

Managing Stress and its Consequences during Covid-19, the College of Technological Studies, Kuwait

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Abstract

The unprecedented outbreak of Covid-19 and the suspension of classes while continuing teaching created disruption and a situation that added considerable stress not only to the management of technical and vocational institutions but also to teachers, trainers and students and their ability to cope with the situation. The shift to online teaching platforms rather than face-to-face learning caused emotional and physical consequences that affect the ability of teachers and trainers to achieve course objectives. This paper identifies and examines the emotional and physical consequences resulting from the use of online teaching platforms on teachers, trainers and students, in addition to examining the quality of online teaching platforms in achieving course objectives. The research involves designing, testing, and distributing questionnaires to a sample of teachers, trainers, and students as well as meeting with the Dean of the College of Technological Studies. The findings of this research revealed that teachers and trainers are more vulnerable to stress, and this can have a significant effect on teachers and trainers psychological and physical health and triggers emotional and physical consequences. In respect to students' perception towards the effectiveness of applying online teaching platforms, the majority of students were disagreed that online teaching platforms helped in gaining the required skills, understanding cases studies and understanding the course topics. Thus, the management of the College of Technological Studies must ensure that teachers and trainers are well equipped with the required knowledge, skills and attitudes to overcome and/or reduce the consequences resulting from the use of online teaching platforms.

Keywords: technical vocational and education, online teaching platforms, Covid-19 pandemic, stress management, Kuwait

1. Introduction

The need for skilled and semi-skilled manpower is highly sought after in the world of work. Industries and businesses have realised the urgent need for technical and vocational graduates to deal with the rapid changes in science and technology and industrialists have widened their demand for broader skills such as those taught at technical and vocational institutions. Among the skills that are required especially by industries are emotional intelligence (Maryville University, 2020); communication skills (Harry, 2020); problems solving skills (National Association of Colleges and Employers, 2020); creativity; the ability to control emotions, especially in a hard-working environment; teamwork; loyalty to work; and work ethic.

Technical and vocational education can be referred to as job or career technical education (Career and Technical Education, 2019), apprenticeship training (Dimitrios et al., 2020), as “educational training that provides practical experience in a particular occupational field, as agriculture, home economics, or industry” (Collins English Dictionary, 1979), being “connected with the skills, knowledge, etc. that you need to have in order to do a particular job” (Oxford Dictionary, 1884) an education that provides education programs which focuses on modern technology in order to enhance students' skills to meet career requirements (The Glossary of Education Reform, 2020, European Vocational Skills Week, 2020), overcoming barriers to the world of work (Etelapelto, 2017), and ensuring a lower school dropout rate and easy access to the world of work (Anthony et al., 2020).

Kuwait, as one of the Gulf States, has realized the significant role of technical and vocational education in enhancing

indigenous capabilities and reducing, to a great extent, the level of dependence on expatriates particularly in essential sectors of the economy (electricity, water, oil and the health service). According to the Ministry of Planning, the population of 4.5 million people: 1.3 million are Kuwaitis and 3.2 million are expatriates. Expatriates account for approximately 70% of the population. (Ministry of Planning, 2021). As a result, the Kuwaiti government has noted the shortage of indigenous manpower in essential sectors of the economy (oil, electricity and water, oil and the health service), and thus forged the College of Technological Studies. The main objective is to provide essential sectors with skilled and semi-skills indigenous manpower capable of managing, maintaining, controlling, and probably adapting the imported technology. Thus, reducing dependence on expatriates, the core objective of the country's workforce plan.

The unexpected outbreak of the coronavirus pandemic has significantly affected the world economy and has reflected negatively on the status of the labour market (Cam, et al., 2020, Martin, et al., 2020, Kwaku, et al., 2020). In Germany for example, around 750,000 companies were forced to reduce working hours (Federal Institute for Vocational Education and Training, 2020). A survey conducted by UNESCO and the World Bank looking at 126 countries revealed that 90% of respondents indicated total closure of technical and vocational education and training centers in their country and 98% of respondents reported disruption of workplace learning (UNESCO, The World Bank, 2021). Unlike other methods of education, apprentices and trainees demand direct interaction with an employer and the pandemic has created uncertainty of the present economic situation and thus minimized the pathway for learners to enroll in the marketplace (Hurley, 2020).

The outbreak of Coronavirus diseases pandemic in Kuwait has forced decision makers to adapt a new teaching and learning techniques. However, the problem in shifting to a digital platform is that teachers and trainers had no antecedent experience in using online teaching platforms. The lack of digital platform facilities, uncontrollable family interruptions while conducting online teaching, lack of technical support, poor internet connection, students' negative attitude towards online learning, lack of students' trust and honesty during online examinations and the unreadiness of teachers to cope with the sudden shift to online teaching were some of the obstacles confronting teachers and the management of technical and vocational institutions.

As a result, an emergency educational plan issued by the Kuwaiti government saw the suspension of schools and universities to contain the spread of Covid-19 but at the same time ensured the continuation of learning through online teaching platforms. In line with this, the College of Technological Studies in Kuwait (CTS), (which is under the umbrella of the Public Authority for Applied Education and Training, PAAE&T) adopted online teaching platforms and suspended students from attending college premises Teachers, trainers and students were not permitted to use workshops and laboratories and visits to industries were terminated. In other words, face-to-face teaching and training was converted to online teaching and on-the-job training transferred to screen learning. However, such an attempt is neither simple nor sufficient in achieving technical and vocational educational objectives. It is rather a very complicated process, particularly for those countries which lack the required knowledge and skills in implementing the use of online platforms teaching. Teachers and trainers have been forced to adjust and use online teaching platforms and such circumstances have caused stress and anxiety among them. In addition, industries have expressed concern regarding the quality of the College of technological Studies graduates, and the possibility of losing jobs is inevitable.

Stress has been defined by the Merriam-Webster Dictionary, 1831 as "a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation", "the degree to which you feel overwhelmed or unable to cope as a result of pressures that are unmanageable" (Mental Health Foundation, 2020) and "any type of change that causes physical, emotional, or psychological strain" (Elizabeth, 2022). The level of stress and its effects on human health can vary from one person to another: it depends on human resistance and the ability to cope with unpleasant situations. Stress can, in some cases, motivate a person to exert efforts to cope with a specific stressful situation and adjust afterwards when the stress has declined or vanished. A recent survey concerning students' perceptions and experiences of the pandemic revealed that "stress, anxiety and loneliness were their overriding concern" (Shaher et al., 2021). A similar survey of more than 10,000 teachers showed that nearly 93% of teachers experienced emotional fatigue, confusion, stress and anxiety when shifting from face-to-face teaching to online teaching (CSIF, 2020). When teachers were asked to name the most frequent emotions they experienced each day during the pandemic, their replies included anxiety, fear, worry, being overwhelmed and feeling sad (March, 2020).

The question is how to manage stress from the point of view of teachers and trainers at the CTS?

In respect to teachers and trainers at the CTS and how to manage stress and its emotional and physical consequences, it is worth mentioning that teachers and trainers are more vulnerable to emotional and physical consequences than students. Thus, the CTS management must ensure that lecturers and trainers are well equipped with the required

knowledge, skills and attitudes to overcome and/or reduce the consequences resulting from the use of online teaching platforms. The fact is not all teachers and trainers are aware of the use of online teaching platforms, nor how to manage stress and its unpleasant consequences. Teachers and trainers, due to the lack of proper experience in the application of online teaching platforms, may accidentally make mistakes such as forgetting to switch off a camera or speaker, shouting when losing control of students or not receiving a quick response from a student, the inability to make a slideshow presentation, the inability to reduce interruptions in their home, weak internet connection, knowing that students are cheating, rude student behaviour and not being able to achieve course objectives. As a result, the emotional and physical consequences would be expected to reach a point where teachers and trainers cannot control and manage stress in an acceptable manner. Teachers and trainers at the CTS and similar colleges and institutions must be able to manage stress using stress management techniques. Among which are:

- Studying the types of stress (e.g., physical, psychological, psychosocial, psychospiritual)
- Knowing the types of emotional consequences (e.g., anger, frustration, worry, depression, anxiety, seclusion)
- Understanding the physical consequences (e.g., back pain, neck pain, shoulder pain, neck pain, eye pain, headaches, wrist pain)
- Acquiring specific skills in coping with stress (e.g., practicing deep breathing techniques, yoga, relaxation, positive thinking)
- Socialising with relatives while following Covid-19 safety and health rules and procedures (e.g., calling a friend, meeting a close relative, sharing photos, sending or receiving gifts, sharing positive feelings)
- Enhancing the ability to use online teaching platforms skills (e.g., checking network connections, using an appropriate online teaching program, learning how to create a slideshow, the ability to prepare and monitor online exams, the ability to control the use of the camera and voice activation and recording, the ability to record exam grades on the system, the ability to use the chat function, the ability to record and retrieve lectures, the ability to position the computer camera so that the students can clearly view the lecturer, and the ability to adjust the voice level to prevent echo).
- Improving teaching skills (e.g. setting a proper course schedule, preparing the students' attendance sheet, recording exam dates and questions for each class, marking exams on time to avoid the accumulation of exam papers, ensuring the availability of clear course notes and references, correcting and posting exam grades on time for each class with an identification code to avoid mixing exams, preparing another exam in case there is a need to repeat an exam when knowing that students are cheating, the ability to apply a unified exam for more than one class at the same time and the ability to retrieve exam papers using the student's name in case of any objection to the exam grade)
- Preparing an appropriate teaching environment. (e.g., selecting a quieter place at home while teaching online, removing unwanted items from the desk, not panicking if there is an interruption to the lecture, ensuring proper lighting, checking room temperature, using a comfortable chair to allow for good posture when lecturing and ensuring the availability of stationery items)

Teachers and trainers should seek advice if emotional and/or physical consequences are accelerated as any continuing emotional and physical consequences can have a direct impact on the health of lecturers and trainers. This would also affect the way lecturers and trainers deal with their close relatives which could cause tension and frustration.

How to manage stress from the point of view of students at the CTS?

The continuing infections and high deaths rates from Covid-19 has created an alarming situation for humanity around the world. It is not bird flu or influenza that can be contained. Rather, it is a life-threatening virus that can spread in the blink of an eye. As a result, many teachers, trainers and students have developed psychological problems that are affecting them not only academically but all over their personality (World Health Organization, 2020). The fact is that stress isn't a physical reaction, it can easily stretch and affect the level of motion, behaviour and cognition (Dangi et al., 2020). Students may vary in their reaction to stress depending on their age, gender, educational level, marital status, body resistance and experience. The stress techniques that students can adopt and apply to overcome and/or reduce the level of physical and emotional consequences resulting from the application of online teaching platforms can also be followed by students in counterpart colleges and institutions. The CTS management must enhance the level of their students' awareness and the expected stress that would occur during the use of online teaching platforms. The use of online lectures and seminars through the Team's program, which is already being adopted by the CTS management in the teaching and learning process, as stated by the CTS dean "would contribute significantly to creating general awareness". The CTS management must focus on the types of physical and emotional consequences or symptoms that

students are likely to experience during the pandemic. In addition to identifying the precautionary procedures that students must follow to reduce the effect of those symptoms. For example, students must know the meaning, implication and types of stress resulting from the use of online teaching platforms. Students would likely be using online teaching platforms at home, however, there are serious implications that students must be aware of and ready to handle safely and positively. There are ways to manage stress and its consequences if students acquired the know-how and know-why. Students must be aware of the differentiation between teaching and learning before (face-to-face teaching) and during (online teaching platforms) the pandemic. Of course, it is not a simple procedure for students to follow: it is rather a complicated process that requires careful planning and monitoring. Students are more likely to react aggressively when internet connections become inactive and can sometimes behave rudely when being caught cheating in an exam. The reaction from students through online teaching platforms varies from student to student. Students are advised to follow a good routine, including sleeping well, stretching, preparing a proper schedule that includes names of lecturers and trainers, preparing notes for writing exams and assignments, ensuring a good internet connection, enhancing their social communication with relatives within the guidelines of Covid-19 health and safety requirements, avoiding cheating, completing assignments on time, showing positive behaviour towards lecturers and trainers, minimising home interruptions, eating healthy food, allocating time for walking, practice breathing techniques and using a proper chair with a straight back. Managing stress techniques will help students to reduce the emotional and physical consequences and allow their brains to comfortably receive and transmit information and data in a more relaxing and effective manner.

It is highly recommended that the CTS management set a proper and effective plan to protect the lives of staff in more a professional way. The plan must encompass a realistic and measurable objective that focuses on applying strict safety and health procedures to limit the spread of Covid-19. The fact is that creating a common awareness regarding the pandemic is not enough if the CTS management does not ensure that students and staff wear masks. In addition, to training or seeking a specialized health staff to test the CTS staffs' health status before entering the college campus. As shown in the research finding, lecturers, trainers and students are not satisfied with the CTS management's action in sterilising classes, offices and other facilities. It is a management responsibility to ensure the availability of a safe and healthy learning environment for lecturers, trainers, students and managerial staff. The CTS management must be held accountable for any misconduct or neglectful actions that would place the lives of the CTS academic and managerial staff at risk. As mentioned earlier, it is a deadly virus that has taken the lives of millions of people around the world. The CTS management must not exclude or underestimate the role of lecturers and trainers in setting an emergency plan to reduce the rate of infections. The spirit of a teamwork approach is highly advisable in these circumstances to achieve an acceptable outcome. The teamwork approach would indeed assist in tackling those obstacles confronting lecturers and trainers in achieving course objectives.

As far as the College of Technological Studies, a research questions have been established to identify and examines several issues related to the appropriateness and effectiveness of the use of online teaching platforms. In addition to, identifying and examining the emotional and physical consequences resulted from shifting from face-to-face teaching and learning to the use of online teaching platforms.

2. Research Questions

The research questions addressed in this study are as follows:

- a) How teachers, trainers, and students perceive the quality of online teaching platform.
- b) What are the emotional and physical consequences resulted from shifting from face-to-face teaching and learning to the use of online teaching platforms.
- c) How successful is the measures set by the management of the College of Technological Studies in dealing with the outbreak of the Covid-19 pandemic.

3. Methodology

3.1 Design

This research consists of a survey designed to identify and examine students' teachers, trainers, and student's perceptions towards the quality of online teaching platforms in achieving course objectives. The research would also identify and examine the emotional and physical consequences resulting from the use of online teaching platforms as a result of the outbreak of the Covid-19 pandemic.

The use of computer questionnaires in research is considered as not expensive means of obtaining a large amount of

information from a large sample of population (Saul, 2018), can be portable and information and date can be easily analysis by using various statistical programs (Toney, 2015), “questionnaires surveys dominate the methodological designs in educational and social studies, particularly in developing countries”, (Reuben, 2021, p.1)

3.2 Sample

Due to the circumstances of the pandemic and the safety precautions enforced by the health sector and the management of the CTS, a questionnaire was designed, tested and sent (by teams’ program) to the heads of the nine academic departments at the CTS, 81 questionnaires were completed and returned. Most of the teachers and trainers (70) had more than 10 years’ experience working at the CTS, followed by 7 who had 5-10 years of experience and 4 who had less than 5 years’ experience at the CTS. In terms of academic qualifications, of the 81 lecturers and trainers, 51 held a PhD degree, 25 held a master’s degree and 5 held a bachelor’s degree. The number of Kuwaiti teachers and trainers was 66 whereas 14 teachers were non-Kuwaiti (one respondent did not answer). The number of male lecturers and trainers was 75 and the number of females was 6.

Teachers and trainers’ sample were selected randomly from the nine academic department sat the CTS. A constant follow-up calls were made with the heads of the nine academic departments to encourage teachers and trainers to respond to the questionnaire. Indeed, an exerted efforts have been made to directly contact a random sample of teachers and trainers in each of the nine academic departments to urge them to fill the questionnaire that is already been send to the heads of their departments. An attempt has been made to identify the exact number of teachers and trainers at the CTS, and regrettably, no accurate or official number have been provided. To check the reliability and validity of the questionnaire, a pilot study has been conducted with (9) academic teachers and trainers in the nine selected academic departments followed by a telephone call through the heads of the nine departments. The objective was to test the reliability of the questionnaire and to clarify any misunderstanding of the purpose of some of the questions. A close monitoring to those teachers and trainers, who were selected randomly to represent the final sample, through telephone calls, and a constant reminder to call back if uncertain of some of some of the questions would, indeed, reduce the unreliability and invalidity of the questionnaire. Teams program can provide essential information regarding teacher’s and trainers names, email address, names of departments, and civil identification that would assess in the selection of teacher’s and trainers’ sample. A frequencies statistical analysis has been made through teams’ program.

The first objective for the questionnaire which directed to teachers and trainers was to identify and examine the effectiveness of the online teaching platforms in achieving course objectives. Among the issues that were discussed were: the ability of teachers and trainers to explain and discuss topics with students, the ability to demonstrate and discuss cases studies, the ability to monitor course examination, the ability of students to focus while using online teaching platforms and the ability to transfer skills to students.

An attempt was also made to measure teachers and trainers’ perceptions towards the role of the CTS management in coping with the pandemic. Among the issues that were discussed were: the role of the management in creating awareness towards the outbreak of Covid-19 and its consequences, the ability to set an emergency plan to deal with the consequences of the pandemic, the procedures applied to ensure the continuation of teaching during the pandemic, the ability to evaluate the efficiency of online teaching platforms in achieving course objectives and the ability to overcome and/or reduce those obstacles that occurred during the application of online teaching platforms.

In respect to the emotional and physical consequences resulting from the use of online teaching platforms, teachers and trainers were asked to indicate the types of consequences that they have experienced while conducting online teaching. Among the emotional consequences discussed were whether teachers and trainers experiencing anger, anxiety, worry and upset and among the physical consequences discussed were whether teachers and trainers experiencing headaches, ear pain, eye pain, back pain, neck pain and muscle tension.

An interview with the dean of the CTS was also conducted to gain in-depth information regarding the objective of this research. Among the issues discussed were whether the CTS had an emergency plan set to deal with the Covid-19 pandemic, the availability of orientation seminars through the use of online teaching platforms and the availability of technical support.

In respect to students’ sample, due to the pandemic’s circumstances and the safety precautions enforced by the health sector and the management of the CTS, a questionnaire was designed, tested and send to 320 students representing all the nine departments at the CTS. 301 questionnaires were completed and received, representing 96% of the total sample. All selected students (301) were male and represented all nine departments at the CTS. The majority of students were from the Department of Manufacturing Engineering (104), followed by 72 from the Department of Petroleum Engineering, 70 from the Department of Electrical Engineering, 21 from the Department of Mechanical

Power and Refrigeration Technology, 10 from the Department of Civil Engineering, 5 from the Department of Electronical Engineering, 5 from the Department of Automotive and Marine Engineering, 3 from the Department of Chemical Engineering and 2 from the Department of Laboratories Technology. Of the 301 students, 109 students were considered as “graduate” students and 233 students had chosen the CTS as their first choice.

Student’s sample were also selected randomly from the nine academic department at the CTS through team’s program. An attempt has been made to include a large sample, however, students seem reluctant to participate in filling the questionnaire, which require resending the questionnaire to a different sample representing, as much as possible, the nine academic departments. To check the reliability and validity of the questionnaire, a pilot study has been conducted with (20) students representing the nine selected academic departments during a live lecture. The objective was to test the reliability of the questionnaire and to clarify any misunderstanding of the purpose of some of the questions. A close monitoring to those students who were randomly selected to represent the final sample and providing them with the researcher direct telephone number, would indeed contribute, to great extent, in reducing the unreliability and invalidity of the questionnaire. Teams program can provide essential information regarding student’s names, email address, names of departments, and civil identification that would assess in the selection of student’s sample. A frequencies statistical analysis has been made through teams’ program.

The objectives of Students questionnaire were to measure students’ perceptions towards the efficiency of online teaching platforms, identifying and examining the emotional and physical consequences resulting from the use of online teaching platforms, and the ability of teachers and trainers in achieving course objectives. Selected students were asked to indicate if they have experienced emotional consequences, such as: stress, worry, frustration, upset, anger and isolation. On the other hand, selected students were also questioned if they have faced with physical consequences during the use of online teaching platforms such as: headaches, ear pain, eye pain, back pain, neck pain and muscle tension. After a trail testing of the creditability of the questionnaires, the date was collected and analyzed by using frequencies methods through SPSS which is available in in teams’ program.

Therefore, the research parameters consist of: selected teachers and trainers, selected students, and the dean of the College of Technological Studies.

4. Results

4.1 Teachers’ and Trainers’ Perceptions towards the Quality of Online Teaching Platforms

The majority of teachers and trainers “disagree” that Team’s program can: permit the ability to monitor exams and quizzes (89.9%), allow students to focus during the lecture (88.6%), give the ability to present and discuss case studies (79.5%), give the ability to transfer skills to students (70.9%) and give the ability to assess students based on their rate of participation (66.7%). When asked to evaluate the overall efficiency of online teaching platforms, the majority of teachers and trainers (63.9%) provided a rating rate between “good” and “excellent” and 36.1% rated it between “acceptable” and “poor”. However, when asked to rate whether students were seriously adapting to the application of online teaching platforms, the majority of teachers and trainers (53%) rated between “acceptable” and “poor” and only 2.5% rated “excellent”. The findings are shown in Table 1.

Table 1. Teachers and Trainer’s Perception towards the Quality of Online Teaching Platforms

| Elements | Agree |
|---------------------------------------|-------|
| Ability to use Team Program | 91 |
| Ability of Students to Answer Quizzes | 73 |
| Communicate with Students | 72 |
| Ability to Ask Questions | 65 |
| Ability to Explain Subjects | 57 |
| Monitoring Students Attendance | 53 |
| Encourage Students Paticipation | 44 |
| Ability to Assess Students | 33 |
| Ability to Transfer Skills | 29 |
| Ability to Discuss Cases Studies | 21 |
| Encouraging Student Attention | 11 |
| Monitoring Exam Progress | 10 |

4.2 Students' Perceptions towards the Quality of Online Teaching Platforms

Online teaching platforms are now popular due to the outbreak of Covid-19. However, despite the advantages of using online teaching platforms, there are disadvantages that might hinder the achievement of course objectives. The selected students were asked to provide their thoughts towards the quality of online teaching platforms. Their answers are shown in Table 2.

Table 2. Students' Perception towards the Quality of Online Teaching Platforms

| Elements | Agree |
|---|-------|
| Ability to use Team Program | 84 |
| Encourage Students Attendance | 82 |
| Limit Time to Complete Exams | 71 |
| Difficulty of Exams | 65 |
| Ability to Listen During Class | 64 |
| Ability to Solve Exams | 62 |
| Ability to Communicate with teachers & trainers | 56 |
| Ability to Ask Questions | 55 |
| Ability to Focus During Class | 48 |
| Ability to Participate During Class | 48 |
| Ability to Interact with Other Students | 44 |
| Ability to Gain Skills | 41 |
| Ability to Understand Cases Studies | 37 |
| Ability to Access Cases Studies | 37 |
| Ability to Understand Course Topics | 36 |

The findings revealed that the application of online teaching platforms has advantages and disadvantages. The greatest advantages highlighted by the students were: the ability to use Team's program during the outbreak of Covid-19 (83.8%), and the ability to attend classes through Team's program (82%). However, the application of online teaching platforms has its disadvantages too, with students agreeing with the following statements: the inability to gain skills (40.6%), the inability to understand cases studies (37%), the inability to access cases studies (36.5%) and the inability to understand course topics (35.9%).

4.3 Teachers and Trainers' Perceptions towards the Performance of the CTS Management in Dealing with the Outbreak of Covid-19

The perceptions of teachers and trainers were measured in respect to the role of the CTS management in handling the pandemic. The outcomes are shown in Table 3.

Table 3. Teachers and Trainers' Perceptions towards the Performance of the CTS Management in Dealing with the Outbreak of Covid-19

| Elements | Excellent | Very Good | Good | Acceptable | Weak |
|---|-----------|-----------|------|------------|------|
| Teachers Awareness on Online Teaching Platforms | 49 | 23 | 23 | 5 | 1 |
| Students Awareness on Online Teaching Platforms | 37 | 24 | 27 | 11 | 1 |
| Technical Support for Students | 21 | 30 | 29 | 15 | 6 |
| Technical Support for Lecturers | 28 | 30 | 23 | 14 | 6 |
| Epidemic Awareness for Lecturers | 22 | 25 | 30 | 16 | 4 |
| Safety Precaution Procedures | 20 | 19 | 32 | 14 | 15 |
| Epidemic Awareness for Students | 14 | 24 | 32 | 22 | 9 |
| Setting Emergency Plan | 16 | 29 | 23 | 9 | 24 |
| Monitoring the Standard of Online Teaching | 14 | 24 | 23 | 13 | 27 |
| Evaluating Quality of Online Teaching | 8 | 28 | 23 | 13 | 27 |
| Offices Sterilization | 13 | 20 | 18 | 22 | 28 |

It is a management responsibility to ensure a safe and healthy learning and teaching environment for teachers, trainers and students. The management should be held responsible and accountable for any misconduct in dealing with Covid-19 and the associated consequences. The above findings indicate, without doubt, that the CTS management

adopted appropriate precautions, to some extent, to minimize the spread of Covid-19 infections and to protect the lives of all members who were working at the CTS premises. In respect to the role of the CTS management in creating awareness for its academic staff regarding the application of online teaching platforms. The findings showed that 48.8% of the selected teachers and trainers rated the role of the CTS in creating a general awareness for its academic staff regarding the application of online teaching platforms as “excellent”. The CTS management has also created awareness regarding the use of online teaching platforms for students and thus has been rated by 36.7% of its academic staff as “excellent”, followed by 24.1% who rated it as “very good”. In this regard, a telephone interview has been conducted with the dean of the CTS who stated that “It is entirely our responsibility to ensure a safety and health learning environment for lectures, trainers and students”. He further added, “we used the available resources to monitor the attendance of all staff including students to the college premises to minimize the spread of coronavirus”. When asked if there is a collaboration with the Ministry of Health in testing lecturers, trainers and students for any coronavirus symptoms, the answer was negative.

It is also a management responsibility to provide technical support for students and this has been rated by 20.5% of staff as “excellent”, followed by 30.1% who rated it as “very good”. Technical support was also provided to teachers and trainers and was rated as “excellent” by 27.5% of the total, followed by 30% who rated it as “very good”. The CTS management has ensured that teachers and trainers are aware of the pandemic and thus have been rated by 22.2% of its academic staff as “excellent”, followed by 24.7% who rated it as “very good”.

The implementation of safety precautions is essential to limit the spread of the virus. When teachers and trainers were asked to rate the efforts made by the CTS management in applying safety precautions, 20.3% rated it as “excellent”, followed by 19% who rated it as “very good”. The CTS management also worked to create awareness for students of the dangers of Covid-19 and this has been rated by 13.9% of its academic staff as “excellent”, followed by 24.1% who rated it as “very good”.

The CTS management must monitor the application of online teaching platforms to ensure an acceptable standard that facilitates the achievement of course objectives. Teachers and trainers were asked to rate the CTS management’s efforts in monitoring the standard of online teaching platforms and this was rated by 13.9% of its academic staff as “excellent”, followed by 24.1% of who rated it as “very good”. In respect to the ability of the CTS management in setting an emergency plan to tackle the outbreak of Covid-19, 16.3% of teachers and trainers rated it as “excellent” followed by 28.8% who rated it as “very good” and 22.5% of who rated it as “good”. However, selected teachers and trainers seem unsatisfied with the actions adopted by the CTS management in sterilizing offices and only 12.7% of the total rated “excellent”.

4.4 Teachers and Trainers’ Perceptions towards the Physical Consequences Resulting from the Application of Online Teaching Platforms

An effort has been exerted to identify physical consequences which occurred during the application of online teaching platforms compared to face-to-face learning. The selected teachers and trainers were asked to indicate the physical consequences that they have experienced while using online teaching platforms and several physical symptoms were noted. The findings are shown in Table 4.

Table 4. Teachers’ Physical Consequences

| Elements | Agree |
|----------------|-------|
| Eyes Pain | 64 |
| Neck Pain | 58 |
| Back Pain | 57 |
| Shoulder Pain | 42 |
| Wrist Pain | 39 |
| Muscular Tight | 37 |
| Headache | 36 |
| Ears Pain | 26 |
| Hand Sweat | 14 |
| Hand Cold | 10 |

The above findings indicate that the application of online teaching platforms has caused physical consequences to both teachers and trainers. The majority of teachers and trainers (64.2%) have experienced eye pain, followed by 58% who have suffered from neck pain, 56.8% who have complained of back pain, and 42% who have suffered shoulder pain.

4.5 Students' Perceptions towards the Physical Consequences Resulting from the Use of Online Teaching Platforms

The selected students were asked to indicate the type(s) of physical consequences felt while using online teaching platforms. The results are demonstrated in Table 5.

Table 5. Student's Physical Consequences

| Elements | Agree |
|----------------|-------|
| Eyes Pain | 65 |
| Headache | 61 |
| Neck Pain | 58 |
| Back Pain | 55 |
| Hand Sweat | 45 |
| Muscular Tight | 38 |
| Shoulder Pain | 36 |
| Wrist Pain | 32 |
| Ears Pain | 27 |

There is no doubt that students have experienced physical consequences because of the use of online teaching platforms. Among the consequences were: eye pain (65.4%), headaches (60.5%), neck pain (57.8%), and back pain (54.5%).

4.6 Teachers' and Trainers' Perceptions towards the Emotional Consequences Resulting from the Application of Online Teaching Platforms

An attempt was made to identify and examine the emotional consequences resulting from the use of online teaching platforms. The selected teachers and trainers were asked to reveal the emotional consequences that they have experienced during the use of online teaching platforms. Several emotional symptoms were noted, and the findings are shown in Table 6.

Table 6. Teachers' Emotional Consequences

| Elements | Agree |
|-------------------|-------|
| Pressure | 59 |
| secluded | 56 |
| Boring | 53 |
| Upset | 49 |
| Tension | 47 |
| Worried | 46 |
| Frustration | 44 |
| Complain | 44 |
| Negative Behavior | 37 |
| Emotion | 32 |
| Anger | 31 |

Most teachers and trainers (59.3%) suffered from "pressure" while adopting online teaching platforms and 55.6% felt "secluded" from not interacting directly with students. As expected, teachers and trainers experienced being "bored" (53.1%) and being "upset" (49.4%). The findings also showed that 46.9% suffered from "tension", 45.7% experienced being "worried" and 44.4% felt "frustration".

4.7 Students' Perceptions Towards the Emotional Consequences Resulting from the Application of Online Teaching Platforms

The use of online teaching platforms has emotional consequences that have been discussed in related literature. However, the emotional symptoms may vary depending on resilience and the ability to cope with stress. The selected students have provided significant answers which are presented in Table 7.

Table 7. Student's Emotional Consequences

| Elements | Agree |
|------------|-------|
| Worried | 65 |
| Bored | 62 |
| Pressure | 61 |
| secluded | 59 |
| Tension | 59 |
| Upset | 54 |
| Moody | 52 |
| Negative | 44 |
| Frustrated | 42 |
| Fear | 42 |
| Nag | 41 |
| Emotion | 41 |
| Anger | 38 |

The use of online teaching platforms has caused emotional consequences on students and manifested itself in the following symptoms: worry (felt by 65.4% of students), boredom (62.1%), pressure 60.8%, feeling secluded (59.1%), tension (58.8%), being upset (54.2%), and being moody (52.2%).

5. Discussion

The fast and sudden shift towards the use of online teaching and learning platforms placed a burden on the shoulders of teachers, trainers and students, as well as the management of technical and vocational educational establishments. Online teaching platforms can open the gates for teachers and trainers to adapt and modify various teaching techniques and methods to achieve course objectives in a more comfortable learning environment. Using online teaching and learning platforms can provide more effective ways for students to explore more knowledge than they can obtain from classrooms (Harsasi, 2015). However, the application of online teaching platforms requires a specific skill, particularly within technical and vocational education. The fact is that not all lecturers and trainers are able to design and implement online teaching to achieve technical and vocational courses objectives. The application of online teaching platforms consists of essential elements that might, if not properly implemented and monitored, hinder the achievement of technical and vocational course objectives.

When teachers and trainers at the CTS were asked to evaluate the standard of online teaching platforms applied at the CTS, the majority (91%) had not encountered any problems using team's program during the Covid-19 pandemic, including the ability to answer quizzes, communicate with students, ask questions, explain subjects and monitor students' attendance. However, teachers and trainers voiced concerned about the inability transfer skills (70.9%), the inability to discuss cases studies (79.5%), and the inability to monitor exam processes (89.9%).

In respect to measuring students' perceptions towards the quality of online teaching platforms, the majority of the CTS students (84%) had not experienced any difficulty in using Team's program, attending classes, completing exams, nor listening to lecturers and trainers. However, 60% of the total disagreed that online teaching platforms helped in gaining the required skills, understanding cases studies and understanding the course topics. Approximately 50% also said they could not focus while being taught online and could not interact with other students in the class. The absence of pedagogical interaction with students in the traditional form of teaching in classrooms, workshops and laboratories has caused considerable emotional stress to students, teachers and trainers.

An attempt was also made to identify whether teachers and trainers at the CTS had suffered emotional consequences while using online teaching platforms. The findings of this research showed that 59.3% of the total experienced pressure, feeling secluded, boredom and feeling upset. As far as students at the CTS were concerned, the emotional consequences that experienced by 65% of students included worry, pressure, feeling secluded, feeling tension, being upset and being moody.

In measuring the CTS students' perceptions towards the physical consequences that they have experienced while using online teaching platforms, the majority of students (up to 65.4%) suffered from eye pain, headaches, neck pain and back pain. On the other hand, up to 44.9% indicated that they experienced shoulder pain, muscular tension and hand sweats.

6. Conclusion

Based on the data analysis and the research outcomes, it can be concluded that the sudden and unpleasant outbreak of Covid-19 has forced technical and vocational institutions, as in the case of other similar educational institutions, to apply online teaching and learning platforms instead of face-to-face teaching and learning techniques. However, due to the unique characteristic of technical and vocational education which accompanied theory and practice, teachers and trainers face with significant challenges to achieve course objectives. This was worsening by the emotional and physical consequences resulted from the use online teaching platforms. The lack of management awareness in dealing with the emotional and physical consequences has contribute negatively into the quality of teaching and learning as well as creating inappropriate and challenging learning environment. The management of the CTS must ensure that teachers, trainers, and students are well equipped with the knowledge, skills, and attitudes needed to cope with the spread and continuing occurrence of Covid-19 in the foreseeable future. The management of the CTS must take into consideration the steps mentioned earlier in minimizing, to great extent, the emotional and physical consequences resulted from the use of online teaching platforms. This would, eventually, encourage the achievement of a satisfactory result in meeting course objectives.

7. Suggestions

The outbreak of Covid-19 has affected not only the educational institutions, but rather the whole world. To overcome the consequences resulted from the use of online teaching and learning platforms instead of face-to-face teaching and learning is extremely difficult, particularly in technical and vocational education. However, to reduce the consequences to its minimum level can be achieved through exerting a collective effort by teachers, trainers, students and educational officials. The steps mentioned earlier on how to deal with stress for teachers, trainers, and students would indeed help in reducing emotional and physical consequences. As well as, assessing the management of the CTS in dealing with the spread of Covid-19 and making the best use, to great extent, of online teaching platforms.

8. Limitations

No doubt, as in most research projects, the research has some limitations which can be explore in more details by other researchers. Area of future interest would include: measuring the competencies of the dean of the CTS since his academic background is completely different from management, whether the management of the CTS have strongly collaborated with the Ministry of Health to investigate and record the level of Covid-19 at the CTS premises, anonymous survey to identify and measure the level of students cheating through the application of online platforms, and whether teachers and trainers have applied various teaching and learning techniques to transfer, to some extent, the knowledge, skills, and attitudes embodied in their course objectives.

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