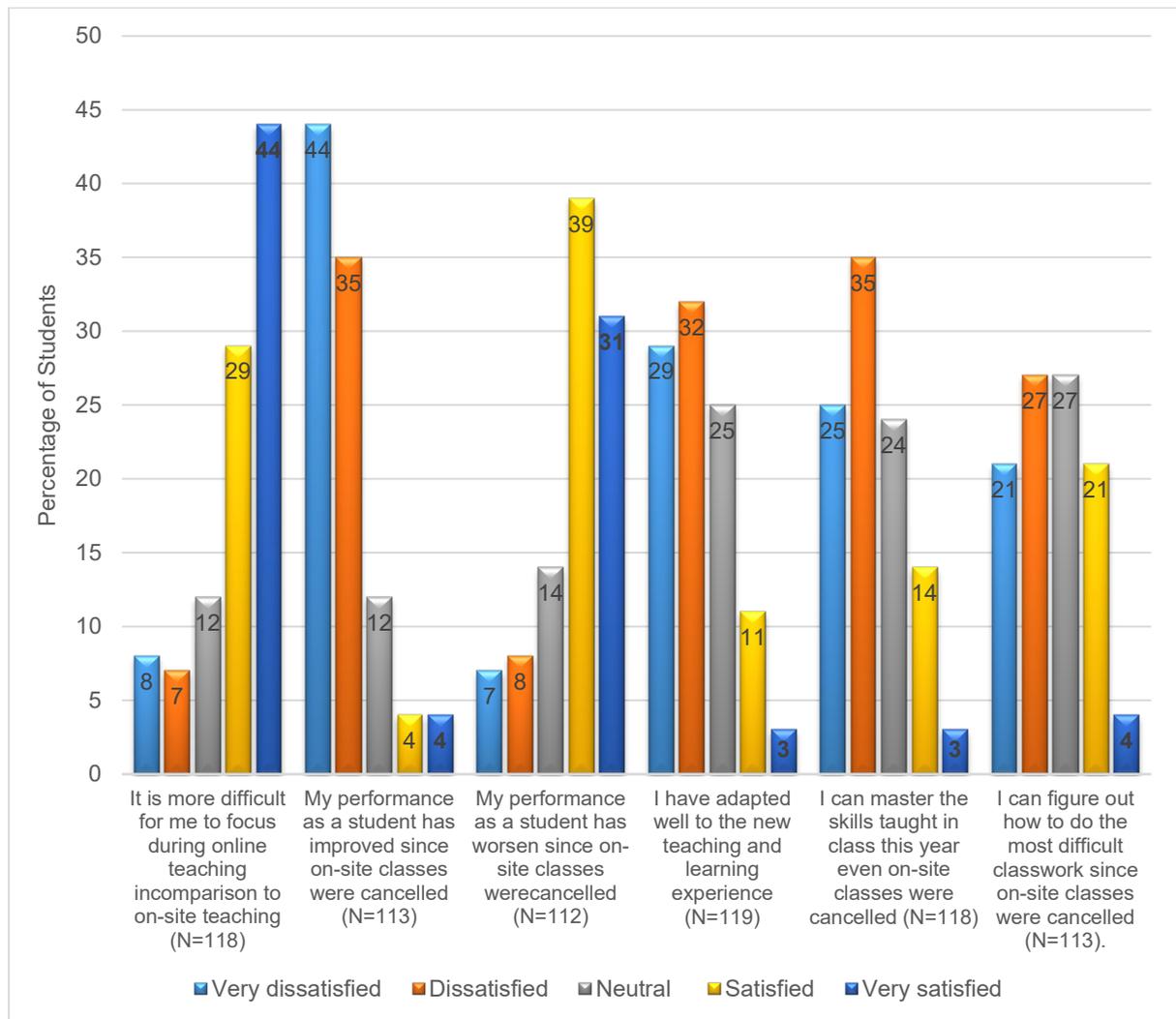
**Figure 5:** Student satisfaction with support systems

It is noted that students were mostly dissatisfied with all the support systems, namely teaching staff (47%), IT services (49%), finance aids (36%), international offices (49%), library (60%), tutors (61%) and student counselling (62%). A slight majority seemed to be satisfied with student affairs office (42%) and public relations (41%) support.

### Satisfaction on performance and expectations

In view of the emergency teaching and learning environment, students were asked to comment on their performance and expectations.

With the new online environment and mostly working from home, majority of the students (73%) are finding it more problematic to concentrate during online teaching compared to face-to-face teaching. Most of the students (79%) disagreed that their performance has improved since the classes were moved online. It is also noted that 70 per cent of the students believed that their performance as a student has worsened since onsite classes were cancelled. Only 14 per cent of students have indicated that they have adapted well to the emergency teaching and learning experience. Majority of the students (60%) disagreed that they could master the skills taught in class this year. 48 per cent of students expressed that they could not understand how to do the most difficult classwork.



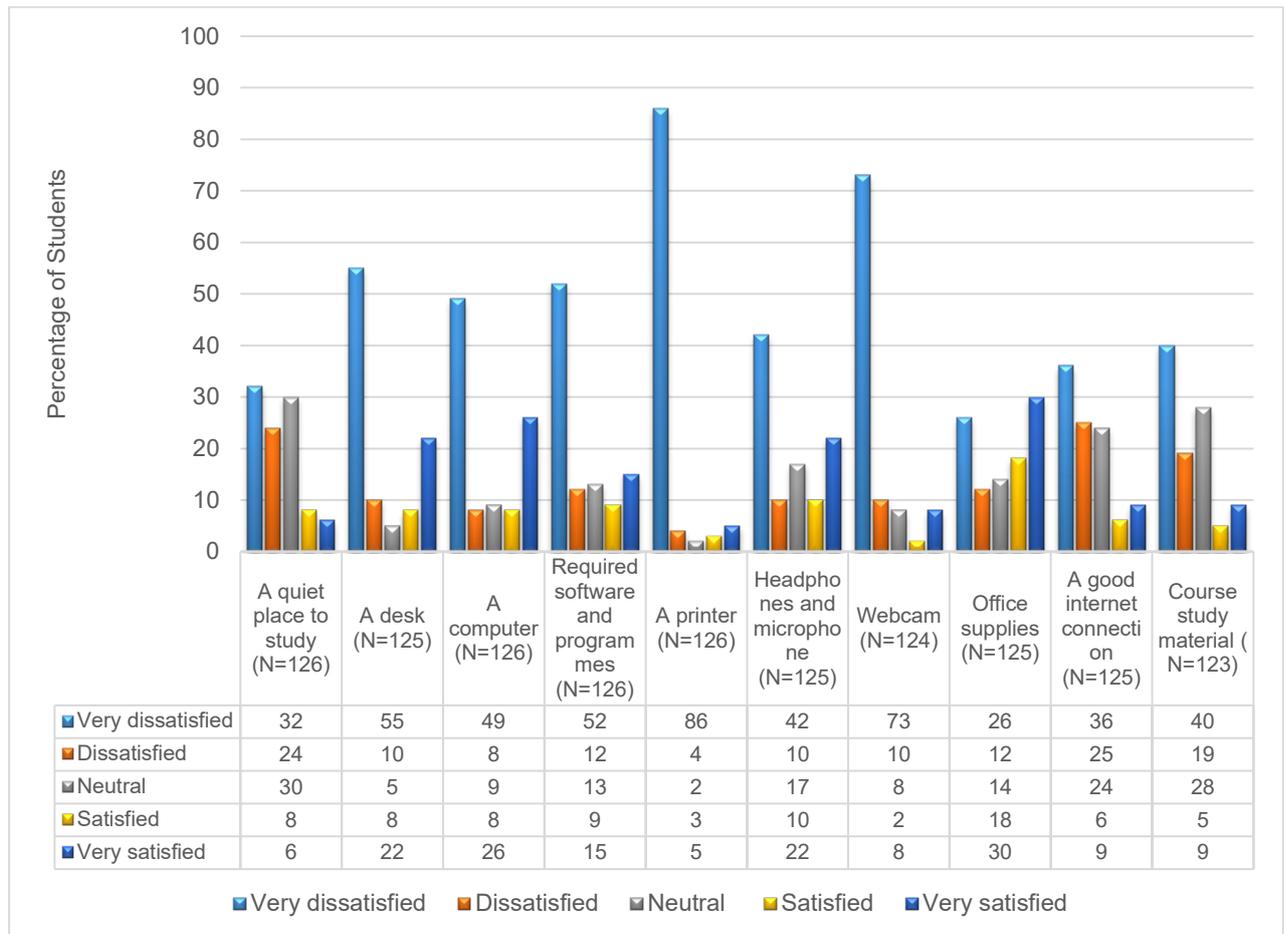
**Figure 6:** Student satisfaction on Performance and Expectations

### Access to infrastructure and skills for studying from home

With the shifting of learning from residences to homes, most of the students had to have the infrastructure in terms of home equipment and skills to study. Students were asked to comment on their satisfaction with infrastructure and skills for learning from home.

It is of concern that majority of the students do not have access to appropriate infrastructure for studying from home such as a quiet place to study (56%), a desk (65%), and a computer (57%). Most of them do not have access to the required software and programmes (64%) and 90 per cent of them do not have a printer at home. Fifty-two per cent of students do not have headphones and microphones and 83 per cent of them do not have a webcam. Although 48 per cent of students indicated that they have the necessary office supplies 61 per cent of students indicated that they do not have access to good internet connectivity. A relatively high percentage (59%) of the student population indicated that they did not have course study

materials. This is of concern on the academic life of students.



**Figure 7:** Student access to infrastructure and skills for studying from home

**Confidence on own computer skills**

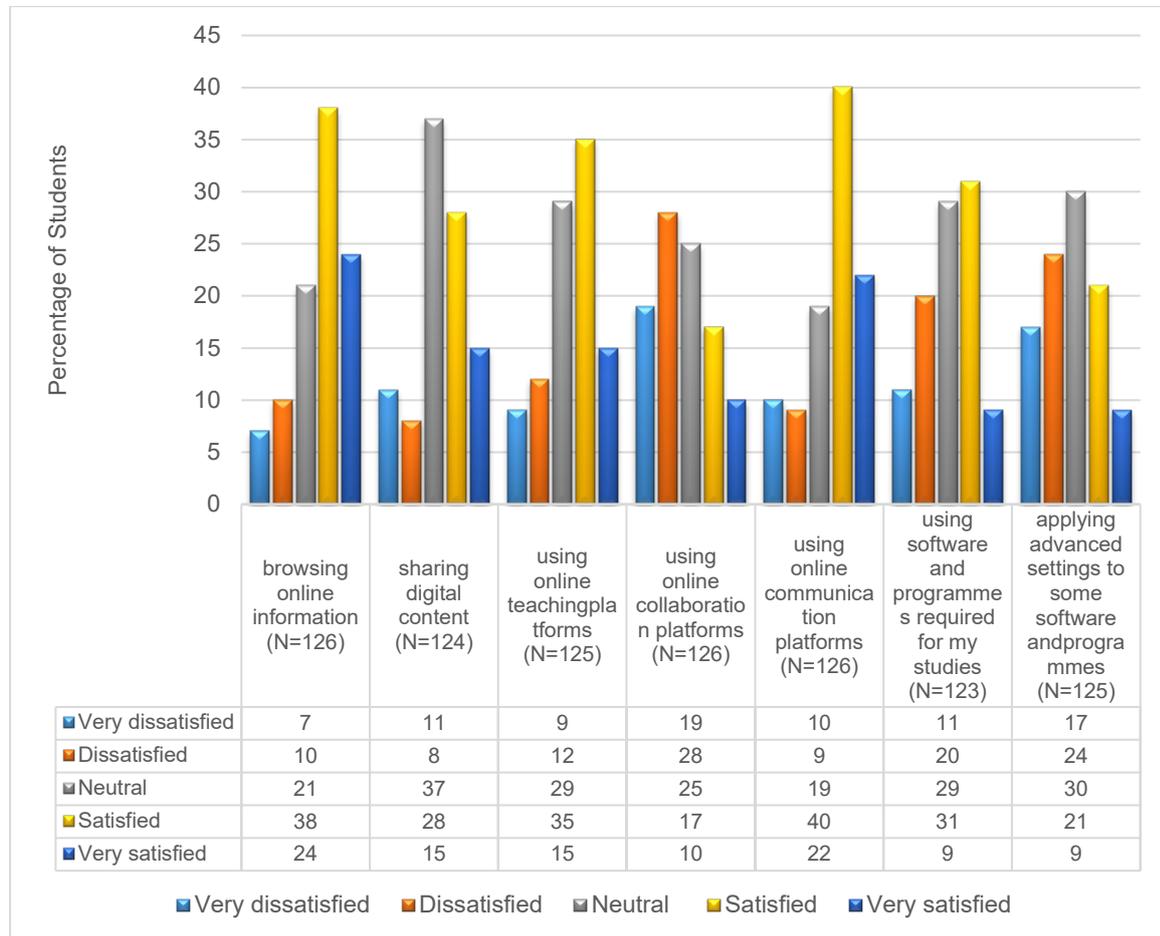
Appropriate and relevant computer skills play a major role in online studying. The students were asked to rate their confidence in computer skills. Figure 8 gives the details of it.

More than half the student population (62%) indicated that they were confident in browsing online information online technological (50%) and online communication platforms (62%). However, students seemed that they were not satisfied with the skills in sharing digital content (43%), using online collaboration platforms (27%), using software and programmes required for the studies (40%) and applying advanced settings to some software and programmes (30%).

**Section 7: General reflections on the academic life: Qualitative Data**

From the open-ended item on the reflections of the life of HE students, sample responses pertaining to academic life are presented below. It is presented under major themes as Missing

the academic life and studies; Worried about the future; Working from home/lack of tools and Concern on the online learning. Repeated responses (responses that were the same) are not included. Some of the responses may overlap between themes as some students wrote them together in one sentence.



**Figure 8:** Student confidence in own computer skills

### Missing the academic life and studies

The following responses, (not on any particular order, labelled as R1–R8), are some of the responses from the students on “concerns over missing the academic life and studies”.

- R1: “I miss going back to campus. I miss school so much.”
- R2: “I am worried about my studies.”
- R3: “At time of this pandemic we struggle, because we are unable to keep up with our studies due to many reasons e.g., late Administration because of previous unpaid fees and expensive data.”
- R4: “It is very hard continuing with my studies during this pandemic. I live in a rural area, I don’t have a laptop, only one lecturer has provided us with study materials on Blackboard but still that information is not enough for us to do our work. Am alone in my rural area, there is

nobody to work with through my school work, this is all too much. It would have been better if we were at our residence there would have been classmates to study with, our books are there.”

- R5: “The COVID-19 is really affecting me personally, more especially academically.”
- R6: “The biggest obstacle I have faced as a 20-year-old is regarding my university studies. It is the source of my stress before the pandemic and now is the source of it during.”
- R7: “I personally think that University students must return to their respective residences because they have already paid full amounts of those rooms and we cannot run away from corona.”
- R8: “Government allow student to go back to the institution and we will take care of ourselves.”

The responses are indications of frustrations from the students concerning their studies. Having no one to study with and not having enough study materials, and having paid their fees, they feel that they need to be back in the campus to study.

### **Worried about the future**

The following responses, (not on any particular order, labelled as R9–R14), are students concern about their future.

- R9: “COVID 19 has delayed my life in many ways. I should have achieved so much but with COVID around I am just stuck inside and doing nothing.”
- R10: “This pandemic is frightening and it has opened my mind to think about many different things than before. My interest has changed ... but I’m worried about my education and job seeking due to this pandemic.”
- R11: “This virus has led us to live in biggest fear. We hardly can do our everyday regularities. Our lives are stuck. We are losing hope regarding our academics and our future.”
- R12: “It is such a scary thing that every day I get scared of my future. I wonder if are we ever going to live a normal life. It is so disappointing to know that the whole academic year just went down the drain.”
- R 13: “It has changed lot of things people are frustrated especially students because we don’t know when it will end.”
- R14: “It has coursed a lot of change in the country and its coursing delays in many things such as our studies and has a bad impact in our economy too.”

The responses are indications of frustrations from the students concerning their future. Indications of losing hope and fear of future were very prevalent.

### **Lack of tools for working from home**

The responses below, (not on any particular order, labelled as R15–R16), are on the lack of tools for working from home.

R15: “My life is at halt; I am worried about my degree. I am a final year student in education apparently they don’t consider us essential students only medical students are considered essential. It is very difficult studying from home where in live with 14 people and share a bedroom with 4 of them. There is no privacy, no space for me to quietly sit and do my schoolwork. I am very worried that my grades will decrease or whether I will make it or not. There is too much noise at home. So COVID-19 just ruined my life.”

R16: “The COVID-19 pandemic has cost us a lot especially us from the rural areas with no internet connection or access, it is very difficult, and we are often left behind.”

The responses are indications of frustrations from the students concerning their lack of tools to work from home.

### **Concern on the online learning**

Regarding students’ “concern on the online learning”, the responses are as follows: (not on any particular order, labelled as R17–R20):

R17: “Covid-19 has greatly delayed our academic year and hopefully it will be saved by online learning.”

R18: “It was very hard for me because I cannot study here at home because there is no resources e.g.; Laptop and data.”

R19: “The online learning is not working for most of us as students. It is so bad.”

R20: “Slow down the online learning till we go to classes. Some of us still find difficulties studying with family and siblings around and we don’t understand the procedure of online learning.”

Although students are hopeful that the academic year will be saved through online teaching, many students indicated their frustrations regarding their experience on online learning. Many indicated that they did not have laptops and data to work at home. They felt that it would be more convenient to be back on campus to continue their studies.

All the open-ended responses are confirmatory to the quantitative data as represented in the tables and figures in the previous sections. It can be assumed that socio-demographic characteristics and lower living conditions have been strongly affected by the pandemic. This is evident in the student’s responses highlighting their dissatisfaction with their academic work/life.

## **DISCUSSION**

The closure of universities and the cancellation of face-to-face teaching and learning has caused much uncertainty and anxiety amongst students and staff in HEI across the globe. The findings

from the rural HEIs students' responses reveal that the students are mostly dissatisfied with every aspect of their academic life, namely online lectures, online tutorials and practicals, online assessments, workload during the pandemic, organisation and support systems of online learning, own performance, working from home and own skills to manage online learning. It can be attributed to the under preparedness of the HEI and students to face emergencies from all spectrums of academic life. The socio-geographical position of the HEI and the student community also contributed to the predicament. According to a study by Owusu-Fordjour, Koomson and Hanson (2020) the impact of COVID-19 on Ghanaian tertiary students indicated that most Ghanaian students were unable to study effectively from home, thus making online learning ineffective. They further state that many students are ill-prepared for self-regulated learning.

In the light of the new online emergency learning, literature has reiterated that many universities do not have the appropriate infrastructure or resources to facilitate online teaching with immediate effect (Sahu 2020). Dill et al. (2020) reported that, in the United States, universities are concerned that internet access can be a challenge, for students and staff members in small cities and towns. They are also concerned on how to replicate the learning setups of laboratory work and practice-based activities. Sahu (2020) also reported that getting students to do assessments online, especially those tasks designed for face-to-face learning is a challenge. The responses from the students in the rural HEI affirm this reality faced by rural communities worldwide. Owusu-Fordjour et al. (2020) also noted that the online platforms rolled out also poses challenge to majority of the Ghanaian students due to the limited access to internet and lack of the technical skills of the technological devices by most students.

Dill et al. (2020) also highlights institutional capacity as another challenge. They reported an opinion that most educational institutions are not equipped to grip a situation of migrating to online teaching which required appropriately qualified personnel to support the technological infrastructure. The rural HEIs in South Africa also had to face the similar challenges like the US institutions.

A sudden shift or migration to online teaching can be a challenge. It has been noted that most students seem to lack the necessary skills in sharing digital content, usage of online collaboration platforms, software and programmes required for the studies. They also challenged with applying advanced settings to some software and programmes, which were not prominent during the face-to-face teaching time. These challenges therefore make it necessary to re- and upskill both students and lecturers to online teaching and learning.

There is a high degree of anxiety and frustration amongst students who are studying from home, facing myriads of challenges discussed above. These frustrations are further exacerbated

by students in rural HEIs. This is confirmed in their responses above in the open-ended questions. Sahu (2020) recommends that lecturers and staff members at HEIs should embrace technology and be vigilant to experiences of students to ensure effective and meaningful teaching and learning.

The purpose of participating in the global study was to find out and understand the academic life of rural HEI students in comparison to their counterparts nationally and internationally. In South Africa there are no available data, therefore the findings from students in WSU was compared against the global study.

Aristovnik et al. (2020b) state that the global data (62 countries; 30,383 students) revealed that most students were satisfied with the support offered by HEI's teaching staff and public relations officers. On the contrary the data of the sample of 274 students from the rural HEI in South Africa revealed mostly dissatisfaction with all aspects of online learning and their frustration was clearly evident in their responses to the open-ended questions.

The findings from the global study, as noted by Aristovnik et al. (2020b) that students with selected socio-demographic characteristics especially, inferior living standard, from Africa or Asia have been most strongly affected by the pandemic. The findings revealed that they were less satisfied with their academic work and life (Aristovnik et al. 2020b). The findings from the rural HEI in South Africa has contributed to this dissatisfaction of their living conditions as revealed in the open-ended responses.

Aristovnik et al. (2020) articulated in his study that online delivery mode was not novel for many international HEIs in comparison to African and South African HEIs who experienced online teaching and learning for the first time. Dill et al. (2020) reported that Duke Kunshan University and New York University's campus in Shanghai switched to online instruction in February 2020. It was recommended that they should be using digital tools and platforms that teaching staff and students are familiar with and are currently using. The HEI under study (WSU) also resorted to using online platform; however, they are also fought with challenges, especially among staff and students using online technology for the first time. This was evident in the narrative responses by the students in the rural HEI from South Africa.

The qualitative data seem to be confirmatory to the quantitative data. It is also resonating with the findings by Aristovnik et al (2020b) that the higher education students across the globe are distressed with concerns on their future, professional career and studies, and they experienced monotony, apprehension and frustration.

## **CONCLUSIONS AND RECOMMENDATIONS**

The participation of the WSU in the global study was exploratory. This was the first time in

which a global survey was conducted on the pandemic, and the reflections by undergraduate students on their academic life was worthy of knowing. The data portrayed in this article can be interrogated by policy makers on how to restructure the policies on infrastructure development to support online teaching and learning. Lecturers can reflect on how they can develop and structure their course materials to make it ready and available for online teaching. It is also worth re- and upskilling students and lecturers on their skills in online teaching and learning to supplement face-to-face teaching whenever necessary.

This article may be of interest and use to other HEIs in South Africa, the region and globally with similar contexts. While the responses from this survey revealed high levels of dissatisfaction from the students, the findings provide pertinent empirical data on what rural students go through with the implementation of new methodologies of teaching and learning. The findings in this study provide the baseline for what needs to be prioritised when such extreme conditions surface. Further longitudinal study is needed to gather students' reflections on their academic life, as at the time this article was being written, sincere and audacious efforts and measures were being done by the HEI to develop the infrastructure for improving online teaching and learning. A post-pandemic survey on students' academic life is recommended, as students' level of satisfaction might change with more training on online teaching and infrastructure developments. It is also recommended to collaborate with HEIs in the other parts of the world to learn good practices of how they integrated online learning to their students' satisfaction.

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