International Forum Vol. 23, No. 2 December 2020 pp. 178-202

# FEATURE

# Transitioning to Emergency Remote Learning amidst Covid-19 and Its Effects on Higher Education Students: A Case Study

### Weber R. Irembere Rosemary M. Lubani

Abstract. The worldwide spread of the Covid-19 pandemic has affected all aspects of human beings, including education. Schools at all levels closed the doors and transitioned to emergency remote learning modalities. In the theory of independent study and transactional distance, Moore (2019) argues that students' ability to manage learning must be analyzed before getting involved in the online learning process. Unfortunately, the Covid-19 pandemic has forced students to embark on emergency remote learning without preparation. This qualitative case study aimed to describe the experiences, discover the challenges and effects of emergency remote learning on higher education students at one faith-based institution in the Philippines. Researchers used semistructured interviews to collect data from students. Data was coded, categorized, and themed for analysis and thick description. Findings revealed that students experienced stress, anxiety, and uncertainty when learning remotely. Furthermore, students faced poor internet connection, lack of space for studies, lack of feedback from some faculty, and dramatic health lifestyle changes, including sleep patterns, eating habits, and physical and health ailments. This study has implications for school administrators, faculty, and students.

**Keywords:** transition, emergency remote learning, Covid-19, higher education students, students' experiences, health lifestyle, case study, Philippines.

#### Introduction

The global outbreak of coronavirus pandemic (Covid-19) has affected people worldwide. Undoubtedly, the devastating impacts of Covid-19 are observed in all the aspects of human beings, including the work of education (Chang, 2020; Hanif, 2020; Rahim 2020). Additionally, Covid-19 has disrupted schools' severely different activities as it has never been imagined (Igbokwe, Okeke-James, Anyunwu, & Eli-Chukwu, 2020). Higher education institutions significantly have been affected in all sides, including the pedagogical aspects (Terenko & Ogienko, 2020), and have abruptly transitioned to either online learning modalities (Dobrila, 2020) or emergency remote teaching and learning (Rahim, 2020; Schlesselman, 2020).

According to Catalano (2018), higher education students' readiness must be assessed before they embark on online learning, and this assessment of students' readiness should be respectfully related to "technical, computer skills, and learners' preferences" (p. 39). Additionally, students who have not experienced any online learning course either synchronously or asynchronously need a clear direction of what work is expected from them (Simonson et al., 2015). Similarly, faculty, staff, and students who transition to emergency remote teaching (ERT) must be trained and assisted (Rahim, 2020; Schlesselman, 2020) pedagogically, methodologically, and technically (Schlesselman, 2020).

Unfortunately, due to the Covid-19 pandemic, schools worldwide shifted abruptly to virtual teaching and learning to carry on learning activities. For instance, in Nigeria, India, Romania, New Zealand, United Kingdom, and Saudi Arabia, colleges and universities locked down their doors in March 2020 and forcibly transitioned from traditional modalities to online learning without prior preparation (Dobrila, 2020; Igbokwe et al., 2020; Kawaguchi-Suzuki et al., 2020; Mishra et al., 2020, Moawad, 2020; Robertson, 2020) or as a protection and safety of students and staff of higher education institutions (Aziz et al., 2020; Moawad, 2020).

Similarly, most schools at all levels in the Philippines, including the Calabarzon region, were locked down in March 2020 and transitioned unexpectedly to emergency remote teaching and learning. This rapid transition without preparation has physical, psychological, social, technological impacts on higher education students. Furthermore, students' health lifestyle might change due to the new system of learning. This study aimed to describe students' experiences in a higher education institution who transitioned to emergency remote teaching and learning during Covid-19, discover the impacts of emergency remote learning, its effects on students' health lifestyle, and the mechanism of coping with their challenges. Significantly, current and prospective students will benefit from the findings of this paper on coping with emergency remote learning challenges. Further, our findings will help faculty, staff, and administrators of higher education institutions to support higher education students enrolled in virtual classes during the Covid-19 pandemic.

#### **Review of Related Literature**

There is a conflict with the concepts used to indicate the remote learning system adopted during the Covid-19 pandemic. While some researchers use the concept of online learning during the pandemic (Dobrila, 2020; Igbokwe et al., 2020; Kawaguchi-Suzuki et al., 2020; Mishra et al. 2020; Moawad, 2020; Robertson, 2020) to indicate the modality adopted to carry on learning activities during the pandemic, other researchers use the concept of emergency remote teaching (Hodges, Moore, Lockee, Trust, & Bond, 2020; Rahim, 2020; Schlesselman, 2020). According to Johnson, Veletsianos, and Seaman (2020), it is preferable to use the concepts "online course delivery," or "delivering courses online," or "delivering instruction online," or emergency remote learning (ERL), virtual learning, and studying online during Covid-19 are considered in this study. This section starts with a clear description of the difference between online learning and emergency remote teaching.

#### **Online Learning**

Online education has been delivered through the internet for about twenty years even though many individuals still do not have its exact meaning, or the way it is conducted, or the real meaning of some of the concepts that describe it (Ko & Rossen, 2015). It is a kind of distance learning which provides learning opportunities for learners, including those from remote areas (Singh & Thurman, 2019; Watts, 2016). Bozkurt and Sharma (2020) define online learning as "a learning process that provides learners agency, responsibility, flexibility and choice" (p. ii). Additionally, Lim (2020) underscores that "true online learning, distance learning, and mobile learning are pedagogies, which are purposefully and deliberately designed for learning to occur and with flexibility of location" (p. 38). It is a learning system that uses electronic resources such as computers and the internet (Babu & Sridevi, 2018).

The full and proper development of an online project takes months. It would be a mistake and contradiction to consider the need to get a course online without considering the time and efforts dedicated to develop it and call it an online course (Hodges et al., 2020). In line with this, Schlesselman (2020) asserted that though a course has been taught face-to-face for years, it takes faculty six months working with online designers to develop an online course that meets online learning standards. Online teaching and learning have advantages and disadvantages since its adoption in higher learning institutions (Akhter & Mahomood, 2018).

Advantages of online learning. Online learning is beneficial in different aspects. It is cost and time effective (Chang, 2020; Igbokwe et al., 2020; Supap & Viriyavejakul, 2019). Furthermore, online learning reduces burdens and allows students to pay for credits to afford and access resources (Supap & Viriyavejakul, 2019). Notably, online learning does not require school classrooms, offers students an opportunity to learn at their own pace and speed, and provides more satisfaction and less stress.

Interestingly, online learning promotes efficient knowledge and communication by providing easy access to adequate information, building strong relationships through forum discussion, and helping students overcome the shyness of talking to classmates (Igbokwe et al., 2020). Akhter and Mahmood (2018) found out that online learning "increases student-centered learning, promotes students' participation, and creates and facilitates more in-depth, logical, and interactive discussion forums in place of outdated face-to-face discussion program" (p.3). Schlesselman (2020) underscored that online learning increases students' learning because of their time on tasks and learning.

Limitations of online learning. Despite its advantages, detractors pointed out the different drawbacks of online learning. These drawbacks include: "lack of interactions between instructors and students, technology difficulties, necessity for students to be self-motivated and responsible for their learning, and an inability for online environments to support the hands-on learning needed for certain types of learning outcomes" (Dabbagh, Marra, & Lowland, 2019, p. 6). Similarly, Kim (2020) found that online learning challenges are associated with students' background on the use of technology and support. Other barriers to online learning include limitation of interaction among learners (Chang, 2020); distraction through gadgets' games, social media, and other irrelevant contents easy to access (Dally et al., 2019); limited experience in technology (Anekwe, 2017); and lack of proper interaction with instructors (Wang, Zhang, Zhao, Zhang, & Jiang, 2020).

#### **Emergency Remote Teaching and Learning**

There is a difference between emergency remote teaching and online learning though in both modalities the teaching and learning process occurs virtually. While online learning is subject to several standards for optimal learning (Schlesselman, 2020); emergency remote teaching is delivered in response to catastrophes or calamities (Hodges et al., 2020; Lim, 2020). It is a provision of an emergent situation (Bozkurt & Sharma, 2020). Additionally, "while distance education has always been an alternative and flexible option for learners, emergency remote teaching is an obligation, which means that we have to use different strategies and approach the case with different priorities" (Bozkurt & Sharma, 2020, p. ii). The ability provided by technology for schools and higher educational institutions to transition to teaching online to carry on the remaining school activities in 2020 was called emergency remote teaching rather than bearing the name of online learning (Schlesselman, 2020). It is a bias to consider online education and ERT equally (Bozkurt & Sharma, 2020).

In contrast to online teaching and learning, emergency remote teaching is not planned and designed. The teaching requires delivery solutions that would have been delivered face-to-face (Means, Bakia, & Murphy, 2014). Regarding the conduct of emergency remote teaching, Hodges et al. (2020) provided an explanation of ERT in the following statement:

December 2020, Vol. 23, No. 2

In contrast to experiences planned from the beginning and designed to be online, emergency remote teaching (ERT) is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves using fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses, and that will return to that format once the crisis or emergency has abated. (p. 6)

Terminology matters. Online learning (OL) is different from ERT, and the two different concepts should not be used to designate one or another. Importantly, the process of transitioning to emergency remote teaching and learning requires consideration of many aspects.

**Transitioning to emergency remote teaching and learning**. Colleges and universities worldwide suddenly transitioned to teaching remotely amidst Covid-19 (Rahim, 2020; Schlesselman, 2020). According to Bozkurt and Sharma (2020), Covid-19 protocols led to the closure of schools' doors from kindergarten to tertiary educational institutions, which forced all the schools to operate remotely and implement emergency remote teaching. In line with Covid-19 protocols, Toquero and Talidong (2020) underscored that schools were obliged to use new measures to teach learners. Even though faculty were forced to teach remotely, they were not prepared and faced unexpected challenges. Faculty preparation and students' readiness are discussed in the next sub-sections.

*Faculty preparation*. Faculty were not prepared for ERT as a way to respond to the pandemic. According to Frumos (2020), many faculty and students were not prepared for the abrupt decision to teach and learn online during the pandemic. Additionally, faculty lacked full preparation (Knysh & Dudziak, 2020; Toquero & Talidong, 2020) and professional training; hence, they struggled with the challenges that arose due to lack of preparation in teaching remotely (Toquero & Talidong, 2020). Regarding teacher preparation, Johnson et al. (2020) asserted that even teachers with no teaching online experiences had to teach online and especially those without experiences, were in the process of learning how to teach online. Knysh and Dudziak (2020) assert that teachers were not sufficiently prepared to teach online during the pandemic in Ukraine. The major problem was the challenge of integrating information and communication technology into their teaching due to lack of predagogical training and the excessive workload.

Interestingly, other researchers found some remedies to teachers' unpreparedness. Toquero and Talidong (2020) underscored that worldwide, teachers were trained via webinars to help them find ways to overcome their challenges by preventing, at the same time, the spread of Coronavirus disease. Similarly, Schlesselman (2020) asserts that teachers, staff, and students of graduate schools in educational centers worldwide received frantic assistance to transition to emergency remote teaching. Additionally, teachers' internal assistance was provided by

instructional designers, digital learning centers, and faculty mentors to make the transition easy (Johnson et al., 2020).

*Student's readiness*. Students' readiness for learning remotely is another vital aspect to consider. According to Frumos (2020), students' readiness for emergency remote teaching and their ability to use technology tools for accessing information from their teachers may differ significantly. Given that they have differences in a face-to-face classroom, virtual learning is much more complicated without training. In the study conducted by Johnson and colleagues (2020), faculty and school leaders revealed that students needed support and guidance on accessing online digital materials and working from home.

Regarding students' experiences during Covid-19, Robertson (2020) discovered that students were disappointed because what they experienced was not aligned with the plans they had made. Furthermore, Terenko and Ogienko (2020) found that students' concerns in learning online during Covid-19 were as follows: uncertainty related to the complete transition to online learning, lack of stability of the internet, technical issues such as accessing the application in use, and the transfer of the information. However, students had positive attitudes and motivation in learning online as the sole solution for continuing their academic journey.

Advantages of emergency remote teaching and learning. Teaching and learning remotely have some advantages. For example, different learning management systems used in regular classes are also used in emergency remote teaching and learning. ERT has increased video conferencing through which faculty and students can interact visually during the meeting (Lim, 2020). Describing the advantages of ERT, Affouneh et al. (2020) state that "education leaders and policymakers in both public and higher education need to learn new lessons about education in crisis to develop their e-Learning systems" (p. 135). Regarding the students, Robertson (2020) found that learning online during the Covid-19 pandemic provided students with increased independence, development of new skills, general improvement of academic writing style, resilience, and the development of a community of learning despite the social distancing measures. Igbokwe et al. (2020) underscored that learning online during Covid-19 reduces the participants' physical contact and provides a safe environment, promotes physical separation between faculty and students, provides self-isolation, and helps to contain the Covid-19 by staying home.

**Effects of emergency remote teaching and learning**. Though the transition to online learning with the use of technology tools can reduce the effects of the pandemic on the system and pedagogy of education (Terenko & Ogienko, 2020), the lack of adequate preparedness in the integration and adoption of online learning technology engenders many challenges (Igbokwe et al., 2020) to faculty, students, and staffs. According to Hodges et al. (2020), transitioning to ERT disrupted the life of learners, teachers, and staff. Students, mostly, were not ready for the immediate

and abrupt attendance to courses. With this, flexibility will be needed with deadlines for course requirements, course rules, and instructional policies.

Concerning the limitations of ERT, Lim (2020) asserted that interactions and feedbacks between faculty and students lack quality and are significantly reduced. Additionally, the necessity of all the participants with diverse abilities to engage in the same requirements at the same stride creates frustration for faculty and learners. Furthermore, relying on online technologies may generate poor outcomes because of the digital divide and socio-economic problems. For example, "some families have limited ownership of internet-capable devices, or live in areas with poor internet access, or have difficulty finding enough distraction-free spaces for parents telecommuting from home and students studying at home" (p. 38). Robertson (2020) found that students went through frequent issues with technology, frustration, and sorrow. Undoubtedly, emergency remote learning affects teachers, students, and parents.

Different authors pointed out other disadvantages of ERT. For example, faculty experience a highly stressful situation when working without knowing the end of the Covid-19 situation (Affouneh et al., 2020). Similarly, the sudden transition to emergency remote teaching is stressful for teachers who are not familiar with online teaching and learning (Rahim, 2020). Additionally, integrating information and communication technology into teaching was a significant problem due to a lack of pedagogical training and excessive workload (Knysh & Dudziak, 2020). Aziz et al. (2020) found the lack of preparedness affected faculty emotionally because "factors such as rudimentary system, inefficient internet, lack of previous experience further accelerated the situation" (181). Emergency remote learning affected students not only psychologically but also socially.

*Psychological effects*. Remote learning during Covid-19 created emotional and psychological challenges among students. Marelli et al. (2020) asserted that though the restriction of freedom was beneficial to minimize the spread of the pandemic, Covid-19 impelled possible psychological effects. In line with this, the highest stressor for students was the uncertainty regarding their assessment and the end of the semester during Covid-19 (Mishra et al., 2020; Moawad, 2020). Furthermore, the lockdown during the Covid-19 pandemic affected the daily routines of individuals provoked a higher level of stress than before the pandemic, and increased anxious minds (Mishra et al., 2020; Marelli et al. 2020). On the other hand, Aziz et al. (2020) discovered that faculty adaptation to the abrupt transition from traditional mode to online teaching modalities was difficult.

*Social effects*. Schools for higher learning are centers of social activities and interaction for students. Unfortunately, Britt (as cited in Martin et al., 2017) stated that emergency remote learning has limited conventional classroom socialization, and students use only digital communication with their classmates. According to the United Nations Educational, Scientific and Cultural Organization (2020), the

emergency remote learning world lacks partially the important time of discussions and time to share knowledge information. Additionally, during the Covid-19 pandemic, many students have lost their social contact. Sadly, Marelli et al. (2020) found that young students feel less efficient in overcoming problems due to social isolation, loneliness, vulnerability, and worries.

#### Students' Healthy Lifestyle Change Dring Covid-19

A healthy lifestyle is important to an individual's general health. However, it does not prevent healthy ailments. According to Bozlar and Arslanoglu (2016), healthy lifestyle changes could either reduce or increase health problems. Further, health is the responsibility of an individual and should be kept a priority. However, the lockdown's restrictive rules dramatically changed individuals' healthy lifestyles and social relationships (Marelli et al., 2020).

One of the healthy lifestyle changes is sleep patterns. Marelli et al. (2020) found significant effects of the lockdown on students' and school administrators' sleep and psycho-emotional well-being. Concerning sleep patterns, poor quality of sleep, poor sleep hygiene (Li et al., 2020; Marelli et al., 2020), and a delay in bedtime and waking up time for the students (Marelli et al., 2020) were identified as effects of emergency remote learning during Covid-19. Additionally, insomnia was found to affect the population during Covid-19 in many aspects (Li et al., 2020; Voitsidis et al., 2020), such as the rapid increase of stress level because of worries about health, financial issues, social life changes, and day-to-day routines (Voitsidis et al., 2020). Regarding students' psycho-emotional well-being, sleep latency problems increased dramatically due to the high level of anxiety and worries before sleeping. Unfortunately, the impact was more significant on students than administrative workers, and female students were more affected than males (Marelli et al., 2020; Nakhostin-Ansari et al., 2020).

Other health lifestyle changes are eating habits and physical exercises. Concerning eating habits, Molea and Nastasa (2020) found that eating a balanced diet during the Covid-19 period yields good health. However, most students were disrupted by other activities, such as eating during the online learning process. Furthermore, Di Renzo et al. (2020) found that outdoor and gym physical activities limitation had influenced healthy lifestyle changes during the Covid-19 period, such as overeating. Regarding physical activities, lack of mobility and healthy habits predispose most students to develop health problems. For example, Covid-19 has made movement restrictions and cancellations of other game activities that promote students' well-being, leaving most students inactive (Di Renzo et al., 2020). Furthermore, Bozlar and Arslanoglu (2016) discovered that healthy lifestyle habits minimize the chances of getting healthy ailments that include chronic diseases.

Emergency remote teaching and learning is a phenomenon currently lived. Most of the publications are theoretical papers focusing on the ways to teach online courses during the pandemic. Additionally, empirical publications are done *December 2020, Vol. 23, No. 2* 

quantitatively on school administrators and faculty regarding remote teaching. Furthermore, this phenomenon is not very much researched in the Philippines. A qualitative study is needed to describe deeply the experiences of graduate and postgraduate students undergoing emergency remote learning, the impacts and effects of ERL on their healthy lifestyle. This case study addressed the following questions:

- 1. What are the experiences of higher education students in emergency remote learning during Covid-19?
- 2. How does emergency remote learning impact higher education students during Covid-19?
- 3. How does transitioning to emergency remote learning affect students' health lifestyle?
- 4. What coping strategies do students use to overcome the challenges encountered during emergency remote learning?

#### Methodology

This section provides the methodological processes used in conducting the study. This study followed a qualitative perspective, which consists of analyzing the ideas of the participants. Descriptions of research design, research setting, sampling techniques, data collection procedures, data analysis, ethical considerations, and researchers' reflexivity are presented below.

#### **Research Design**

A single case study was used in this qualitative inquiry. Creswell and Poth (2018) define a case study as an existing reality which can be a human being, a diminutive assembly, an association, or a company. In addition, a case study consists of describing and analyzing deeply and intensively a single unit or bounded system (Merriam 2009; Merriam & Tisdell, 2016). It can be "a person such as a student, a teacher, a principal; a program; a group such as a class, a school, a community; a specific policy; and so on" (Merriam, 1998, p. 27). According to Yin (2018), a case study research is most likely is to be appropriate for "how" and "why" questions (p. 27) to understand a complex problem. The institution where this research was done provided a natural and appropriate context. This consisted of the presence of students who transitioned abruptly from traditional learning modalities to ERL from the time the institution closed the doors in March 2020 due to Covid-19. The bounded system is formed of the time for students to accomplish their academic requirements, the space for study, and the technology tool such as computer and internet connection.

#### **Research Setting**

This study was conducted on single and married students staying and living inside the campus of a faith-based higher education institution. This institution is located in Cavite Province, Calabarzon Region in the Philippines. It is an international higher education institution hosting students from Africa, America, Asia, Europe, and Oceania. Additionally, the institution employs faculty from different nationalities. This institution offers Master's and Doctoral programs in business, education, public health, and theology. School administrators, teachers, and students stay on the beautiful campus of the institution. Since March 2020, this higher education institution was locked down and students staying on campus transitioned abruptly to virtual learning. They were learning and working from their dormitories using the internet.

#### **Participants and Sampling Procedures**

In this qualitative inquiry, we used purposeful sampling. According to Creswell and Poth (2018), purposeful sampling "means that the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (p. 158). This study involved twelve participants selected based on the following criteria: being a student living and staying on campus from the time of lockdown (March 2020). Second, being a student enrolled either in inter-semester 2020 or in the first semester 2020-2021. Furthermore, the participants must not have been enrolled in an online program before the transition from face-to-face to emergency remote learning modalities.

#### **Data Collection Procedures**

The methods used for data collection in this paper were in-depth interviews. According to Aurini et al. (2016), interviews grant a researcher the possibility to explore the ideas more deeply and understand the participants' points of view. Due to the Covid-19 pandemic situation, a request for participation was sent to the participants through email. Second, one-on-one interviews were held between the researchers, and the participant respecting the institution's health and safety regulations. Importantly, literature was a significant tool used to corroborate the semi-structured interviews.

#### **Data Analysis Procedures**

This section provides a description of the process of data analysis and synthesis used in this study. Creswell and Creswell (2018) argue that data analysis generally aims to give meaning from the text and image of the information. They state that data analysis "involves segmenting and taking apart the data (like peeling back the layers of an onion) as well as putting it back together" (pp. 190-193). In this research, the data collected were analyzed according to Creswell's (2014) process from the specific to the general meaning. This process also consisted of making codes, categorizing, and theming data (Saldaña, 2016).

The first step was to prepare and organize data. In this step, researchers transcribed the recorded interviews, read the raw data, understood, and reflected on *December 2020, Vol. 23, No. 2* 

data to make sense of the participants' responses. The second step consisted of coding data, which were sorted by question. Next, from the codes emerged important categories that generated themes. Last, a thick description of themes was done to generate responses to the research questions of the study.

#### Trustworthiness

Trustworthiness is a crucial criterion to evaluate qualitative research findings based on the credibility of the results in general (Dahler-Larsen, 2018). In this case study, credibility was preserved to ensure the accuracy of the findings. It was enhanced by the fact that data was collected and analyzed by both of us as researchers. Furthermore, member check, which consisted of returning the raw transcriptions of the interviews and provisional interpretations were returned to the participants from whom data was collected. Due to the Covid-19 pandemic, researchers emailed the participants for member check. Additionally, we approached two different credible researchers for peer examination to get more insights into the research process.

To certify consistency and dependability of the findings, triangulation of data was used. It was done by interviewing 12 students staying on the institutional campus and enrolled during the pandemic. A clear audit trail, which is an account of how the research was conducted to enhance reliability (O'Reilly & Kiyimba, 2015), was used. Distinctly, literature was another way to triangulate the data. Regarding transferability, a detailed description of the research setting has been provided for more information about the application of the findings.

#### **Ethical Considerations**

In conducting a qualitative study, a researcher must anticipate the types of ethical issues that may occur during the research process and set strategies to address them. Even though many issues occur during data collection (Creswell, 2016; Creswell & Poth, 2018), it is worthy to notice that they arise at the beginning of the study, during the phases of collection, analysis, and interpretation of the results (Creswell, 2016). In this study, the informed consent form was signed by each participant for their agreement to participate voluntarily. In addition, the participants were not forced to participate and were told they could withdraw from the study at any time.

Interestingly, confidentiality is also an important aspect to consider in qualitative research. Confidentiality consists of managing the participant's information delivered privately, and anonymity consists of removing the identifiable information regarding the participants (O'Reilly & Kiyimba, 2016). Therefore, all the identifiers that could reveal the participants' identity were not recorded in the present study. Finally, the data was treated privately for the study's purpose, with only the researchers to access the information. With this, data was analyzed as delivered by the participant without any additional information by the researchers.

#### **Researchers' Reflexivity**

The researcher's positioning plays a significant role in the qualitative research process. Regarding reflexivity, Creswell (2016) suggested that researchers express their predispositions, principles, and knowledge in the study and how they would impact the participants and readers. In addition, Creswell and Creswell (2018) underscored that "inquirers explicitly identify reflexively their biases, values, and personal backgrounds, such as gender, history, culture, and socio-economic status (SES) that shape their interpretations formed during a study" (p. 183).

In this study, we, researchers, have been living in this study's settings during the pandemic. Furthermore, we believe that students would be overwhelmed and stressed when learning remotely during the pandemic. As researchers, we discussed our preconceived thoughts about how we view the students and their online remote learning conditions during the pandemic. We recognized our stand and opted that our interest was in listening to the experiences of the participants. Therefore, participants were given the freedom to express their feelings and experiences of learning in the pandemic conditions without our influences. In line with that, our experiences could not have a place in interpreting the finding regarding the phenomenon in the study (Creswell & Poth, 2018).

#### Results

This study aimed to explore students' experiences in emergency remote teaching and learning during Covid-19, discover the impacts of emergency remote learning and its effects on students' health lifestyle, and find the coping mechanisms applied to their challenges. Participants in this study included single and married students enrolled in master's and doctoral programs in education, business, public health, and theology from the institution. Students described their experiences about learning online during Covid-19. Research findings presented below are based on students' experiences and are categorized in six themes according to the research questions.

#### Theme 1: Students' Experiences in Emergency Remote Learning

Participants described their feelings when they started remote online classes. Their experiences are expressed in terms of preparation for emergency remote learning, journey through emergency remote learning, and the support they experienced. Details of the above different experiences are provided in the next subsections.

**Students' preparation**. Students must be prepared for any learning modality. In this study, students who were enjoying face-to-face classes on campus found themselves forced to study remotely because of the unpredicted Covid-19 pandemic. They revealed that they were mentally, psychologically, and technically unprepared for transitioning to emergency remote learning. Students' feelings were not *December 2020, Vol. 23, No. 2* 

enjoyable, and they experienced fear, doubt, and stress. They were not familiar with the new system that came abruptly. There was no other option than to carry on their learning journey.

**Journeying through emergency remote learning**. According to the participants, having online courses during the Covid-19 pandemic time was an unplanned journey, without hope, full of fear and doubt. Though it cannot be compared to hell, some of the participants described it as an annoying, displeasing, and fearful journey that they would stop if possible. Describing the experiences in this journey, one of the participants stated, "*I can stop journeying*. *I am motivated because it is temporary*. But if I am aware that it is a continuing journey, until the end, I do not know if I can survive" (P3ERL, p. 9). Additionally, another participant asserted: "I feel like I should give up but sometimes but I say okay, I came here to study. I have to finish this race. So, it was a challenging time for me" (P5ERL, p. 15). Journeying through emergency remote learning during Covid-19 was not easy. It required much determination from the students.

Academic support. Interestingly, students found academic support during the unplanned journey of learning online during Covid-19. They experienced teachers' understanding and flexibility that strengthened them in their remote learning journey. Not only some faculty listened to the students' concerns, but they also provided assistance and guidance in the process of learning. Finally, the department of the institution's online division helped students technically in their online remote courses.

# Theme 2: Benefits of Emergency Remote Learning During Covid-19

Emergency remote teaching and learning during the Covid-19 pandemic helped students in some aspects of their learning journey. Participants pointed out three different categories of advantages gained when learning remotely. These are academic, technology, and family and socio-spiritual benefits. The subsections below provide more details.

Academic benefits. Emergency remote learning provided some important knowledge to the students during the Covid-19 pandemic. For instance, students learned to work under pressure, got familiar with online learning, improved their writing skills, and understood their lessons much better when reading at their own pace. Interestingly, students discovered online ways of learning and getting materials. One of the participants expressed, "I have discovered materials I did not know before; I managed to check some of online libraries, some online materials that I didn't use before" (P2ERL, p. 5). Most importantly, teaching strategies improved when faculty who used lecture as the only method of teaching could no longer use it. Rather, discussions and interactions were promoted as new ways of teaching and learning that increased students' participation (P6ERL).

International Forum

**Technology benefits**. Emergency remote learning provided an opportunity for higher education students to use technology tools than in traditional classes. The most common technology benefit is the use of the Zoom application. One of the participants expressing the benefits from emergency remote learning stated, *"Actually, I did not know zoom before we shifted to remote classes. But I had to learn zoom in a few days, learn some features, and how to use it"* (P2ERL, p. 6). Another advantage of technology tools in remote learning was that class discussions through zoom were recorded. In case a student did not retain or missed class discussions was able to replay the recordings for more understanding.

**Family and socio-spiritual benefits**. Studying online during Covid-19 has benefited higher education students in different aspects. First, married students had more time to spend with their families and other activities effectively. These are, for example, children's care and household chores. Second, expenses were reduced especially among married students who used to travel with family members for recreation. Next, there was a spiritual improvement for a few of the participants who mentioned that they had more time for reading the Bible and prayer. Last, on the social aspect, most participants enjoyed interacting with classmates from different parts of the world synchronously.

# Theme 3: Challenges of Emergency Remote Learning During Covid-19

Students who transitioned to emergency remote learning during the Covid-19 pandemic experienced many challenges. Not only was learning affected, but also other aspects of students' life. In this study, participants revealed that they faced academic, technological, social, spiritual, and environmental limitations. These constraints are described in the following sections.

Academic problems. Higher education students were academically challenged by emergency remote learning during the Covid-19 pandemic. First, students experienced having lower scores in different courses than they used to have in faceto-face classes, which made them unhappy. Furthermore, most participants experienced a fear of failure due to a lack of enough scores and low grades, and the lack of feedback from some professors. Expressing the problems of lack of feedback and low grades, one of the participants explained the consequences of emergency remote learning in the following statement:

> Oh, it has really affected me a lot because I am a person who loves to ask questions from the professors and I always trouble them from that. But at this very moment, some of the professors do not have time to reply to all or give feedback on time. So, even though if I keep on reminding them to give me feedback so that my academic performance will be okay but there are times they do not have time at all. They just leave it. And there is one class that really affected me I did not receive any feedback and my grade also was not really good. I am upset. (P5ERL, p. 16)

December 2020, Vol. 23, No. 2

Other academic challenges students faced during the emergency remote learning are related to deadlines and difficulty in conducting group work. Participants expressed that they had heavy work that required them to work hard. Furthermore, they had overwhelming requirements that they had to fulfill in a short, defined time. Thus, it was challenging to meet the deadlines for, especially student-parents whose children were also experiencing online learning during the pandemic and needed much assistance and parents' presence. Regarding the conduct of group work, participants expressed the problem of working in groups virtually due to lack of orientation, internet disruptions, and time zone differences of the students' locations.

**Technology problems.** Participants revealed many challenges related to the use of technology during emergency remote learning. The most prominent common technology issue participants experienced when learning remotely was the poor internet connection. One of the participants expressed how students struggled with the internet connection in the following way:

Almost every day, we had either many students or some students having to disconnect again and again due to poor connection. Personally, I could log out almost in every class. A few times I had to log out and log in because my internet was a bit poor. (P2ERL, p. 6)

In addition, individual technology problems were also experienced by some students. For instance, some of the students lacked computer skills and were struggling with attending classes, doing quizzes, and exams online. Such students lost 10 to 15 % of the academic performance of the face-to-face classes (P3ERL). Regarding the use of the Zoom application, though some students learned to use it in a few days, others remained challenged. One of the participants expressed that some of the classmates "even after several months of using Zoom, they do not know some aspects of it which are necessary for classes like breakout sessions, for example, some even using a whiteboard, screen share, and so on" (P2ERL, p. 6). Surprisingly, the problems of technology use, as asserted by most participants, were experienced not only by students but also by some facilitators.

**Social limitations**. Students lacked social and cultural activities when learning remotely during Covid-19. Due to confinement, they experienced minimal physical conversations with classmates and spent more time alone fulfilling academic requirements. The only way that helped them socialize was through online interaction via zoom, messenger, or WhatsApp applications. Concerning cultural limitations, participants expressed a lack of intercultural activities such as potluck, hugs, and hangouts. Regretting the missed cultural interactions during Covid-19, one of the participants stated: "*I learned to recognize every ordinary meeting with my friends in the canteen or on the market as a gift from God. I think conversation with many people from different cultures really sharpens my emotional intelligence. Now <i>I lack it*" (P4ERL, p. 13). Students learning remotely during Covid-19 were affected socially and culturally.

**Environmental constraints.** Participants in this study revealed some environmental problems. First, they experienced a lack of space for studies. One of the participants expressed the lack of space for study in the following way: "We have been quarantined; we have been confined, so you will study at the same place, you will eat at the same place and sleep at the same place. You couldn't go anywhere, so that was the awful part" (P6ERL, p. 18). Second, there were more disturbances at home by spouses and children. For example, children were asking the parent-students to stop studying and entertain them.

**Time constraints**. Time is another issue that higher education students experienced during emergency remote learning. Due to the many academic requirements, some students lacked time to cook. Others managed to cook but sacrificed their eating time to meet the deadline for submission. Additionally, some students lacked proper time management and personal discipline. Surprisingly, some of the faculty could not manage time effectively by extending class sessions, which affected students' time.

## Theme 4: Psychological Effects of Emergency Remote Learning

Students taking classes during Covid-19 experienced many psychological problems. For instance, participants experienced a high level of anxiety, stress, and slight depression. Additionally, more students studying remotely experienced the fear of the future. Worried by thoughts and what the future holds, one of the participants stated: "*I was overwhelmed by it, I do not know what to expect, I do not know if I will be able to acquire the learning I wanted to*" (P10ERL, p. 31). Undoubtedly, participants explained that taking remote classes during Covid-19 was emotionally overwhelming.

Students studying remotely during Covid-19 experienced panic due to separation from family members. In this regard, married students living alone, and young students living away from parents expressed worries over their family members' welfare back home. Additionally, most of the students felt lonely. For instance, one of the participants asserting to have no family member on campus stated: "*I just have my classmates to interact with. So, with this emergency remote learning, it was very difficult because it increases a little bit loneliness, as everyone is busy doing his staff"* (P12ERL, p. 38). On the contrary, some of the participants felt comfortable when studying alone remotely (P6ERL; P11ERL).

# Theme 5: Effects of Emergency Remote Learning on Students' Health Lifestyle

Emergency remote learning did not only affect students psychologically. Turning now to the health lifestyle aspect, students learning remotely during the Covid-19 pandemic experienced health lifestyle changes. Participants revealed that they experienced physical problems, sleep deprivation, eating problems, and health ailment. A description of each aspect is provided in the sections below.

**Physical problems**. Many physical problems were experienced by students studying remotely during the pandemic. Remarkably, all the participants in this study experienced a sedentary life. They spent much of their time sitting, focusing on their academic requirements. As a result, sitting longer provoked tiredness, increased students' weight due to lack of physical exercise, and affected their sitting position and posture.

**Sleep challenges**. Due to worries, fear, and hard work, students experienced sleeping problems when learning remotely. Participants experienced sleep disturbances due to many requirements and a complete change in sleeping habits. Furthermore, most participants stated that they could be awake until midnight or even work until the following day's early night hours. One of the participants expressed: "we tend to sleep very late sometimes. I am a kind of a person who likes to finish my requirements on time. So, there are sometimes I will try to sleep at 1:00 or 2:00 AM" (P5ERL, p. 16). Sadly, other students experienced insomnia when learning remotely. For instance, one participant stated: "At the beginning for me, I had insomnia, I could not sleep well. It is like I feel okay, I have time to do this assignment, and I can do it later, with insomnia you stay awake, yes, that was a hard time" (P12ERL, p. 39). Undoubtedly, emergency remote learning affected the participants' sleeping patterns.

**Eating problems.** Learning remotely during Covid-19 had both positive and negative impacts on the eating habits of students. Few participants mentioned having an opportunity to cook healthy food during the pandemic, while others lacked time to cook their food. Surprisingly, even those who cooked healthy food sacrificed their eating time by working on their assignments to meet submission deadlines. Additionally, some students who used to have three meals a day had to eat once per day. Undoubtedly, eating habits were dramatically disrupted.

**Health ailments**. Different health problems occurred to students who were studying online during the Covid-19 pandemic. Some students experienced high blood pressure and sickness because of the new learning system and hard online work. Furthermore, most participants expressed that due to sitting longer and focusing on their academic work looking at the computer screen, their body developed health issues. One of the participants expressed the health problems encountered when learning remotely in the following way:

I could have done something but you know the demand to sit in front of the computer was too much. So, I started developing back pain, eye issues, and once in a while, I get a headache looking at the screen for too long, because sometimes when you sit there, you forget about your own self because of the demand of the assignments. (P10ERL, p. 32)

Undoubtedly, the health lifestyle of students learning remotely during the Covid-19 pandemic was affected. Despite all the challenges encountered, students had strategies that helped them be focused academically. Students had personal and common ways to cope with the challenges. The next section describes the strategies.

#### **Theme 6: Coping Mechanisms**

The participants provided different strategies they used to overcome the challenges encountered in emergency remote learning. The first mechanism is the adaptation to the situation and the determination to carry on with their studies. Students had to accept the situation they went through because there was no other way to escape it. Second, regarding the problem of internet disruptions during classes through the Zoom application, students could request the class recordings. They could replay the class discussions to get the missed points or have more understanding.

Third, on the matter of being stressed, anxious, tired, and overwhelmed, students managed such a problem by napping, resting, and drinking much water. One of the participants stated: "when I felt much overwhelmed or tired, I had to deliberately have a nap or rest and exercise or even drink a lot of water to gain more energy" (P2ERL, p. 6). Next, moral support from spouses, children, friends, and parents was of great significance for students facing psychological challenges. In addition, some of the students used exercises and evening walks to overcome the problems of sedentary life. Furthermore, setting priorities was another strategy to cope with the challenges of learning virtually during the Covid-19 pandemic. Students focused on working on the things they prioritized as needing more attention than others. Last, trusting in God was a coping mechanism that increased their hope as they journey through remote learning.

#### **Discussion and Implications**

Graduate and post-graduate students at this higher education institution expressed their experiences from emergency remote learning during the Covid-19 pandemic. Students were not prepared mentally, psychologically, and technically to transition to emergency remote learning. They considered learning remotely during Covid-19 as an unplanned, tedious, and forced journey where they experienced much stress, fear of the future, and doubt of the end of their trip. Corroborating with these findings, Robertson (2020) found in his study a great disappointment from students who transitioned to online learning due to the Covid-19 pandemic in New Zealand, while Terenko and Ogienko (2020) found that students were uncertain of their studies when learning online during the Covid-19 pandemic in Ukraine. This implies more preparation and orientations of students before they embark on emergency remote learning.

Interestingly, despite students' tedious experiences when learning virtually during the Covid-19 pandemic, significant advantages were enjoyed by the same students. Academically, students who transitioned to emergency remote learning learned how to work hard under pressure, gained knowledge related to online learning, improved writing skills, and understood more the lesson by reading and learning at their own pace, discovered new online platforms where they got materials for studies. More importantly, they enjoyed discussions as strategies of learning than lectures. Technologically, emergency remote learning was an opportunity for graduate students to use more technology tools and get familiar with some applications, including Zoom.

The impacts of emergency remote learning were revealed in different aspects. Technologically, students were challenged with poor internet connection on campus. Students could log in and log out repeatedly during class sessions. Thus, they lost some parts of the lesson discussion with the teachers. Furthermore, some students were challenged by a lack of technology skills since they were not familiar with the online system. Concerning communication between teachers and learners, students experienced the fear of failure due to low scores and lack of feedback from the faculty. Another big challenge of emergency remote learning was the lack of physical space for studies since it is challenging to work from home. To corroborate these findings, Lim (2020) affirmed that poor internet connection and students studying from home were counted among factors of low quality and quantity of interactions and feedbacks between teachers and students. Furthermore, students studying remotely developed a fear of their final exam results, especially of the online assessment at the end of the semester, as found by Mishra et al. (2020) and Moawad (2020). Based on the findings, it is critical and crucial to retain and provide good quality of internet to the students who study from their apartments during the Covid-19 pandemic.

Student health lifestyle was also highly affected by emergency remote learning. Psychologically, students studying remotely were anxious, stressed, worried about the future, and slightly depressed. Furthermore, students experienced health ailments. Physically, students were very tired and increased their weight due to spending more time sitting. This caused backache, alteration of the sitting position, posture, eye-ache due to computer screen focus, blood pressure, etc. Furthermore, sleepless nights, insomnia, and latency of sleeping time were the effects of learning remotely during the Covid-19 pandemic. In line with this, Voitsidis et al. (2020) found that due to worries of life, insomnia and a high-stress level were experienced by the whole population. Nakhostin-Ansari et al. (2020) also found that sleep patterns changed, energy lost, and difficult concentration were the symptoms of depression commonly found among Iranian medical students during the Covid-19 pandemic.

International Forum

#### **Conclusion and Recommendations**

Transitioning to emergency remote learning due to the Covid-19 pandemic impacted the process of teaching and learning. Undoubtedly, the emergency remote learning adopted temporarily by schools has its positive and negative effects on students. Though studying remotely was considered an unplanned, tedious, unpleasant, and fearful journey, students got advantages from it. For example, they tasted a shadow of online learning, gained knowledge in using some technology applications, improved writing skills, understood lessons more when reading and learning at their own pace, and discovered many online platforms. Importantly, married students staying on campus with their family members had more time to spend with their spouses and children.

Unquestionably, the negative effects of emergency remote learning were revealed by the participants. Students were affected physically, psychologically, and technologically. Furthermore, students' health lifestyles were affected due to emergency remote learning. Gaining weight, sitting position problems, having posture problems, and developing backache are some of the physical problems due to lack of exercise and sitting longer. Anxiety, stress, loneliness, and slight depression were the students' psychological issues, while low internet connection was the basis for technological problems. Concerning health lifestyle issues, students experienced changes in sleep patterns, sleepless nights due to submission deadlines, and other health ailments such as eye issues due to spending much time on the computer screen. The students used different coping strategies to carry on with their studies. For instance, napping, resting, drinking water, setting priorities, and trusting God helped them carry on their learning process.

Based on the challenges encountered when learning remotely, significant suggestions are recommended. First, school administrators should think about prioritizing students' learning by increasing the speed of internet connection in the students' dormitories. Second, class periods should be shortened. Students prefer having one to two hours of faculty-student meetings through Zoom instead of 3 hours and do the rest independently. As most participants desired, face-to-face classes should be opened for students regarding the use of technology applications. Students should be training for faculty and students regarding the use of technology applications. Students should be trained to use Zoom, get materials from the Learning Management System (LMS) such as Moodle, make online submissions, and do other online activities done through the LMS. Faculty should not extend class sessions for the sake of students' time to cook food and prepare for other classes or to have rest, especially for the classes scheduled in the evening due to the different time zones of the students.

Some limitations can be drawn from this study. First, this study focused only on one institution as a case study. Therefore, the results cannot be extrapolated to all other graduate educational institutions. Second, observation as an essential tool of qualitative data collection was not used due to health and safety regulations *December 2020, Vol. 23, No. 2* 

regarding the spread of the Covid-19 pandemic. Next, this study has solely focused on learning remotely while emergency remote teaching and learning are a broad concept with different aspects. Other researchers can conduct studies using a quantitative or mixed-method approach. Additionally, research can be conducted in public universities at different levels, including undergraduate students learning remotely during Covid-19. Researchers can also focus on the experiences of faculty teaching remotely during Covid-19 in the Philippines and beyond.

#### References

- Affouneh, S., Salha, S., & Khalif, Z. N. (2020). Designing quality e-learning environments for emergency remote teaching in coronavirus crisis. *Interdisciplinary Journal of Virtual Learning in Medical Sciences*, 11(2), 1-3. https://bit.ly/2GtoAbV
- Akhter, H., & Mahmood, M. (2018). Study of the impact of online education on student's learning at university level in Pakistan. *International Journal of Distance Education and E-learning*, 3(2), 1-11. https://doi.org/10.36261/ijdeel.v3i2.282
- Anekwe, J. U. (2017). Impacts of virtual classroom learning on students of Nigerian federal and state universities. *European Journal of Research and Reflection in Educational Sciences*, 5(3), 21-36. https://bit.ly/33HtsCS
- Aurini, J. D., Heath, M., & Howells, S. (2016). *The how to of qualitative research*. Sage.
- Aziz, A., Aamer, S., Khan, A. M., Sabqat, M., Sohail, M., & Majeed, F. (2020). A bumpy road to online teaching: Impact of Covid-19 on medical education. *Annals of King Edward Medical University*, 26, 181-186. https://www.annalskemu.org/journal/index.php/annals/article/view/3635/2208
- Babu, G. S., & Sridevi, K. (2018). Importance of e-learning in higher education: A study. *International Journal of Research Culture Society*, 2(5), 84-88. https://ijrcs.org/wp-content/uploads/201805018.pdf
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Coronavirus pandemic. *Asian Journal of Distance Education*, 15(1), i-vi. https://bit.ly/33r1D1C
- Bozlar, V., & Arslanoglu, C. (2016). Healthy life style behaviors of university students of school of physical education and sports in terms of body mass index and other variables. *Universal Journal of Educational Research*, 4(5), 1189-1195. https://doi.org/10.13189/ujer.2016.040532
- Catalano, A. J. (2018). Measurements in distance education: A compendium of instruments, scales, and measures for evaluating online learning. Routledge.

- Chang, H. S. (2020). Online learning in pandemic times. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(2), 111–117. https://doi.org/10.18662/rrem/12.2Sup1/296
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Creswell, J. W. (2016). 30 essential skills of the qualitative researchers. Sage.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Dabbagh, N., Marra, R. M., & Howland, J. L. (2019). Meaningful online learning: Integrating strategies, activities, and learning technologies for effective designs. Routledge.
- Dally, D., Rasmussen, A. V., & Dalsgaad, A. (2019). Learning about midwifery in another country from a distance: Evaluation of a virtual classroom learning session. *Nursing Education Today*, 75, 47-52 https://doi.org/10.1016/j.nedt.2019.01.007
- Dahler-Larsen, P. (2018). Qualitative evaluation: Methods, ethics, and politics with stakeholders. In N. K. Denzin., & Y. S. Lincoln (Eds.), *The sage handbook of qualitative research* (pp. 1493-1526). Sage.
- Di Renzo, L., Gualtieri, P., Pivari, F., Soldati, L., Attinà, A., Cinelli, G., ...De Lorenzo, A. (2020). Eating habits and lifestyle changes during Covid-19 lockdown: An Italian survey. *Journal of Transilational Medicine*, 18(1), 1-15. doi.org/10.1186/s12967-020-02399-5
- Dobrila, M. C. (2020). Legal aspects regarding online learning process for students at university and digital education in European Union: Different life, challenges and the ability to continue education during the pandemic caused by coronavirus (Covid-19). *Revista Romaneasca Pentru Educatie Multidimensionala*, *12*(2), 130–137. https://doi.org/10.18662/rrem/12.2Sup1/298
- Frumos, L. (2020). Inclusive education in remote instruction with universal design for learning. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(2), 138-142. https://doi.org/10.18662/rrem/12.2Sup1/299
- Hanif, B. B. (2020). Impact of Covid-19 on medical universities: The financial aspect. *Biomedica*, *36*, 21–23. https://bit.ly/2RQSusJ
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. *Educause Review*. https://medicine.hofstra.edu/pdf/faculty/facdev/facdev-article.pdf
- Igbokwe, I. C., Okeke-James, N. J., Anyanwu, A. N., & Eli-Chukwu, N. C. (2020). Managing the challenges to the effective utilization of e-learning as a response in covid-19 Nigeria. *International Studies in Educational Administration*

December 2020, Vol. 23, No. 2

(Commonwealth Council for Educational Administration & Management (CCEAM)), 48(2), 28–34. http://cceam.net/wp-content/uploads/2020/08/ISEA-2020-48-2.pdf#page=34

- Johnson, N., Veletsianos, G., & Seaman, J. (2020). US faculty and administrators' experiences and approaches in the early weeks of the Covid-19 pandemic. *Online Learning*, 24(2), 6-21. https://doi.org/10.24059/olj.v24i2.2285
- Kawaguchi-Suzuki, M., Nagai, N., Akonoghrere, R. O., & Desborough, J. A. (2020). COVID-19 pandemic challenges and lessons learned by pharmacy educators around the globe. *American Journal of Pharmaceutical Education*, 84(8), 1045-1048. https://www.ajpe.org/content/ajpe/84/8/ajpe8197.full.pdf
- Knysh, O., & Dudziak, O. (2020). Overcoming the challenges—the impact of Covid-19 on agricultural higher education in Ukraine. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(2), 162–167. https://doi.org/10.18662/rrem/12.2Sup1/302
- Ko, S., & Rossen, S. (2017). *Teaching online: A practical guide* (4th ed.). Routledge.
- Li, Y., Qin, Q., Sun, Q., Sanford, L. D., Vgontzas, A. N., & Tang, X. (2020). Insomnia and psychological reactions during the Covid-19 outbreak in China. *Journal of Clinical Sleep Medicine*, jcsm-8524.
- Lim, L. F. (2020, July-August). Education: Emergency remote teaching and learning in the time of COVID-19. *Chemistry in Australia*, 38-39. https://search.informit.com.au/documentSummary;dn=245004957700524;res= IELIAC
- Marelli, S., Castelnuovo, A., Somma, A., Castelnuovo, V., Mombelli, S., Bottoni, D., ... & Fereni-Strambi, L. (2020). Impact of Covid-19 lockdown on sleep quality in university students and administration staff. *Journal of Neurology*, 1-8. https://doi.org/10.1007/s00415-020-10056-6
- Martin, F., Polly, D., Jokiaho, A., & May, B. (2017). Global standards for enhancing quality in online learning. *The Quarterly Review of Distant Education*, 18(2), 1-10. https://bit.ly/3oY7pka
- Means, M., Bakia, M., & Murphy, M. (2014). *Learning online: What research tells us about whether, when and how.* Routledge.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education: Revised and expanded from case study research in education.* Jossey-Bass.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

International Forum

- Mishra, D., Nair, A. G., Gandhi, R. A., Gogate, P. J., Mathur, S., Bhushan, P., ... Singh, M. K. (2020). The impact of Covid-19 related lockdown on ophthalmology training programs in India: Outcomes of a survey. *Indian Journal of Ophthalmology*, 68(6), 999–1004. https://doi.org/10.4103/ijo.IJO\_1067\_20
- Moawad, R. A. (2020). Online Learning during the Covid- 19 Pandemic and academic stress in university students. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(1), 100–107. https://doi.org/10.18662/rrem/12.1sup2/252
- Molea, R., & Năstasă, A. (2020). How Romanian higher education institutions have adapted to online learning process in the Covid-19 context through a student's eye. *Revista Romaneasca pentru Educatie Multidimensionala*, 12(2), 175-181. https://doi.org/10.18662/rrem/12.2Sup1/304
- Moore, M. G. (2019). Theory of transactional distance. In M. G. Moore & W. C. Diehl (Eds.), *Handbook of distance education* (4th ed., pp. 32-46). Routledge.
- Nakhostin-Ansari, A., Sherafati, A., Aghajani, F., Khonji, M., Aghajani, R., & Shahmansouri, N. (2020). Depression and anxiety among Iranian medical students during Covid-19 pandemic. *Iranian Journal of Psychiatry*, 15(3), 228-235. https://doi.org/10.18502/ijps.v15i3.3815
- O'Reilly, M., & Kiyimba, N. (2015). Advanced qualitative research; A guide to using theory. Sage.
- Rahim, A. F. A. (2020). Guidelines for online assessment in emergency remote teaching during the Covid-19 pandemic. *Education in Medicine Journal*, 12(2), 59-68. https://doi.org/10.21315/eimj2020.12.2.6
- Robertson, S. (2020). Going hard and early, tertiary teaching. International Studies in Educational Administration (Commonwealth Council for Educational Administration & Management (CCEAM), 48(2), 107–113. http://cceam.net/wp-content/uploads/2020/08/ISEA-2020-48-2.pdf#page=113
- Saldaña, J. (2015). Thinking qualitatively: Methods of mind. Sage.
- Saldaña, J. (2016). The coding manual for qualitative researchers (3rd ed). Sage.
- Schlesselman, L. S. (2020). Perspective from a teaching and learning center during emergency remote teaching. *American Journal of Pharmaceutical Education*, 84(8), 1042-1044. https://doi.org/10.5688/ajpe8142
- Simonson, M. R., Smaldino, S. E., & Zvacek, S. (2015). Teaching and learning at a distance: Foundations of distance education (6th ed.). Information Age Publishing.
- Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018).

*American Journal of Distance Education, 33*(4), 289-306. https://doi.org/ 10.1080/08923647.2019.1663082

- Supap, S., & Viriyavejakul, C. (2019). Adaptation of collaborative learning and synectics learning system for the development of a virtual classroom for educational college creative thinking at Roi Et Rajabhat University. *Mediterranean Journal of Social Sciences, 10*(4), 90-101. https://doi.org/10.2478/mjss-2019-0055
- Terenko, O., & Ogienko, O. (2020). How to teach pedagogy courses online at university in Covid-19 pandemic: Search for answers. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(1), 173–179. https://doi.org/10.18662/rrem/12.1sup2/261
- Toquero, C. M., & Talidong, K. J. (2020). Webinar technology: Developing teacher training programs for emergency remote teaching amid Covid-19. *Interdisciplinary Journal of Virtual Learning in Medical Sciences*, 11(3), 200-203. https://ijvlms.sums.ac.ir/article\_46769\_8757b2ab4b9ca 67928bef79348d3ff85.pdf
- UNESCO. (2020). Covid-19 educational disruption and response: Education in emergencies. https://en.unesco.org/themes/education-emergencies/coronavirus -school-closures.
- Voitsidis, P., Gliatas, I., Bairachtari, V., Papadopoulou, K., Papageorgiou, G., Parlapani, E., ... & Diakogiannis, I. (2020). Insomnia during the Covid-19 pandemic in a Greek population. *Psychiatry Research*. https://doi.org/10.1016/j.psychres.2020.113076
- Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the Covid-19 outbreak. *The Lancet*, 395(10228), 945-947. https://doi.org/10.1016/ S0140-6736(20)30520-1
- Watts, L. (2016). Synchronous and asynchronous communication in distance learning: A review of the literature. *Quarterly Review of Distance Education*, 17(1), 23–32. https://bit.ly/2TYDY2U
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.

Weber R. Irembere, PhD Candidate, Education Department Adventist International Institute of Advanced Studies iremberew@aiias.edu

Rosemary, M. Lubani, Master of Science in Nursing Education (MSNED) Faculty at Malawi Adventist University—Malamulo Campus rosimarinus@gmail.com

International Forum