**FACTORS AFFECTING ONLINE CLASSES among ENTREPRENEURSHIP sTUDENTS of quezon**

**city university DURING PANDEMIC ERA**

**Quezon City University**

**College of Business in Entrepreneurship and Accountancy**

**FACULTY**

**College of Business Administration in Entrepreneurship**

**and Accountancy**

**August 2021**

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Quezon City University

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**FACTORS AFFECTING ONLINE CLASSES among ENTREPRENEURSHIP sTUDENTS of quezon**

**city university DURING PANDEMIC ERA**

A Faculty Research

Presented to the Quezon City University

Novaliches, Quezon City

In Partial Fulfillment of the Requirements for the College of Business

Administration in Entrepreneurship and Accountancy

by

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August 2021

**ACKNOWLEDGEMENTS**

The researchers would like to thank first, God above for the knowledge and wisdom that was given to him. Glory to God!

To the respondents, even if you have busy schedules, you have spared of your valuable time without which, this study not have all accomplished. May God bless you all.

Thank you.

**Entrepreneurship Faculty**

**CERTIFICATE OF ORIGINALITY**

This is to certify that the research work presented “**FACTORS AFFECTING ONLINE CLASSES among ENTREPRENEURSHIP sTUDENTS of quezon city university DURING PANDEMIC ERA”** for the College of Business Administration in Entrepreneurship and Accountancy at the Quezon City University embodies the result of original and scholarly work carried out by the faculty researchers. This research does not contain words ideas taken from published sources or written works, except where proper referencing and acknowledgement were made.

**Faculty** Researcher

August 2021

**ABSTRACT**

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| --- | --- | --- |
| **Title** | : | **FACTORS AFFECTING ONLINE CLASSES among ENTREPRENEURSHIP sTUDENTS of quezon city university DURING PANDEMIC ERA** |
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| **College** | : | Entrepreneurship and Accountancy |
|  |  |  |
| **Year** | : | 2021 |

**The Problem**

The study sought to assess the identified problems of the respondents on the factors effecting online classes among entrepreneurship student’s of Quezon City University. And the significant of learning factor, physical factor, emotional and social factor, and environmental factor.

The respondents were individual from different year level of the college of entrepreneurship of the Quezon City University. There were 300 respondents who participated in this study. The statistical tools utilized in this study were frequency and percentage, weighted mean, and one way ANOVA. The researcher used the systematic random sampling to individual students from different year level of college of entrepreneurship. In this study, a researcher made questionnaire was used to gather the primary data. The survey questionnaire was formulated based on the related literature gathered. This instrument was divided in to three parts. The first part aims to survey the profile of the respondents. The second part is knowing the factors of affecting online classes of the student’s and the third part is the significant difference on the respondents assessment on the factors affecting online classes among entrepreneurship student evaluations of Quezon City University when they grouped according to profile. After the data gathered, they were complied, sorted out and tabulated. They were subject statistical treatment in order to answer the questions and proposed in this study.

**Key words:** learning factor, physical factor, emotional and social factor, and environmental factor

**Research Methodology**

This study used the descriptive method of research which describes the nature of a situation, as it exists at the time of the study. The descriptive research involves the collection of data in order to test the hypotheses and to answer questions concerning the current status of the subject study. According to Best (2005), a descriptive method of research is concerned with the condition of relationship that exists, practices that prevail, belief, points of view, or attributes that are held, processes that are going on, effects that are being felt or trends that are developing. The researcher also solicited ideas to give solution to the problem. Survey method is found to be an easy way of collecting data to determine the awareness of the respondents. It was a valid method for researching specific subject and as precursor to more quantitative studies. While there were some valid concerns about the statistical validity, as long as the limitations were understood by the researcher, this type of study was invaluable scientific and random tool. Although the results are always open to question and to different interpretations. There was no doubt that such is a helpful tool in performing a research.

**Findings**

The following are the profile variables of the respondents on the assessment of factors affecting online classes among the entrepreneurship student of the Quezon City University according to age, gender, civil status, college year level.

* In term of age, out of 300 respondents indicated that 21-22 years old participants dominated the survey with a total of 53.3% (169), followed by 19-20 years old 19% (57), 23-24 years old 12.3% (37), 25 and above years old 11% (33), and 17-18 years old with 1.3 % (4) respectively.
* In terms of gender, out of 300 respondents dominated by female with a total of 213 (71%) while 73 (24.3%) belonged to male respondents and 14 (4.7%) for the LGBT respectively therefor majority of the respondents are female.
* In terms of civil status, out of 300 respondents 282 (94%) belonged to singled, 15 (5.0%) married, 3 (1.0%) solo parent, and 0 legally separated respectively.
* In terms of college year level, out of 300 respondents 192 (64%) dominated by 3rd year college level followed by 51(17%) 4th year college level, 39 (13%) 2nd year college level and 18 (6%) 1st year college level respectively.
* In term of learning factors, the overall weighted mean is 3.83 and verbal interpretation of agree of the respondents assessment on the factors affecting online classes among entrepreneurship students in Quezon City University (QCU) during pandemic era, and the results of the following indicators as rated by the respondents: speed, quality and cost of internet hinder the proper delivery of study materials to meet deadlines got a highest weighted mean of 4.06 with verbal interpretation of agree while students tend to multi-task playing computer games, sending message, and using Facebook during online classes with a lowest weighted mean of 3.45 with verbal interpretation of somewhat agree.
* In terms of Physical factors, the overall weighted mean is 4.04 with verbal interpretation of agree of the respondents assessment on the factors affecting online classes among entrepreneurship students in Quezon City University (QCU) during pandemic era, and the results of the following indicators as rated by the respondents: Episodes of headache, dizziness, or migraine due to long exposure to laptop and other gadgets got the highest weighted mean of 4.40 with verbal interpretation of agree while Weight gain due to stress eating since the online classes was implemented indicator got a lowest weighted mean of 3.67 with verbal interpretation of agree as rated by the respondents.
* In terms of Emotional and Social Factors, the overall weighted mean is 3.98 and verbal interpretation of agree of the respondents assessment on the factors affecting online classes among entrepreneurship students in Quezon City University (QCU) during pandemic era, and the results of the following indicators as rated by the respondents: Feeling anxious meeting deadlines especially when there is a poor internet connections indicators got a highest weighted mean of 4.44 with verbal interpretation of agree while Social disconnection from classmate and friends indicator got the lowest weighted mean of 3.77 with verbal interpretation of agree as rated by the respondents.
* In terms of Environmental factors, the overall weighted mean is 4.12 with verbal interpretation of agree of the respondents assessment on the factors affecting online classes among entrepreneurship students in Quezon City University (QCU) during pandemic era, and the results of the following indicators as rated by the respondents: Communication barriers particularly noise from neighbors, dogs, roosters, loud music, and lighting are predominant distraction during online classes indicators got the highest weighted mean of 4.48 with verbal interpretation of agree while Transferring from to one place to another to attend the online classes conveniently indicators got the lowest weighted mean of 3.90 with verbal interpretation of agree as rated by the respondents.
* In terms of age, there is a significant difference of the following factors: learning factors with F-value of 263.705, physical factors with F-value of 217.521, emotional and social factors with F-value of 204.161 and environmental factors with F-value of 230.945 with the decision of rejection of the hypothesis of the respondents assessment of the Factors affecting Online Classes among Entrepreneurship students’ of Quezon City University during Pandemic Era.
* In terms of gender, there is a significant difference of the following factors: learning factors with F-value of 283.986, physical factors with F-value of 186.518, emotional and social factors with F-value of 189.867 and environmental factors with F-value of 150.888 with the decision of rejection of the hypothesis of the respondents assessment of the Factors affecting Online Classes among Entrepreneurship students’ of Quezon City University during Pandemic Era.
* In terms of civil status, there is a significant difference of the following factors: learning factors with F-value of 58.375, physical factors with F-value of 216.539, emotional and social factors with F-value of 71.551 and environmental factors with F-value of 86.532 with the decision of rejection of the hypothesis of the respondents assessment of the Factors affecting Online Classes among Entrepreneurship students’ of Quezon City University during Pandemic Era.
* In terms of college year level, there is a significant difference of the following factors: learning factors with F-value of 247.982, physical factors with F-value of 180.037, emotional and social factors with F-value of 168.141 and environmental factors with F-value of 171.929 with the decision of rejection of the hypothesis of the respondents assessment of the Factors affecting Online Classes among Entrepreneurship students’ of Quezon City University during Pandemic Era.

**Conclusion**

Based on the result presented on this study, the researcher concludes the following:

* The profile variables of the respondents in this study, the researcher find out that most of the participants coming from the 3rd year students with a total population of 192 or 64% out of 300 participants while 21-22 years old 53.3% (169) dominated the the study while 213 (71%) out of 300 is female respondents and 292 (94%) is belong to single respondents.
* The following indicators identified from the following factors: students tend to multi-task playing computer games, sending message, and using Facebook during online classes, Weight gain due to stress eating since the online classes was implemented, Social disconnection from classmate and friends indicator and Transferring from to one place to another to attend the online classes conveniently got the lowest score as rated by the respondents therefore this indicators need to be address for further improvements.
* Regardless of the profile variables of the respondents in this study, the researcher find out that there is a significant difference and the rejection of hypothesis of the following factors identified as to the result of the assessment of the factors affecting online classes among entrepreneurship students’ of Quezon City University (QCU) during pandemic era.

**Recommendations**

* The respondents population of the study must be equal in terms of college year level, and gender to avoid biased results.
* Give attentionfor to the lowest point of the study as rated by the respondents to make sure that the learning outcome of the students is in line with the course syllabus and the activities given to avoid any inconvenience and stressful with them.
* Provide an activity that in line with the course syllabus and or the subject that compensate with the time allotted given to the students that balance activity with asynchronous and synchronous to ensure the school work balance and lessen the level of stress of the students .
* The cooperation of the entire households is really important in today’s virtual learning at home and isolated study area to be able to balance the school work and household chores.
* It is important for universities to prepare for any such future crisis. This study results will provide a useful insight to design the online courses effectively by considering all the factors impacting students’ intention and satisfaction.
* Further research studies can expand the scope of this study. Since, most studies have examined the effect and impact in terms of suggesting how to incorporate it within the action plan, and how to gauge responses.

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**Chapter I**

**THE PROBLEM AND ITS BACKGROUND**

**Introduction**

The Philippine educational system is struggling to adapt to the sudden and major shift from traditional to distance learning during the Covid-19 pandemic. The Department of Education (DepEd) has delayed the opening of the school year and has offered Self-learning modules to students at home. Authorities pledged to provide distance learning access for all students, whether through radio, television, modular, or online tools. President Rodrigo Duterte had previously announced that face-to-face classes has not been an option until a vaccine is rolled out, given that the number of cases continues to spike. Despite DepEd’s assurance that every student should be able to handle the new form of learning, difficulties arise for those who lack resources.

COVID-19 has become a global health crisis. As of October 6, 2020, almost 36 million people have been infected and over one million have died. In the Philippines, this translates into almost 325,000 infected and 6,000 deaths ([Worldometer, 2020](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B48)). To curb the spread of COVID-19, most governments have opted to employ quarantine protocols and temporarily shut down their educational institutions. As a consequence, more than a billion learners have been affected worldwide. Among this number are over 28 million Filipino learners across academic levels who have to stay at home and comply with the Philippine government’s quarantine measures ([UNESCO, 2020](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full#B44)).

Lockdown is a state of the emergency protocol implemented by the government to restrict people from leaving their houses resulting in mass quarantines and stay-at-home across the world since March 2020. The whole educational system has been collapsed during the lockdown period of the corona virus disease 2019 (COVID-19) and most of the college educator have encountered similar kinds of challenges and issues. Informal and non-formal education is also tremendously affected. However, it is a well-established assumption that no pedagogical approach can replace the peak position of formal education due to having professor taught direct interaction.

To respond to the needs of learners, especially of the 3.5 million tertiary-level students enrolled in approximately 2,400 HEIs, certain HEIs in the country have implemented proactive policies for the continuance of education despite the closure. These policies include modified forms of online learning that aim to facilitate student learning activities. Online learning might be in terms of synchronous, real-time lectures and time-based outcomes assessments, or asynchronous, delayed-time activities, like pre-recorded video lectures and time-independent assessments ([Oztok et.al., 2013](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B36)). Case in point are top universities in the country, viz., De La Salle University (DLSU), Ateneo de Manila University (AdMU), the University of Santo Tomas (UST), and the state-run University of the Philippines, Diliman (UPD).

As the aftermath of COVID-19 crisis exist, online education became a pedagogical shift from traditional method to the modern approach of teaching-learning from classroom, from personal to virtual and from seminars to webinars. Previously, e-learning, distance education and correspondence courses were popularly considered as part of non-formal education, but as of now, it seems that it gradually replaces the formal education system if the circumstances enduringly persist over the time.

**Background of the Study**

Online teaching-learning became a massive challenge to deal with, and stakeholders are not potentially fit to adjust with the sudden educational change as they are not technologically competent to embrace the current situation. The major challenge while teaching online is the unstable network connection. If the videos and audios of the students are kept off, the connection remains more stable, but that mode of teaching seems to teach to a blank wall. It is perceived that some of the students have no essential resources to join online; There it appeared like pushing the digital divide further. Ergo, the difficulties with online teaching are both technical and ideological. Most of the challenges have been related to the students and their responses to the needs of online teaching, which include uninterrupted electricity connection and intermittent signal issues. Among others, level of understanding and lack of scope for meaningful interaction are unable to read the face and mood of students, and thus, difficult to change the teaching pattern.

Teachers have been in a dilemma as they are not sure of whether the students just switch on the computer to be actively present at the moment or sit somewhere else. The online classes are any how problems in certain subjects where the content is abstract in which any concepts exist that need real face-to-face interaction for complete understanding. Relying on online interaction is detrimental to the health visually and physically too. Students who do not have their laptop or desktops at home only use their mobile phones to participate in their online classes and it becomes ineffective considering that some mobile phone are low specification. Besides, during the lockdown period, individual families have been struggling with financial problem and could not afford to buy new gadgets for their online class.

**Theoretical Framework**

The level of stress both of the professor and the students shows that they do not have conducive learning environment at home. Since online teaching-learning is a new experience for both, it is noticed that the stressful situation has bee involved.

On top of these concerns, there are deep socio-economic concerns for online learning in a developing country like the Philippines. Students in far-flung areas in the country do not even have roads or electricity. They have less access to computers and the internet. Moreover, given current internet infrastructure, even students in urban areas may have limited internet access. This then results in a “digital divide” between those who do have access and those who do not. The Philippines does not have a national policy dealing directly with online platforms such as Massive Open Online Courses (MOOCs), Open Distance e-learning (ODel), and Open Educational Resources (OERs). While there are laws, like the *Open Distance Learning Act* ([Sixteenth Philippine Congress, 2014](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full#B43)), which provide legal bases for funding such platforms, they are not enough as “some national policies will have to be put in place to sustain the growth” of these online platforms ([Bandalaria, 2019](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B8)). The Philippines is not the only country facing these problems. Its southeast asian neighbors have creatively responded to the same challenges and started to pivot to a new era of education.

**Conceptual Framework**

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| --- | --- | --- |
| **INPUT**  Profile of the Respondents   * Age * Gender * Civil status * Year level in College * Learning factor * Physical factor * Emotional and social factor * Environmental factor * Assessment of the the factors affecting online classes among Entrepreneurship students’ of Quezon City University during pandemic era * Presentation of analysis and interpretation of gathered data through survey questionnaire * Profile of the respondents identified * Solution and recommendations   **FEED BACK** | **PROCESS** | **OUTPUT** |

The conceptual framework discusses the flow of the study. Input box contains the profile variables of the respondents. The process box contains the research instruments where in the respondents answer the specific questions pertaining to factors affecting online classes, analysis and interpretation of the collected data. Output box contains the derived goal from the survey and solution to the problem identified.

**Statement of the Problem**

This study aimed to determine the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of the following?

1.1 age;

1.2 gender;

1.3 civil status, and

1.3 year level in college.

2. How do the respondents assess the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic in terms of the following aspects:

2.1 Learning factor;

2.2 Physical factor;

2.3 Emotional factor: and

2.4 Environmental factor.

1. Is there a significant difference on the respondents’ assessment of the factors affecting online classes among Entrepreneurship students of Quezon City University during pandemic in terms of the aformentioned aspects when they are grouped according to the respondents’ profile?

**Hypothesis**

The hypothesis was tested at .05 margin of error. There was no significant difference on the respondents assessment on the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic when grouped according to profile.

**Scope and Limitations of the Study**

The research was conducted to evaluate and understand the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic. This study limited itself to the analysis of data derived from furnished questionnaire and opinion to further clarify the subject-matter. The gathered data of this research were derived from primary and secondary sources. The primary source of information for this research was taken from survey questionnaires which were accomplished by the respondents of this study. On the other hand, the secondary sources of data came from published articles, journals, theses, dissertations, and related studies of the factors affecting online classes among Entrepreneurship students during the pandemic.

The researchers only focused on the factors affecting online classes among Entrepreneurship students of Quezon City University during pandemic being assessed of the entrepreneurship students using internet and Google classroom.

In this study, the questionnaires were use to collect quantitative data, which were presented by means of tabular presentation and illustration and the differences were highlighted.

**Significance of the Study**

This study will be beneficial to the following:

**Researchers.** The study is beneficial to the researchers as they made a thorough analysis of the factors affecting online classes among Entrepreneurship students of Quezon City University during pandemic

**Academe**.It will find the study’s usefulness as reference material in professing the factor affecting online classes among Entrepreneurship students of Quezon City University during pandemic.

**Future Researchers.** It may contribute to the knowledge that will serve as reference to future researchers who want to pursue further study similar or related the subject matter.

**To other Researchers.** This will benefit the other researchers who plan to conduct other studies related to the factor affecting online classes.

**Definition of Terms**

Several terms used throughout this document were defined in this section for clarity. Defining terms may also serve to communicate limitations in their usage. The following terms were defined with a brief outline of intended meanings.

**Asynchronous Learning** - It is a general term used to describe forms of education, instruction, and learning that do not occur in the same place or at the same time. It uses resources that facilitate information sharing outside the constraints of time and place among a network of people. (wikipedia.org)

**Coronavirus Disease 2019 (COVID19)** - It is a [contagious disease](https://en.wikipedia.org/wiki/Contagious_disease) caused by [severe acute respiratory syndrome coronavirus 2](https://en.wikipedia.org/wiki/Severe_acute_respiratory_syndrome_coronavirus_2) (SARS-CoV-2). (wikipedia.org)

**Digitalization** - It refers to the use of desktop computers, mobile devices, the Internet, software applications, and other types of digital technology to teach students of all ages. (google.com)

**E-Learning** - It is a learning environment which uses information and communication technologies (ICT's) as platforms for teaching and learning activities. It has been defined as "pedagogy empowered by technology", though 'digital technology' is more accurate. (https://www.learnupon.com/)

**Emotional Factor** - It refers to a performer’s feelings and how these can influence the outcome of any activity. (https://www.satpe.co.uk/)

**Environmental Factor** - It refers to the continues process of learning often affected by the environment in which takes place one’s situation that affect his behavioral changes throughout his life, through direct and indirect experiences. (https://en.wikipedia.org/)

**Learning Factor -** It is the process of acquiring new knowledge, understanding, skills, attitude, behavior, and preferences from both emotional and intellectual process. .(https://nobaproject.com/)

**Online classes** - It refers to the environment created through the use of a learning management system that allows students and teachers to connect either synchronously and asynchronously. (https://tophat.com/)

**Pandemic** - it is an [epidemic](https://en.wikipedia.org/wiki/Epidemic) of an [infectious disease](https://en.wikipedia.org/wiki/Infectious_disease) that has spread across a large region, for instance multiple [continents](https://en.wikipedia.org/wiki/Continents) or worldwide, affecting a substantial number of people. (wikipedia.org)

**Pedagogy** - It is the theory and practice of [learning](https://en.wikipedia.org/wiki/Learning), and how this process influences, and is influenced by, the social, political and [psychological development](https://en.wikipedia.org/wiki/Psychological_development) of learners. Pedagogy, taken as an academic discipline, is the study of how knowledge and skills are imparted in an educational context, and it considers the interactions that take place during learning. (wikipedia.org)

**Physical Factor** - It refers to the health, nutrition and physical development affect the learning process.(https://www.oxfordreference.com/)

**Social Factor** - It refers to a process in the classroom that takes place when the learners interacts with instructors and peers. (google.com)

**Synchronous Learning** - It refers to a [learning](https://en.wikipedia.org/wiki/Learning) event in which a group of students are engaging in learning at the same time. (wikipedia.org)

**Chapter 2**

**REVIEW OF LITERATURE AND STUDIES**

This chapter presents the review of literature and studies that are mainly but not limited to the research, articles on agreement of factors affecting online classes among Entrepreneurship students of Quezon City University during pandemic era. These literature and studies are sources of information relative to the current study.

**Online Classes**

The Philippines enters various lockdown every month with Manila on its third strictest lockdown this 2021 since the COVID-19 pandemic broke out last year online classes in the Philippines will continue. Most students and teachers would like to go back to face-to-face classes, but they really can’t do anything, for now, other than follow the government’s recommendation to continue mobile learning. For students who cannot participate in online learning, there are flexible options for completing course requirements throughout the academic year ([De La Salle University, 2020a](#B15)). ADMU has suspended synchronous online classes but continued asynchronous online learning so that “all students can learn at their own pace” ([Villarin, 2020](" \l "B47" \t "_blank)). the HEIs’ pivot to modified forms of online learning attempts to concretize the government’s stance to continue learning despite the pandemic. As the Philippine’s Department of Education (DepEd) Secretary, Leonor Briones quipped, “Education must continue even in times of crisis whether it may be a calamity, disaster, emergency, quarantine, or even war” ([Department of Education, 2020](#B19)). The Philippines’ Commission on Higher Education (CHEd), on the other hand, advised HEIs to continue the “deployment of available flexible learning and other alternative modes of delivery in lieu of on-campus learning” ([Commission on Higher Education, 2020](#B13)). These pronouncements aim to encourage the continuance of learning. Without implementing rules and regulations, however, private HEIs are left to make their own policies.

There is an issue about the “lack of environments conducive to learning at home and the effectiveness of the online lectures” ([Bagayas, 2020](" \l "B6" \t "_blank)). Social media hashtags like, #NoStudentLeftBehind, #NoSchoolLeftBehind, #EndOnlineClasses, #EndTheSem, and #NoToOnlineClasses strengthen these sentiments further. The other concerns, however, have already been noted by experts in the field of distance education. First, there is the issue of social integration and peer culture, and the possibility of transmission of values in a “virtual” classroom. Since there is a lack of human interaction in the learning process, students may learn less in such a set-up as opposed to those in the traditional classroom ([Edge and Loegering, 2000](#B20); [Gamage et al., 2020](" \l "B22" \t "_blank)). Second, there is also an issue on the unnaturalness and the results of online learning, since it goes against how natural teaching and learning supposedly take place ([Larreamendy-Joerns and Leinhardt, 2006](" \l "B28" \t "_blank); [Adnan and Anwar, 2020](" \l "B1" \t "_blank)). The lack of face-to-face human interaction in the online learning space and process appears disconcerting to both educators and learners alike. Perhaps, some teachers might go back to basics and distribute annotated physical textbooks to their students through courier services. As long as the education sector is engaged, teachers and students have ample support, the curriculum and content of the learning modules are well-defined and personalized, technological limitations are acknowledged, and user-friendly and enjoyable materials are present, education will continue one way or another ([Ramos et al., 2007](#B41); [Ali, 2020](#B3)). Such support presupposes a collaboration between teachers and policymakers and authorities to develop the relevant referenced programs as well.

Online classes in the Philippines are courses delivered over the internet and are a popular form of flexible learning. Because of the pandemic, mobile learning is the only option to keep up with your studies. Students can choose to take classes online or in a modular format. As a result of the pandemic, educational institutions, including instructors and students, were forced to migrate online with which they were unfamiliar. The students were unprepared for such a change in their lives. As a result, the purpose of this study will be to determine what factors affect students and how they perceive these changes as shown in their satisfaction levels. (Gopal et al., 2021).

**Pandemic era**

The word pandemic was, for mos people, associated with disaster movies and history books. Despite repeated warning about the very real risk of occurrence from infectious disease experts, it felt remote and distant, not something for most people to worry about day to day, that experience has now been transformed almost everywhere (doi.org published 2021). COVID-19 has become a global health crisis. As of October 6, 2020, almost 36 million people have been infected and over one million have died. In the Philippines, this translates into almost 325,000 infected and 6,000 deaths ([Worldometer, 2020](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B48)). To curb the spread of COVID-19, most governments have opted to employ quarantine protocols and temporarily shut down their educational institutions. As a consequence, more than a billion learners have been affected worldwide. Among this number are over 28 million Filipino learners across academic levels who have to stay at home and comply with the Philippine government’s quarantine measures ([UNESCO, 2020](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full#B44)). As we move into 2021 and vaccine roll out scales up, many will be hoping that we can put the COVID-19 pandemic behind us. However, even if we manage a speedy recovery, we need to know that COVID-19 was an unavoidable and requires more self-reflection and capacity for change (doi.org published: January 2021).

Most of the governments around the world have initiated a common goal to curb the spread of this highly contagious disease by imposing lockdown, social/physical distancing, avoiding face-to-face teaching-learning, and restrictions on immigration. Around 600 million school-going learners are affected across the world due to the closing down of educational institutions (Goyal, 2020). Consequently, Education systems have also received their part and witnessed the treats of the outbreak of COVID-19. On one side, most of the countries around the world provisionally stopped their educational institutions in an attempt to avoid the spread of the[COVID-19 pandemic,](http://www.who.int/emergencies/diseases/novel-coronavirus-2019) according to, a UNESCO report on April 25, 2020, the numbers of affected learners in 146 countries worldwide are 1,186,161,728 where 67.7% of the total enrolled learners. On the other side, almost all countries in the world have moved to online mode of education systems to cover the gaps created by this pandemic, this is what the key role of technology has been sensed by those who were not paying attention and importance to the use of technology in education systems, mostly in underdeveloped countries. However, students are just kept learning to utilize the use of technology in developing countries where required facilities are accessible such as high-speed internet and online resources. But the same situation in underdeveloped countries where there is a lake of high speed internet and less familiarity with technology and digital devices is covered different alternatives like radio and television broadcasting to help students learn and use their time well while staying at home.

**The Learning Factors**

Due to the global pandemic COVID-19, many sections of the world are currently on lockdown and the impact of the pandemic can be observed throughout all industries, including education. During the widespread of the virus all schools and universities around the world have been affected, and many educational institutions get forced to continue giving courses online because it is the only option. Amidst this situation, the institutions have been forced to switch from face-to-face to e-learning. Since the transition from traditional to online teaching and pedagogical approaches were so rapid, some higher educational institution (HEIs) have not been able to fully incorporate content digitalization. As a result, it has become important for every educational institution to sustain its teaching standards as well as enrollment during this trying time. A lot of HEIs may be findin it difficult to shift from traditional to online teaching at this time as they become unable to to keep up with others’ paces. As a result, it is critical for educational institutions to comprehend the variables that are significant in persuading students to continue taking online courses in the future (Maheshwari, 2021).

*Speed, quality and cost of internet hinder the proper delivery of study materials to meet deadlines.*

The availability of internet in provincial and rural areas, the speed and cost of internet, the availability of electronic devices to access the internet, and the lack of interaction between students and lecturers are among the most prominent issues related with online education in general. To improve online education in general, it is advised that platforms for online learning be provided, that students be provided with electronic devices to access the internet, that internet speed be improved, that lower or even free internet packages be provided during the pandemic, that lecturers be provided with professional training, and that student-teacher contact be improved. The students think that it is difficult to fulfill the learning skills competencies acquired thru online education system. Online education could be improved by making it more interactive, showing the activities in real situation, giving concise information, and providing different tools for learning (Mahdy, 2020).

A study recognizes the importance of individual factors in the adoption and effective use of the e-learning facilities which will improve the private HEIs by recognizing the social dimensions of e-learning adoption and use such as the academic and professional goals, interest and needs, sources of work pattern and social network (Singh and Hardaker, 2014).

The study of Eze, et.al (2020) reveals that technology-related factors (ease of use, speed accessibility and service delivery), organization-related factors (training support and diversity), environment-related factors (attitudes of the users) and impact-related factors (learning experience, skill development, academic performance, and degree of engagement) influence the students’ adoption of e-learning facilities.

They also have to do with how much effort the production side has to invest into the student support services. The students will be very confused and in need of a lot of advice (administrative concerns, technological challenges, how to be an online learner, and so on) in a context where e-learning is new and ICT literacy is poor (Andersson, 2008).

*Professor’s technical know-how on various modes of instructions and platforms.*

Online teachers must be technologically knowledgeable and conversant with the latest online tools and technologies because classes are delivered via online. Teachers can stay updated on the latest advancements by incorporating technologies into their daily lives. Teachers who think outside the box and prioritize creative thinking are better suited to assist students flourish in a digital learning environment. Teachers may use online learning to innovate and create compelling learning experiences for their students. A lack of training is another reason why college teachers are still struggling with education technology. Professors from previous generations did not receive any education technology training when they were learning to teach in higher education because education technology did not exist at the time.Even today, however, there is a scarcity of education technology training, both in the form of ongoing training for existing academics and in the form of initial training for qualified professionals. To summarize, college instructors continue to struggle with education technology because they are unfamiliar with the full variety of education technology available and do not always know how to use it appropriately (Lynch, 2018).

According to Hendricks, et.al. (n.d.) regardless of the delivery mode, professors have a major impact and influence in the classroom. In an online learning environment, the mere presence of the instructor is found to positively impact the student’s level of affective learning, cognition, and motivation. It is important for professors to begin redesigning courses to promote positive professor-student relationship and engaging lessons with student support. Professors must understand the technological aspects of online courses when redesigning and teaching online courses. Technological needs are ever changing in education, as with any change, professor who teaches online must remain updated on the technological changes related to online platforms. Thus, there will always be a need for professors to constantly gain insight through quality professional development to implement the most updated technology available.

*Student’s span of attention during class discussion.*

According to some psychologists, the average student's attention span is 10 to 15 minutes despite the fact that most university classes are 50 to 90 minutes. It is natural for students' attention levels to fluctuate depending on their motivation, mood, and perception of the material's importance among other things.

The students in the 21st century do not have the same attention span as students in the previous ten or twenty years. According to educational studies, kids focus on a single activity for 10-18 minutes, seven to eight minutes, or even two minutes. According to research, students' capacity to keep attention decreases during the class hour, even if they lose focus for little than a minute before refocusing. Additionally, when teachers use student-centered pedagogies, kids focus more successfully. Since students are more actively engaged at the start of class, aside from the first few minutes when they are settling in, it may be more efficient to start with lectures and transition to an activity around 20-25 minutes into the class hour. Teachers can then return to summarize the exercise, which will increase student interest and engagement because it is a reflection of what they just did. Regardless of the format, research suggests that incorporating activities and varying material delivery formats helps keep students engaged (Blake, 2021).

In the study of Cicekei, et.al. (2019), it was observed that the teachers perceived the attention problems that the students experienced during the course mostly as a problem arising from the students themselves while the students associate this problem not only with themselves, but also with other students, teachers and the environment. Some psychologists claim that the typical student’s attention span is about 10 to 15 minutes long, yet most university classes last 90 minutes. It is natural for students attention levels to vary according to motivation, mood, perceived relevance of the material, and other factors.

*Professors motivate students to participate in the class recitation but they remain passive.*

According to Ramos (2018), to be motivated means to be moved to do something. A person who feels no impetus or inspiration to act is thus characterized as unmotivated, whereas someone who is energized or activated toward an end is considered motivated. In the classroom setting, students motivation refers to the degree to which a students puts effort into a focus on learning in order to achieve successful outcomes. Motivations and engagement are very important for sound student learning.

In situations where the educational tradition is very teacher-centered, it is important to recognize that implementing e-learning requires a significant shift, and learner-centered learning must be supported by interactivity, feedback, and self-assessment tools like continuous assessments.The rookie e-learner wants to know that someone is there (as a substitute for the classroom teacher they sorely miss), and any e-learner, no matter how self-managing, wants to keep track of his progress (Andersson, 2008).

According to D. Johnson (2017), motivation has an impact on students' learning. Though pupils are born with the aptitude to learn, they depend much on the engagement of teachers. Students' energy, ambition, and excitement for a subject or endeavor can fade at times, necessitating further reinforcement from outside sources. External assistance is frequently provided by teachers, who are responsible for creating a supportive environment that supports and promotes pupils' learning. Teachers' support for growing students' autonomy, relevance, relatedness, competency, teachers' interests, and teachers' self-efficacy about teaching their subject is seen as a key factor in promoting students' motivation. Although students' desire to study might be intrinsic or extrinsic, the teacher's involvement in supporting their learning and establishing the ideal environment will help them learn more effectively.

*Students tend to multi-task by playing computer games, sending message, and using Facebook during online classes.*

Evidence from the psychology, cognitive science, and neuroscience suggest that when students do multitask while doing schoolwork, their learning is far spottier and shallower than if the work had their full attention. They understand and remember less, and they have greater difficulty transferring their learning to new context (Schmidt, 2020).

According to research, college students frequently engage in many online activities at the same time when using the Internet (Moreno et. al., 2012). In other words, when college students are online, they tend to multitask. This may also be true in online learning environments. Research by Manwaring, Larsen, Graham, Henrie, and Halverson (2017) discovered that multitasking increased throughout the online section of mixed university courses (i.e., courses that combine face-to-face and online learning). If multitasking is more common in online courses than in face-to-face courses, theory and empirical evidence imply that primary task performance suffers as a result. This is due to the fact that our cognitive ability for completing any activity.

If a student has never taken a distance learning course before, it is likely to be difficult for him to make the adjustment. The students may not have access to a home environment that promotes successful study habits, such as a quiet space devoid of distractions. This may be compounded by the fact that more family members are working from home or are unemployed (Brynjolfsson, et al., 2020). the students must deal with personal habits tied to digital gadgets, in addition to interruptions from family members, while they study from home without the supervision of teachers to keep them on course. The students in middle school, high school, and college were only able to stay on task for 65 percent of the time in 15-minute increments at home in one study, with typical on-task runs lasting less than 6 minutes (Rosen, Carrier, & Cheever, 2013). The social media - Facebook, as well as texting while studying, were said to be the main distractions. Despite the overwhelming evidence of multitasking's negative impacts on student performance, many students appear to be overconfident in their ability to multitask efficiently (Kirschner & Bruyckere, 2017).

The COVID-19 pandemic, a public health crisis of worldwide importance, announced by the World Health Organization (WHO) in January 2020 as an outbreak, has made distance education through the E-learning system an urgent and irreplaceable requirement. As a result, the effectiveness of E-learning and students’ online learning outcomes become a matter of concern for universities in particular and society in general. There has been a significant increase in research on factors affecting students’ online learning outcomes (Pan et al., 2021). The COVID-19 pandemic situation has impacted the entire education system, especially universities, and brought a new phase in education “e-learning.” The learning supported with electronic technology like online classes and portals to access the courses outside the classroom is known as e-learning. This study aimed to point out the variables influencing the quality of e-learning, such as administrative support, course content, course design, instructor characteristics, learner characteristics, social support, and technological support. (Elumalai et al., 2020). According to Helma & Murni (2021), The factors affecting of learning outcomes during the Covid-19 pandemic are student background, learning attitude, and learning style. In particular, the indicators that influence student learning outcomes are the ease of obtaining internet access, the need for time to study that is not under the schedule, not confidence in solving Real Analysis problems/exercises, not being able to understand Real Analysis material independently, and student learning styles.

The provision and usage of online and e-learning systems are becoming the main challenge for many universities during the COVID-19 pandemic. E-learning system such as Blackboard has several fantastic features that would be valuable for use during this COVID-19 pandemic. However, the successful usage of e-learning systems relies on understanding the adoption factors as well as the main challenges that face the current e-learning systems. There is a lack of agreement about the critical challenges and factors that shape the successful usage of e-learning systems during the COVID-19 pandemic; hence, a clear gap has been identified in the knowledge of the critical challenges and factors of e-learning usage during this pandemic (Almaiah et al., 2020). Educational institutions worldwide had to shift the teaching delivery mode from face-to-face to online teaching during COVID-19. Most of the universities in Vietnam were based on face-to-face learning until the sudden outbreak of COVID-19 (Maheshwari, 2021). Many universities and colleges worldwide suspended classroom teaching due to the novel coronavirus pandemic and switched to online teaching. The current cross-sectional study was carried out to analyze the impact of the COVID-19 lockdown on the academic performance of veterinary medical students and researchers. (Mahdy, 2020).

Online learning systems owing to their nature are free of restrictions of time or place and can prove to be a useful platform for students where they can continue their studies when it is not possible for them to go to a university in person owing to different reasons. (Mustafa, 2021). Virtual “online” teaching has been adopted by most universities around the world during the COVID-19 outbreak. This study aims to investigate the factors that might affect students’ preference for virtual learning. Since the second wave of such a pandemic is expected to occur, professors and teaching assistants may want to be prepared and aware to create an effective virtual learning environment for students (Al-Azzam & Gombedza, 2020). Recently, the emergence of COVID-19 has witnessed a high acceleration towards the use of information and communication technologies in educational institutions. To cope with these sudden conditions, many educational institutions, including universities, have made distance electronic platforms available to their students and teachers. However, the limited adoption and use of these new electronic platforms among students is considerable concern among teachers and parents. The use of technologies during COVID-19 is beneficial for educational institutions and the more frequently and more diverse the technology being used the better. There is a growing paradigm shift towards technologically driven research, teaching, and learning to improve a student’s productivity( 2021).

**Physical Factor**

In 2020, a global pandemic occurred caused by a virus COVID-19. According to WHO (2020), Covid-19 was originated in Wuhan, China, caused by a virus called SARS-Cov-2. It was on December 21, 2019 when WHO learned about the cluster cases of COVID -19. An alarming number of affected individuals within China and other countries like Canada, Finland, and Australia thus by January 30, 2020, the Emergency Committee of WHO declared an outbreak of COVID-19 (Lee, 2020).

According to Edrada E. et. al. (2020), first suspected cases of COVID-19 was reported on January 22, 2020, both are Chinese nationals traveling for vacation. Both were confined in San Lazaro Hospital. The illustration showed the travel path of the two Chinese Nationals. Prior to pandemic, online learning had been a method of learning specially on higher education. Dr. Harasim cited by (Scigliano, 2000), claimed that online education as a new paradigm for learning wherein the twenty first century opens new innovative discipline of learning to with the help of the web. Another point is online education serves as platform of collaboration of teachers and students. As stated in the research of Wallace (2003), online becomes a community of transmission of information. In the United States, several colleges and universities have shifted from traditional classes into either online or blended to have competitive edge and make classes more accessible to increasing number of students (Keengwe, J. & Kidd, T. 2010).

In a total of 195 countries all over the world, 191 counties were affected by COVID-19 (UNESCO, 2020b). Around 429 universities across the world were shut down and started conducting online classes and e-learning (UNESCO, 2020a). COVID -19 has changed the complete phase of the education sectors. At this global pandemic time, administrators, teachers, and students had the dilemma of how to achieve the overall objectives of the institutions and individuals. In March 2020, the Center for Disease Control and Prevention issued guidelines on the alternative teaching methods to communicate the class works and assignments to the students. The popular virtual classroom applications are ZOOM, Google Classroom, Moodle, and Blackboard and play a vital role in the transition from face-to-face classes to online and e-learning system (Stone, 2020). The COVID -19 pandemic situation has impacted the entire education system, especially universities, which brought a new phase in education “e-learning.” Learning supported with electronic technology such as online classes and portals to access the courses outside the classroom is known as e-learning (Ngampornchai & Adams, 2016). Though adopting e-learning is a challenge for the teachers and students (Kuhad, 2020), academicians are incorporating this phase of e-learning by equipping the gadgets and internet facilities for the smooth flow of e-learning. In the emerge of the pandemic, education was one of the greatly affected even the higher education was affected. In a survey by Marinoni, G., Van’t Land, H., & Jensen, T. (2020), 59% of HEI campuses were forced to closed due to COVID-19. Therefore, HEIs shifted to online classes to ensure safety of stakeholders while continuing the learning process. Several challenges surfaced as classes shifted from traditional to online. Among these challenges was the health and safety. In setting-up online classes, health and safety of the stakeholders is a top priority (Sahu, 2020).

**Physical Effects of Online classes to student**

Migrating to online classes limits the movement of students being confined at home. One concern is the decrease in physical activities and develop sedentary behavior. The sedentary behavior may result to negative health due to limited physical activities Tremblay M. et al., 2010). In a study conducted by Blanco, C et al., (2020) it showed that there might be an increased in sitting time due to online classes physical activities also increases among student especially male student. In a similar study, increase in Body Mass Index (BMI) is one of the effects of closure of universities due to pandemic (Barkley, J. E. et al., 2020). BMI as defined by Centers for Disease Control and Prevention (2021) refers to the person’s weight over his height in meter. BMI also indicates body fat and it is also a tool to measure obesity. Diabetes, high blood pressure, hearth disease, stroke, sleep apnea are some of the many health risks of overweight or obesity according to National Institute of Diabetes and Digestive and Kidney Diseases (2018).

Body pain is also a result of sedentary behavior, with the increased in screen time and longer sitting time, students complained body pain. Figure below illustrates the hierarchy of body discomforts during the lock down. In addition, in a study result by Dol (2016), college students who are moderate users of internet or computer experience fatigue and body pain that are significantly experienced by female students than male in areas of eye, neck, and shoulder. New step-up of classes resulted to 57.01% increase in screen time among students, and as result there is also an increase in the digital eye strain 19 (Ganne, P. et al., 2020). Screen Time is a term used in front of any digital screen (Kaneshiro, (2019). Whereas eye strain as defined by Mayo Clinic (2020), as a condition when eyes get tired due to staring at computer and other digital device in an extended period. The symptoms include itching, watery or dry eyes, headaches, and increased sensitivity to light. On the other hand, to avoid digital eye strain, intervention can be made such as frequent blinking, 20-20- rule (every 20 minutes take 20 second break by shifting vision), human factors and ergonomic intervention, proper lighting and angle of the screen.

UNESCO ([2020](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR68)), confirms that universities and schools closure have several adverse consequences on students such as interrupted learning which results in students and youth being deprived of opportunities for growth and development. Therefore, online digital learning systems can address this problem with easy access to these systems and offer fast internet connections. The success of e-learning system depends on students’ willingness and acceptance to use this system (Almaiah and Jalil [2014](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR18); Almaiah and Alismaiel [2019](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR14); Shawai and Almaiah [2018](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR60)), a lack of e-learning system usage hampers the realization of benefits (Almaiah et al. [2019a](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR22); Almaiah et al. [2019b](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR23); Almaiah and Al-Khasawneh [2020](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR15)). The result is an unsuccessful system and is a waste of universities money (Naveed et. al., [2017](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR51)). Research on this topic is still at its infancy, where the views of the students are not fully studied (Tarhini et. al., [2017](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR63); Almaiah and Alamri [2018](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR13)). Studying e-learning adoption can lead universities to better understand their students’ needs, and eventually lead to a successful e-learning system (El-Masri and Tarhini [2017](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR32); Alksasbeh et. al., [2019](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243735/#CR10)). There is still no thorough analysis of challenges and factors influencing the usage of e-learning system during COVID-19 pandemic despite that e-learning systems were introduced in many universities almost 3 years ago.

**Emotional and Social Factors**

Online learning has gained widespread acceptance and has now been seen as a valuable tool for overcoming the limits of on-campus learning, particularly in higher education. Learning technologies are often accepted based on technological ideas and apparent simplicity of use. It is reasonable to believe that among other things, students' emotional experiences influence their usage of educational technology. Although there has been an increase in study on emotions in technology-supported learning settings in recent years, the topic of how students emotionally experience online learning environments and how these emotions are intertwined with technology adoption have yet to be fully resolved. Only a small number of research have focused on university students' emotions and technological adoption, particularly in teacher education (Stephan, Markus and Glaser-Zikuda, 2019).

Personal factors such as instincts and emotions, and social factors such as cooperation and rivalry, are directly related to a complex psychology of motivation. It is a recognized fact that the various responses of the individual to various kinds of stimuli are determined by a wide variety of tendencies (Mondal, 2018). According to Lutz, (2018), emotion in the learning process impedes or motivates learning, facilitates self-regulated processes, or produces different problem solving processes. In short, emotion plays a critical role in understanding the learning and performance of human beings.

According to the research of O’Regan (2017), particular emotions experienced online include frustration, fear, anxiety, apprehension, embarrassment, enthusiasm/excitement and pride. Rowe (2018) identifies various emotions experienced by learners and teachers from the beginning to the end of learning online. She introduces those emotions under three metaphors: connection, balance, and movement. Those emotions should be understood in not only from an individual perspective but also the sociocultural aspect where the meanings of emotions are developed, ‘discourses’, so to speak. This position of Row is quite unique reflective analysis not found in other research. Three discourses of emotion either shaping or constraining the felt and expressed emotion are to be ‘emotion negation’, ‘social uptake’, and ‘caring police’.

Kim (2018) and Astleitner (2017) also focus on identifying ‘emotions’ experienced in the e-learning context. Kim (2018) reports various emotions including frustration, resistance, pride, relief, expectation, fear, anxiety, hopelessness, confidence, envy, and complex; this confirms that emotion functions with the integration of cognition, motivation, and action. Rha and Sung (2016) suggest six domains of emotional expressions elements (pleasure, concern, disappointment, anger, pride and delightfulness) frequently experienced in an online learning community using an electronic bulletin board where one hundred and twenty elementary students were exchanging messages, writing opinions, and reading others’ works. They have also found significant relationships between the emotional factors and the message dimensions (social, interactive, cognitive, & meta-cognitive). That is, certain emotional factors are rather frequently used by certain dimensions of message boards. For example, ‘pleasure’ appeared evenly in all the message dimensions, however, ‘pride’ appeared strongly only in the cognitive and meta-cognitive dimensions, which are strongly related to ‘learning’.

Various studies have asserted that positive and negative emotions are the psychological bases of cognition and behavior changes within computer based learning or web-based learning and further anticipate the directions of learner behaviors. As Sujo de Montes and Gonzales (2017) assert, it is important to understand emotions learners experience in the contents as much as the content and assignments.

Vuorela and Nummenmaa (2019) examined which events cause emotional reactions in students. In a collaborative learning environment called ‘Work Mates’, which provides asynchronous text-based commentary and discussions, ‘the course design in general’ and ‘interactions within learning environment’ bring about emotions more than the causes relating to the workmate or to the functionality of technology. This suggests that the presence of others in a virtual environment is an important antecedent of students’ affective reactions in e-learning situations as in face-to-face learning situations.

Kang and Goo (2017) claim that in a blended learning environment, demonstrated ‘emotional facilitation of thinking’ out of five sub types of emotional intelligences significantly predicts achievement in online team learning, but not ‘online individual learning’ or ‘offline learning’. This finding implies that emotional facilitation of thinking would affect those abilities necessary for team learning and draw high academic achievement. There are significant changes in students’ affective reactivity during the different periods of the course. There are at least two possible explanations for this. Firstly, negative emotions occur often in situations in which people experience events that conflict with their goals and needs. Secondly, negative emotions are likely to result in social conflicts (Frijda, 2016). Leaving that aside, there are many perspectives on emotion. As Tyng et. al. ([2017)](https://jime.open.ac.uk/articles/10.5334/jime.472/#B26)  assert, ‘Although emotion has long being studied, it bears no single definition’; it is instead an umbrella concept covering affective, cognitive, expressive and physiological components which may or may not cohere over time. Tyng et. al. cite learning as being a function of one of the primary neural networks for all mammalian brains (the so-called SEEKING module). If learning is seen as a social and cultural process, then it depends on mastery and internalization of social interactions, and this is where teachers actively contribute in creating the emotional climate of learning. Williams, Childers and Kemp ([2018, p. 209](https://jime.open.ac.uk/articles/10.5334/jime.472/#B27)) show that positive emotions in a classroom environment can stimulate and enhance learning behaviors by augmenting the scope of individuals’ cognition, attention and action, and build psychological, social, intellectual and physical resources.

Rowe and Fitness ([2018](https://jime.open.ac.uk/articles/10.5334/jime.472/#B25)) cite continued challenges in asking the right questions about emotion and learning, suggesting that— as reported by faculty and students—‘negative emotions’ can both promote and inhibit learning, ‘given the complexity of interactions between variables such as task requirements, interpersonal relationships, achievement goals and cognitive resources’.

Freerkien’s ([2017](https://jime.open.ac.uk/articles/10.5334/jime.472/#B10)) says that the study of language students and the interaction between affective, motivational and cognitive factors concluded that, for older learners, motivation is more important, whereas for younger learners affective and contextual factors are more significant; the classroom is thus a dynamic system. Even social-cultural factors – such as how learning is evidenced, publicized and ‘performed’—influence emotion; Huang’s (**2017**) meta-analysis suggested that ‘mastery’ goals elicited more positive emotions than ‘performance avoidance’ goals: the goal to master a skill is a more positive and effective motivator than pursuing performance-avoidance goals to avoid looking stupid.The online space is not a classroom, however, too easily, perhaps, do the designers of online spaces and virtual learning environments (VLEs) fall into a content-publishing mentality: the screen, with its promises of limitless scalability is a distancing device as well as a space for interaction. Yang, Taylor and Cao ([2016](https://jime.open.ac.uk/articles/10.5334/jime.472/#B28)) attest that, while e-learning and the classroom are different in many ways, some of the same principles apply to both, suggesting that it is ‘critical for online instructors and course designers to create a learning environment that is supportive and builds confidence [italics added]’, especially as seeking and obtaining help is critical in elearning. Furthermore, Rodríguez-Ardura and Meseguer-Artola ([2016](https://jime.open.ac.uk/articles/10.5334/jime.472/#B24)) cite several studies showing that successful e-learning environments can be designed to elicit subjective experiences of presence through which e-learners ‘feel individually placed within a true, humanized, education environment’, in which they feel that they are taking part ‘in a true teaching–learning process, interacting with their lecturers and peer students’. (The use of the word ‘true’ in those two phrases denotes a value, a feeling of authenticity, not just a statement of fact.)

A study conducted among three hundred and ninety-nine (399) students in California State University San Marcos concluded that those at an economic disadvantage are exposed to higher chances of experiencing difficulties accessing materials online (Añover, Ng, & Pellicia, n.d.). Another research done by Institute for Fiscal Studies (IFS) and Institute of Education (IoE) from England reported that children from poorer families spend less time learning at home during the lockdown due to the lack of study spaces and online resources (Andrew, Cattan, Costa Dias et. al., 2020). Both studies show that there is a relationship between socio-economic status and accessibility; the lower a household’s social status is, the higher the possibility their accessibility to education will be affected negatively. Such mechanisms affect students’ academic achievement based on human capital theory. The success of children coming from disadvantaged backgrounds are usually limited due to their family’s status; they are confined by the restricted financial resources their families possess. The human capital theory explains that education is a significant human capital investment, whereas the difference in children’s educational achievement is predominantly caused by the difference of family educational investment (Li & Qiu, 2018). When family resources are bounded, parents cannot invest competently in their children’s education, which in turn, affects their children’s academic achievement (Becker, 2017).

It is quite understandable that some of the backlashes stem from the stresses caused by the pandemic. The other concerns, however, have already been noted by experts in the field of distance education. First, there is the issue of social integration and peer culture, and the possibility of transmission of values in a “virtual” classroom. Since there is a lack of human interaction in the learning process, students may learn less in such a set-up as opposed to those in the traditional classroom ([Edge and Loegering, 2020](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full#B20); [Gamage et.al., 2020](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B22)). Second, there is also an issue on the unnaturalness and the results of online learning, since it goes against how natural teaching and learning supposedly take place ([Larreamendy-Joerns and Leinhardt, 2006](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B28); [Adnan and Anwar, 2020](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B1)). The lack of face-to-face human interaction in the online learning space and process appears disconcerting to both educators and learners alike. However, in a developing nation like the Philippines, there are serious socio-economic issues about online learning. The students in remote parts of the nation lack even access to roads and electricity. Furthermore, due to existing internet infrastructure, even metropolitan students may have restricted online access. As a result, there is a presence of digital division between those who have and those who do not have an internet access and connectivity (Joaquin, Biana, & Dacela, 2020).

In addition, there is also the question of social policy to consider. The Philippines lacks a national strategy on online platforms like Massive Open Online Courses (MOOCs), Open Distance e-Learning (ODel), and Open Educational Resources (OERs). There are laws in place, related to the Open Distance Learning Act  ([Sixteenth Philippine Congress, 2014](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full#B43)) and these legal bases are insufficient since “some national policies will have to be put in place to maintain the growth” of these internet platforms ([Bandalaria, 2019](https://www.frontiersin.org/articles/10.3389/feduc.2020.576371/full" \l "B8)).

**Environmental Factor**

A life changed when a Filipino, who had not traveled out of the country tested positive for coronavirus last March 2020 and has been tagged as the first local case of the deadly Covid-19. This finally set the alarm in all Filipinos that the said virus was really spreading and the suspension of classes was implemented right after (doh.gov.ph). Due to the nature of the virus, particularly how it is transmitted, it has altered human behaviors, relations and lifestyles, and had profound impacts on the economic, political and cultural landscapes of societies across the world. It has likewise exacerbated poverty, discrimination and inequalities in many parts of the world, not only through how COVID-19 appears to be affecting poorer communities more than the rich, but also as a consequence of the measures taken by states to control the spread of the virus (Simbulan, 2020).

**Environmental Effects of Online classes to student**

The COVID-19 pandemic has caused a drastic shift from traditional to online distance education which resulted in many difficulties to our learning delivery modes. (www.dpublication.com). The coronavirus pandemic has highlighted school opening woes that have long existed even before the health crisis happened (Magsambol, 2020). Online schooling with a limited enrolment period and no technical support is not enough. ‘Gap year’ students must not be overlooked and ignored by the government and education authorities. Their physical and economic lockdown must not spill over to the intellectual (Uaminal, 2020).

Educational institutions worldwide need to adapt to the barriers brought by the pandemic by transitioning to online platforms as an alternative place for learning. Some claim online learning is an indispensable alternative to making up for the lost presence in physical classrooms, while others struggle as they adjust to the digital environment (Delas Peñas, 2020). In some instances, these arrangements became unsustainable and some universities had to suspend remote or online classes because the uneven socioeconomic status of students affected their access to these modalities of learning (Simbulan, 2020).

One of the things that the students have a hard time balancing with their school works at home are the household chores that never seem to stop and adjust for their online class schedule. Household activities have been theorized as among the impediment to girls’ concentration in school activities and performing well in their studies. While this separation of activity may seem fair, in actual fact, household activities are unscheduled and therefore, more time consuming and tiring than those performed outside the house. Outdoor activities are normally scheduled (Emmanuel, 2015). While the home may present comfort, students voiced difficulty with balancing and home responsibilities and remote learning. It keeps their time divided (files.eric.ed.gov). It was concluded that the main reason of having an ability to have high academic performance and do housework as well is based on their balanced time-management skill and being well-organized in every day routine (articlekz.com).

Aside from the household chores, members of the family are also considered as one of the biggest factors in students distractions during online class. Most houses in the city are not built with soundproofs. All the noises coming from inside and outside the house are beyond control. Also, privacy is a challenge as most families are crammed in a small house or apartment, leaving no room intended for online class (www.dpublication.com). And so, even family members can represent distractions by talking to the student, innocently asking questions. It can be hard to say no to loved ones, but it is important to establish boundaries and make sure everyone understands which disruptions are acceptable and which should wait until your study time is complete (www.affordablecollegesonline.org). What worst is when the siblings even have to fight on who will use the device or gadget they have at home for their online class (Santos, 2020). Negativity can come from various sources, from family, friends and partners not necessarily offering you the support and encouragement you need, which could lead to anxiety and poor academic performance (Cooper, 2017). That is why according to Scalar (2020), people who work from home usually need quiet environments to keep them concentrated, and as a student, one needs such environments even more. A quiet environment gives a studeny the peace of mind he needs to concentrate and makes studying less boring. Finding that quiet place at home is indeed a struggle that each student faces nowadays.

It was undoubtedly a very unpleasant experience for students to abruptly shift from the traditional normal education system to embracing the new normal with its blended learning system, otherwise known as online learning. The environmental factor, as experienced, has been one of the pointed out barriers to communication that posts the most distraction to this particular type of learning system that presently exist.

As it is, the unwanted background noise in the common learning environments in the Philippines is already exceeding the maximum level recommended by the World Health Organization (WHO) during teaching and studying sessions even before the pandemic happened that is totally affecting the college students cognitive performances (Diaco, 2014). Much more now, the students are left without much choices but to take a totally different way of learning in their own homes, as today every school is adapting online classes due to the Covid 19 pandemic.

The type of noise makes different effects in the cognitive performance of a person and in the activities like reading, memory, attention. Acute noise is more likely to impact the attention and memory skills while the chronic noise is the most impairing to language skills (Massonnie, et.al., 2020). Some recommendations to avoid noise distractions such as turning off music, and using noise blocking earphones are a big help (Fleming, 2019).

Surveys and observations show that during online classes, students would try to find the most convenient space in their houses to have a quieter working place, but unfortunately for others who do not have much of a space in their homes. This is the complaint of difficulty in learning for them. Additionally, as a faculty, one can identify that students has very limited personal space as he hears the background noise when talking to the students and could see regular appearance of family members on the camera feed background more than usual (Gears, 2020).

As pointed out by Alec Olson (2021) in his article, Classroom Audio Challenges and How To Solve Them: “Hearing is the primary portal to learning, with up to 75% of a student's day dedicated to listening activities. Clear audio leads to better educational outcomes for both students and teachers. It can also lessen stress in students, and save teachers from voice fatigue or illness, which accounts for 16% of teacher’s absenteeism”.

There have been some efforts undertaken by the local government to lessen this struggles which sources are mostly coming from the inimical surroundings at home which made it not conducive for studying and therefore learning, such as neighbor’s unconcerned use of videoke, animals annoying sounds, and neighborhood quarrels. Some local authorities had passed on some ordinance to regulate and avoid disturbances during online classes (Lalu, 2020), and still urging other LGUs to enact ordinances prohibiting videoke and other loud distracting noises to address the problem (Luna, 2020).

For kids and teens who struggle with focus, distance learning can be especially difficult (www.understood.org). According to Asia Society Philippines, this pandemic pronounced the distance between students and their formal schooling, and for that matter, the gulf between privileged students and the actual majority of their fellow learners (asiasociety.org). Try organizing a dedicated study room that has adequate lighting and ventilation to help keep them focused. As mentioned by Arturo Realyvásquez-Vargas et al., (2020), the previous information revealed that students can be exposed to uncomfortable and unsafe conditions in online classrooms, and their academic performance may be consequently affected. Take a second and look around the house for an open area against a wall that one can set his computer up against. A blank wall behind one’s monitor might seem a little boring, but a still background is less likely to take one’s attention away from his studies (hallmarkuniversity.edu). Department of Education Leonor Briones said that it is needed to encourage not only the teachers but also the learners to not only specialize and memorize; but to know many things, to know how to analyze, to know how to be objective, to know how to come to break a problem apart and come up with a solution (Montemayor, 2020).

**Chapter 3**

**METHODOLOGY**

This chapter presents the design and procedures undertaken during the conduct of the study. It discusses the research method used, sampling techniques, and description of the respondents, research instrument, data gathering procedure, and statistical treatment of data.

**Method of Research**

This study used the descriptive method of research which describes the nature of a situation, as it exists at the time of study. The descriptive research involves the collection of data in order to test the hypotheses and to answer questions concerning the current status of the subject study (Santarin, 2005). According to Best (2005), a descriptive method of research is concerned with the condition or relationship that exists, practices that prevail, beliefs, points of view, or attitudes that are held, processes that are going on, effects that are being felt or trends that are developing.

The researchers also solicited ideas to give solution to the problem. Survey method is an easy way of collecting data to determine the awareness of the respondents. It is a valid method for researching specific subjects and as a precursor to more quantitative studies. While there are some valid concerns about the statistical validity, as long as the limitations are understood by the researchers, this type of study is an invaluable scientific and random tool. Although results are always open to questions and to different interpretations, there is no doubt that such is a helpful tool in performing a research.

**Population, Sample Size and Sampling Techniques**

The researchers decided to use the sampling technique by selecting at least 300 students as respondent. The respondents’ demographic profile comprises the following: age, gender, civil status, and college year level. Convenience sampling technique is a non-probability sampling technique used when respondents are chosen because of their appropriateness in the conduct of a study. This is designed to have the general description of the factors affecting online classes among Entrepreneurship students of Quezon City University during pandemic era. The researchers used the systematic random sampling to Quezon City University Entrepreneurship students who have been into online classes during the pandemic era. The gathered data from respondents were tabulated and interpreted.

**Description of Respondents**

In this study, the researchers gathered information from three hundred (300) Entrepreneurship students, who have taken up online classes. The researchers pulsed the general perception on the factors affecting online classes during the pandemic era.

**Research Instrument**

The study used questionnaire in gathering the primary data. The survey questionnaire was formulated based on the related literature gathered.

The instrument was divided into three (3) parts. The first part deals with the demographic profile of the respondents. The second part is about the aspects of factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era. The third part delves the significant differences on the respondents’ assessment on factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era when they are grouped according to their profile.

To assess the level of agreement to the beneficiaries, the researchers adopted the Likert Scale where each category is assigned with a numerical value such as:

|  |  |  |  |
| --- | --- | --- | --- |
| **Scale** | **Mode of Interpretation** | **Symbol** | **Range** |
| 5 | Strongly Agree | SA | 4.51 - 5.00 |
| 4 | Agree | A | 3.51 - 4.50 |
| 3 | Somewhat Agree | SA | 2.51 - 3.50 |
| 2 | Disagree | D | 1.51 - 2.50 |
| 1 | Strongly Disagree | SD | 1.00 – 1.50 |

The data gathered in this study were organized, classified, and tabulated based on the research and problem formulated. In this survey type, five choices were provided for every question or statement. The choices represented the degree of the respondents’ assessment. The scales were used to interpret the overall responses of all the respondents for every question by computing the weighted mean.

A group of four (4) experts had been consulted to validate the prepared items. then, the questionnaires were pilot-tested by selecting thirty (30) Entrepreneurship students from 1st year to 4th to respond to the survey questionnaires. These students as well as their answers were not part of the actual study process, but were only used for testing purposes. After accomplishing the instruments, the researcher asked the students for any suggestion or any necessary correction to ensure further improvement and validity of the instrument.

The researchers revised the survey questionnaire based on the suggestion of the five (5) experts and the students used for pilot testing. The researchers then excluded irrelevant questions and deleted vague or complex terminologies into simpler ones to ensure comprehension. Finally, the questionnaires were furnished by the researchers to the target respondents.

**Data Gathering Procedure**

The researchers developed the questionnaire. With regard to data gathering, the researchers sought the assistance of all the Entrepreneurship faculty and explained the objectives of the study to meet the exact required respondents. For the duration of two (2) days, the survey questionnaires were already sent via messenger and another two (2) days were allotted for the retrieval of the questionnaires. The respondents answered on the survey questions willfully. The results of the survey questionnaires were tabulated accordingly to the frequency of items checked by the respondents. After the tabulation of data, results were interpreted using various statistical tools. The system of follow up was adopted to ensure the 100% retrieval of the questionnaire from the students

**Statistical Treatment of Data**

The data collected in this study were organized and classified based on the research design and the formulated problem. They were recorded, tallied, and tabulated to facilitate the presentation and interpretation of results using the following statistical tools:

1. Frequency and Percentage Distribution. The percentage and frequency distribution were used to classify the respondents according to profile – age, gender, civil status, college year level. The frequency presented the actual answer of the respondents to a specific question or item in the questionnaires.

On the other hand, the percentage of the item was computed by dividing it with the sample total number of respondents, the formula used is:

% = (f/x) x 100

Where: % = percentage

f = frequency

n = number of total sample

2. Weighted Mean. Another statistical technique used by the researcher was the weighted mean. It was used to determine the average responses of the different options provided in the various parts of the survey questionnaire used. The method was used in conjunction with the Likert scale. It was solved by the formula.

|  |  |  |
| --- | --- | --- |
| X = ∑ƒx / n | | |
|  |  |  |
| Where: | X = | Weighted mean |
|  |  |  |
|  | ∑ƒx = | The sum of all the products of ƒ and x, ƒ being the frequency of each weight and x as the weight of each operation |
|  |  |  |
|  | N = | Total number of respondents |

**3.** One-way ANOVA.It was used to describe the respondents’ assessment on the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era.

The Analysis of variance (ANOVA) used to test hypothesis about the differences between two or more means.

F = MST / MSE

Where : F = Anova coefficient

MST = Mean sum of squares due to treatment

MSE = Mean sum of squares due to error

MST = SST / (p – 1)

SST = ∑ n (x – X)2

Where: SST = Sum of squares due to treatment

p = Total number of populations

n = Total number of samples in a population

MSE = SSE / ( N – p)

SSE = ∑ (n -1) S2

Where: SSE = Sum of squares due to error

S = Standard deviation of the samples

N = Total number of observations

**Chapter 4**

**RESULT AND DISCUSSION**

This chapter shows the presentation, analysis, and interpretation of the data in the light of the research questions formulated in Chapter 1. It indicates the expected results and the manner in which they are analyzed and presented graphically and designed to bring order, coherent patterns and meaning to accumulated data.

|  |  |
| --- | --- |
| **1.** | **Profile of the Respondent According to Age, Gender, Civil Status and Year Level in College** |

**Table 1**

**Frequency and Percentage Distribution of the Respondent**

**According to Age**

|  |  |  |
| --- | --- | --- |
| **Age** | **Frequency** | **Percentage** |
| 17 - 18 years old | 4 | 1.3 |
| 19 - 20 years old | 57 | 19.0 |
| 21 - 22 years old | 169 | 56.3 |
| 23 - 24 years old | 37 | 12.3 |
| 25 years old - and above | 33 | 11.0 |
| **TOTAL** | **300** | **100.0** |

Table 1 shows the frequency and percentage distribution of the age of the respondents in Quezon City University. As shown in the table, 169 (56.3%) of the respondents belong to 21-22 years old followed by 57 (19.0%) of them belong to 19-20 years old, while 37 (12.3%) of them range to 23-24 years old. Thirty-three (11.0%) of them belong to 25 years old and above while 4 (1.3%) of the respondent to 17-18 years of age. Therefore the figure of the above table showing that 21-22 years of age dominated to participate on the research survey.

**Table 2**

**Frequency and Percentage Distribution of the Respondent**

**According to Gender**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Frequency** | | **Percentage** | |
| Male | 73 |  | 1.3 |  |
| Female | 213 |  | 19.0 |  |
| Member of LGBT | 14 |  | 56.3 |  |
| **TOTAL** | **300** |  | **100.0** |  |

Table 2 presents the frequency and percentage distribution of the respondents’ gender. Two hundred thirteen or 71% of them are female, while 73 or 24.3% of them are male. Lastly, 14 or 4.7% of the respondents are members of LGBT.

**Table 3**

**Frequency and Percentage Distribution of the Respondent**

**According to Civil Status**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Civil Status** | **Frequency** | | **Percentage** | |
| Single | 282 |  | 94.0 |  |
| Married | 15 |  | 5.0 |  |
| Solo Parent | 3 |  | 1.0 |  |
| Legally Separated | 0 |  | 0 |  |
| **TOTAL** | **300** |  | **100.0** |  |

Table 3 shows the frequency and percentage of the respondents civil status that indicates 282 (94.0%) of the respondents are single, while 15 (5.0%) of them are married. Three (1.0%) of them are solo parents, while none has been legally separated.

**Table 4**

**Frequency and Percentage Distribution of the Respondent**

**According to Year Level in College**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **College Year Level** | **Frequency** | | **Percentage** | |
| 1st year level | 18 |  | 6.0 |  |
| 2nd year level | 39 |  | 13.0 |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3rd year level | 192 |  | 64.0 |  |
| 4th year level | 51 |  | 17.0 |  |
| **TOTAL** | **300** |  | **100.0** |  |

Table 4 indicates the frequency and percentage distribution of the respondents year level in college. One hundred ninety-two or (64.0%) of the respondents claim that they belong to 3rd year level, while 51 (17.0%) of them come from 4th year level. Thirty-nine (13.0%) of them come from the second year level, while 18 (6.0%) of the respondents are from the first year level.

|  |  |
| --- | --- |
| 2. | **How do the respondents assess the Factors affecting Online Classes among Entrepreneurship students’ of Quezon City University during the Pandemic Era in terms of the following aspects?** |

**Table 5**

**Factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of Learning factors**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Learning Factors** | **Weighted Mean** | **Verbal Interpretation** |
| 2.1.1 | Speed, quality and cost of internet hinder the proper delivery of study materials to meet deadlines. | 4.06 | Agree |
| 2.1.2 | Student’s span of attention during class discussion. | 3.78 | Agree |
| 2.1.3 | Professor’s technical know-how on various modes of instructions and platforms. | 3.91 | Agree |
| 2.1.4 | Professors’ motivation efforts for students to participate in the class recitation but they remain passive. | 3.93 | Agree |
| 2.1.5 | Students tend to multi-task playing computer games, sending message, and using Facebook during online classes. | 3.45 | Somewhat Agree |
|  | **Grand Mean** | **3.83** | **Agree** |

***Legend:*** *“4.51-5.00 (Strongly Agree (SA))”, “3.51-4.50 (Agree (A))”, “2.51-3.50 (Somewhat Agree (SA))”, “1.51-2.50 (Disagree (D))”, “1.00-1.50 (Strongly Disagree (SD))”*

Table 5 shows the weighted mean and verbal interpretation results of the respondents’ assessment on the factors affecting online classes among Entrepreneurship students of Quezon City University (QCU) during the pandemic era. It can be seen in the above table the overall general weighted mean of 3.83 as rated by the respondents with agree as its verbal interpretation.

The following indicators: speed, quality and cost of internet hinder the proper delivery of study materials to meet deadlines has the 4.06 weighted mean with agree as its verbal interpretation. Therefore, it is not easy to learn it online. The student thinks that it is difficult to fulfill the learning skills competencies acquired thru online education system. Online education could be improved by making it more interactive, showing the activities in real situation, giving concise information, and providing different tools for learning (Mahdy, 2020).

**Professors motivation efforts for students to participate in the class recitation but they remain passive** gets the weighted mean score of 3.93 with verbal interpretation of agree. As quoted in the study of Ramos (2018), to be motivated means to be moved to do something. A person who feels no impetus or inspiration to act is thus characterized as unmotivated, whereas someone who is energized or activated toward an end is considered motivated. In the classroom setting, student’s motivation refers to the degree to which a students puts effort into a focus on learning in order to achieve successful outcomes. Motivations and engagement are very important for sound student learning.

**Professor’s technical know-how on various mode of instructions and platforms garners a weighted mean score of 3.91** with verbal interpretation of agree. According to (Hendricks, et.al., n.d.), regardless of the delivery mode, professors have a major impact and influence in the classroom. In an online learning environment, the mere presence of the instructor is found to positively impact the student’s level of affective learning, cognition, and motivation. It is important for professors to begin redesigning courses to promote positive professor/students relationship and engaging lessons with student support. Professors must be understand the technological aspects of online courses when redesigning and teaching online courses. Technological needs are ever changing in education, as with any change, professor who teaches online must remain updated on the technological changes related to online platforms. Thus, there will always be a need for professors to constantly gain insight through quality professional development in order to implement the most updated technology available.

**Student’s span of attention during class discussion has a** weighed mean score of 3.78 with verbal interpretation of agree. In the study of Cicekei, et.al. (2019), it was observed that the teachers perceived the attention problems that the students experienced during the course mostly as a problem arising from the students themselves while the students associate this problem not only with themselves, but also with other students, teachers and the environment. Some psychologists claim that the typical student’s attention span is about 10 to 15 minutes long, yet most university classes last for 90 minutes. It is natural for student’s attention levels to vary according to motivation, mood, perceived relevance of the material, and other factors.

For the last indicator **students tend to multi-task - playing computer games, sending message, and using Facebook during online classes** garners a weighted mean score of 3.45 with verbal interpretation of somewhat agree. Evidences from the psychology, cognitive science, and neuroscience suggest that when students do multitask while doing schoolwork, their learning is far spottier and shallower than if the work had their full attention. They understand and remember less and they have greater difficulty transferring their learning to new context (Schmidt, 2020).

**Table 6**

**Factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of Physical factors**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Physical Factors** | **Weighted Mean** | **Verbal Interpretation** |
| 2.2.1 | Weight gained due to stress eating since the online classes were implemented.. | 3.67 | Agree |
| 2.2.2 | Episodes of headache, dizziness, or migraine due to long exposure to laptop and other gadgets. | 4.40 | Agree |
| 2.2.3 | Occurrence of body pains while attending classes and other activities online due to sedentary position. | 4.03 | Agree |
| 2.2.4 | Experience eye strain caused by over exposure to laptops and other gadgets and blue light effect. | 4.13 | Agree |
| 2.2.5 | Physical weakness due to lack of physical activity since most of the activities are done online. | 3.96 | Agree |
|  | **Grand Mean** | **4.04** | **Agree** |

***Legend:*** *“4.51-5.00 (Strongly Agree (SA))”, “3.51-4.50 (Agree (A))”, “2.51-3.50 (Somewhat Agree (SA))”, “1.51-2.50 (Disagree (D))”, “1.00-1.50 (Strongly Disagree (SD))”*

Table 6 present the physical factors affecting students attending online classes. The highest weighted average mean of 4.40 is indicated by the respondents, who agree that they experienced episodes of headache, dizziness, or migraine due to long exposure to laptop and other gadgets. A mean of 4.13 is garnered from the respondents who experience eye sore caused by over exposure to laptops and other gadgets and blue light effect. Pratyusha G., et. al (2020) say that due to the increased exposure gadget usage or screen time, Digital Eye Strain (DES) scores the highest in terms of physical challenges for students taking online classes. On the other hand, Physical factor under 2.2.3 gains weighted average mean of 4.03. The lowest weighted mean of 3.67 is remark by the respondent, who agree that they have gained weight since online classes were implemented. These results show that due to decreased physical activities, health issues related to physical sedentary is one of the challenges of students in online classes during the pandemic. Eye strain, obesity, and depression are the health impacts of online learning ( Bruce, 2020).

**Table 7**

**Factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of Emotional and Social factors**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Emotional and Social Factors** | **Weighted Mean** | **Verbal Interpretation** |
| 2.3.1 | Losing enthusiasm due to lack of social life. | 3.92 | Agree |
| 2.3.2 | Feeling anxious meeting deadlines especially when there is poor internet connection. | 4.44 | Agree |
| 2.3.3 | Feeling depressed with the day-to-day routinary activities. | 3.94 | Agree |
| 2.3.4 | Social disconnection from classmates and friends. | 3.77 | Agree |
| 2.3.5 | Discomfort due to lack of privacy being observed by family members while studying online. | 3.84 | Agree |
|  | **Grand Mean** | **3.98** | **Agree** |

***Legend:*** *“4.51-5.00 (Strongly Agree (SA))”, “3.51-4.50 (Agree (A))”, “2.51-3.50 (Somewhat Agree (SA))”, “1.51-2.50 (Disagree (D))”, “1.00-1.50 (Strongly Disagree (SD))”*

The average weighted mean and verbal interpretation on the factors affecting online classes among Entrepreneurship students of Quezon City University during pandemic era in terms of emotional and social factors are shown in table 7. A mean of 4.44 has been garnered by the respondents who agree that they feel anxious meeting deadlines especially when there is poor internet connection while 3.94 of them agree that they feel depressed with day-to-day routinary activities. It is found out that c**lasses are entirely dependent on a strong internet connection. The school and college closures have resulted in an almost overnight switch from face-to-face classes to learning online. Universities and colleges have been keen to emphasis that special measures will be taken to ensure students do not lose out as a result. However, many who face challenging or stressful circumstances worry that they are left behind and their grades will suffer.** Logging WiFi means missing out on chunks of conversation when the internet freezes, and the atmosphere and learning environment are not the same as sitting in a classroom with lecturers and classmates (The Irish Times, 2020). **Students learn social and emotional skills as teachers teach them. This is understandable, since teaching social and emotional skills can have a direct impact on students' ability to apply them (Frey, Fisher, & Smith 2019).**

**Table 8**

**Factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of Environmental factors**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Environmental Factors** | **Weighted Mean** | **Verbal Interpretation** |
| 2.4.1 | Communication barriers particularly noise from neighbors, dogs, roosters, loud music, and lighting are predominant distractions during online classes. | 4.48 | Agree |
| 2.4.2 | Household chores and other unforeseen tasks are greatly affecting student’s focus during online classes. | 4.21 | Agree |
| 2.4.3 | Distractions from family members such as children, siblings, partners during online classes. | 4.00 | Agree |
| 2.4.4 | Transferring from one place to another to attend the online classes conveniently. | 3.90 | Agree |
| 2.4.5 | Poor illumination, ventilation, overcrowding, sitting position, and uncomfortable study areas. | 4.02 | Agree |
| **Grand Mean** | | **4.12** | **Agree** |

***Legend:*** *“4.51-5.00 (Strongly Agree (SA))”, “3.51-4.50 (Agree (A))”, “2.51-3.50 (Somewhat Agree (SA))”, “1.51-2.50 (Disagree (D))”, “1.00-1.50 (Strongly Disagree (SD))”*

Table 8 presents the average weighted mean and verbal interpretation on the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of environmental factors. It shows a prominent result of general weighted mean of 4.12 with verbal interpretation of agree. It can be noted that the following indicators such as communication barriers particularly noise from neighbors, dogs, roosters, loud music, and lighting are predominant distraction during online classes top the highest rating of 4.48 as its weighted mean with verbal interpretation of agree. Overall, the respondents agree on the the following factors affecting online classes with the following ratings: poor illumination, ventilation, overcrowding, sitting position, and uncomfortable study areas with 4.02 weighted mean; distractions from family members such as children, siblings, partners during online classes with 4.0 weighted mean; transferring from to one place to another to attend the online classes conveniently with 3.90 weighted mean respectively. All of which point out some of the valid protests of the students in the blended learning system in the new normal, particularly in the residential environment of the QCU that are mostly situated in the congested rural areas of diverse habitants and social classes.

As Dr. Victor de Andreade, audiologist and lecturer in the Department of Speech Pathology and Audiology in the School of Human and Community Development at Wits University puts it, “The effects of noise hamper learning opportunities for learners. Background noise exceeds the level of speech. It makes it difficult to hear even familiar words. Sometimes students miss out on certain frequencies of sound and they have difficulties following what is being said in the lesson” according to Wits University, August 2016).

|  |  |
| --- | --- |
| **3.** | **Significant difference on the respondents’ assessment of the Factors affecting online classes among Entrepreneurship students’ of Quezon City University during the pandemic era in terms of the above mentioned aspect when they are grouped according to the respondents’ profile?** |

**Table 9**

**Significant difference in the respondents’ assessment on the Factors affecting online**

**classes among Entrepreneurship students’ of Quezon City University**

**during the pandemic era when they are group according to Age**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factors affecting Online Classes** | **F-Value** | **p-Value** | **Decision** | **Remarks** |
| Learning Factors | 378.386 | .000 | Reject Ho | Significant |
| Physical Factors | 284.763 | .000 | Reject Ho | Significant |
| Emotional and Social Factors | 241.419 | .000 | Reject Ho | Significant |
| Environmental Factors | 293.845 | .000 | Reject Ho | Significant |

Table 9 illustrates the respondents’ assessment on the factors affecting online classes among Entrepreneurship student of Quezon City University during the pandemic era when they are grouped according to age. In terms of learning factors, it can be observed from the table that F-value of 378.386 with a p-value of 0.000 is less than the assigned level of significance of 0.05, sowhen the respondents are grouped according to their age, their percentile is significant to all factors affecting online classes among Entrepreneurship students, it therefore rejects the hypothesis.

In terms of Environmental factors, since the computed p-value is 0.000 with F test results of 293.845 is less than the assigned level of significance of 0.05, therefore, the hypothesis that there is significant difference on the factors affecting online classes among Entrepreneurship students based on environmental factors when the respondents are grouped according to age profile is thus, rejected. It can be derived that all the age groups have a significant difference on the factors affecting online classes.

In terms of physical factors, it can be seen from the table that F-value of 284.760 with a p-value of 0.000 is less than the assigned level of significance of 0.05, sowhen the respondents are grouped according to their age, their percentile is significant to all aspects of factors affecting online classes among Entrepreneurship students. Therefore, this reject the hypothesis.

In terms of emotional and social factors, it shows that F-value of 241.419 with a p-value of 0.000 is less than the assigned level of significance of 0.05. Sowhen the respondents are grouped according to their age, their percentile is significant to all factors affecting online classes among Entrepreneurship students. This reject the hypothesis.

When it comes to implementing and applying e-learning, the study of Fleming, et.al., (2017) emphasizes the importance of focusing on aspects over which organizations have control. Age should not be considered as a barrier to e-learning implementation. Instead, focus should be on effective and user-friendly e-learning interventions, as well as adequate technology support.

**Table 10**

**Significant difference in the respondents’ assessment on the Factors affecting online**

**classes among Entrepreneurship students’ of Quezon City University**

**during the Pandemic Era when they are grouped according to Gender**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factors affecting Online Classes** | **F-Value** | **p-Value** | **Decision** | **Remarks** |
| Learning Factors | 338.823 | .000 | Reject Ho | Significant |
| Physical Factors | 210.485 | .000 | Reject Ho | Significant |
| Emotional and Social Factors | 207.182 | .000 | Reject Ho | Significant |
| Environmental Factors | 168.634 | .000 | Reject Ho | Significant |

It is evident that there is a significant difference on the factors affecting online classes among Entrepreneurship students at Quezon City University during the pandemic era when they are grouped according to gender. In terms of learning factors as indicated by the r value of 338.823 at 0.05 level of significance, the result implies that learning is essential factor of the students associated with motivational aspects, ability of the learner and aptitude necessary for online learning. Therefore, there is a significant difference to all factors of affecting online classes among Entrepreneurship students. In terms of physical factors, the F-value garners 210.485 and p value of o at 0.05 level of significance the rate is about 218 percent when grouped according to gender. It shows a significant difference to all factors affecting online classes among Entrepreneurship students.

The result implies that physical factors must have a well- ventilated and sufficient lightning, peaceful and clean place, lastly with normal temperature that will help learning processes of the students. It is generally recognized that ill health retards physical and motor develop­ment and malnutrition interferes with learning and physical growth. Children suffering from visual, auditory, and other physical defects are seriously handicapped in developing skills such as reading and spelling. It has been demonstrated that various glands of internal secretion, such as the thyroid and pituitary glands, affect behavior. The health of the learner will likely affect his ability to learn and his power to concentration. (www.yourarticlelibrary.com).

In terms of emotional and social factors, the F-value garners 207.182 and p value of o at 0.05 level of significance. The rate is about 190 percent when grouped according to Gender. Therefore, there is a significant difference to all factors affecting online classes among Entrepreneurship students.

According to Chris Anderson (2019), stress caused by some type of physical or emotional trauma produce a hormone called cortisol that disrupts the connections between brain cells in the learning and memory part of the brain. Too much stress literally “shuts down” the brain and stops the learning process cold. Emotions are just as critical to learning they influence our attention, meaning, and memory.

Lastly, the environmental factor is the lowest F-value that garners 168.634 and p value of o at 0.05 level of significance. The rate is about 151 percent interpreted as “significant”. Therefore, there is a significant difference to all factors of affecting online classes among Entrepreneurship students.

One of the factors that affects the efficiency of learning is the condition in which learn­ing takes place. This includes the classrooms, textbooks, equip­ment, school supplies, and other instructional materials. In the school and at home, the conditions for learning must be favorable and adequate if teaching is to produce the desired results. It cannot be denied that the type and quality of instructional materials and equipment play an important part in the instructional efficiency of the school. It is difficult to do a good job of teaching in a poor type of building and without adequate equipment and instructional materials. (www.yourarticlelibrary.com).

**Table 11**

**Significant difference in the respondents’ assessment on the Factors affecting online**

**classes among Entrepreneurship students’ of Quezon City University during**

**the Pandemic era when they are grouped according to Civil Status**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factors affecting Online Classes** | **F-Value** | **p-Value** | **Decision** | **Remarks** |
| Learning Factors | 64.650 | .000 | Reject Ho | Significant |
| Physical Factors | 93.009 | .000 | Reject Ho | Significant |
| Emotional and Social Factors | 76.224 | .000 | Reject Ho | Significant |
| Environmental Factors | 85.392 | .000 | Reject Ho | Significant |

The result of the multivariate analysis sample on the assessment of the groups of respondents as the factors affecting classes among students of QCU during the pandemic era as to emotional and social factors using one-way analysis of variance (ANOVA) reveals that there is significant difference on the assessment of the groups of respondents.By criteria, the differences are considered to be statistically significant.

**Table 12**

**Significant difference in the respondents’ assessment on the Factors affecting online**

**classes among Entrepreneurship students’ of Quezon City University during**

**the Pandemic era when they are group according to College Year Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| **Factors affecting Online Classes** | **F-Value** | **p-Value** | **Decision** | **Remarks** |
| Learning Factors | 296.342 | .000 | Reject  Ho | Significant |
| Physical Factors | 216.037 | .000 | Reject  Ho | Significant |
| Emotional and Social Factors | 190.767 | .000 | Reject  Ho | Significant |
| Environmental Factors | 203.932 | .000 | Reject  Ho | Significant |

This show that the respondents’ are grouped according to their college year level. All given factors affecting online classes differ significantly with the learning factors getting the highest F-value of 296.342 with p-Value of .000, while the emotional and social factors get the lowest F-Value of 190.767 with p-Value of .000.

In the article written by Ina Springler Linka’s on May 28, 2021, states that their greatest challenge was linked to their learning environment at home, while their least challenge was technological literacy and competency. The findings further revealed that the COVID-19 pandemic had the greatest impact on the quality of the learning experience and students’ mental health. In terms of strategies employed by students, the most frequently used were resource management and utilization, help-seeking, technical aptitude enhancement, time management, and learning environment control.

**Chapter 5**

**SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents the summary of the study which includes its findings, conclusions and recommendations based on the gathered, analyzed and interpreted data.

**Summary of Findings**

The purpose of the study was to examine the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in the aspects of Learning Factor, Physical Factor, Emotional Factor and Environmental Factor. This study used the descriptive research design which described the data and characteristics of the sample studied. The respondents were the three hundred (300) entripreneurship students of Quezon City University. The statistical tools utilized in the study were frequency and percentage, weighted mean, and ANOVA.

Based on the presentation of gathered data, the findings of the study are as follows:

1. Profile of the respondents according to age, gender, civil status and college year level.

The following are the profile variables of the respondents:

* In terms of age, 53.3% of the respondents are 21-22 years old, while 19% are 19-20 years old. Twelve point three percent of them are 23-24 years old, while 11% are 25 years old and above. Lastly, 1.3% are 17-18 years old.
* In terms of gender, 213 (71%) are female while 73 (24.3%) are male. Meanwhile, 14 (4.7%) are form the LGBT. In terms of civil status, 282 (94%) are single, while 15 (5.0%) are married. Meanwhile, 3 (1.0%) of them are solo parents and none is legally separated. In terms of year level in college, 192 (64%) of them are in 3rd year level while 51(17%) of them are in 4th year level. Meanwhile, 39 (13%) of them are in 2nd year level and 18 (6%) of the respondents are in 1st year level.

1. How do the respondents assess the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of the following aspects:

* Learning Factor;
* Physical Factor;
* Emotional and Social Factor; and
* Environmental Factor.
* In terms of learning factors, the overall weighted mean is 3.83 and with verbal interpretation of agree. the mean of 4.06 computed for speed, quality, and the cost of internet hinder the proper delivery of study materials to meet deadlines, while students tend to multi-task playing computer games, sending message, and using Facebook during online classes gets a lowest weighted mean of 3.45 with verbal interpretation of somewhat agree.
* In terms of physical factors, the overall weighted mean is 4.04 with verbal interpretation of agree. A mean of 4.40 is garnered from episodes of headache, dizziness, or migraine due to long exposure to laptop and other gadgets, while weight gain due to stress eating since the online classes was implemented indicator gets a lowest weighted mean of 3.67 with verbal interpretation of agree.
* In terms of emotionals and social factors, the overall weighted mean is 3.98 and verbal interpretation of agree. A mean of 4.44 is computed from feeling anxious meeting deadlines especially when there is poor internet connection, while social disconnection from classmate and friends garners the lowest weighted mean of 3.77 with verbal interpretation of agree.
* In terms of environmental factors, the overall weighted mean is 4.12 with verbal interpretation of agree. A mean of 4.48 emanates from communication barriers particularly noise from neighbors, dogs, rooster, loud music, and lighting are predominant distraction during online classes while transferring from to one place to another to attend the online classes conveniently is the lowest weighted mean of 3.90 with verbal interpretation of agree.

1. Is there a significant difference on the respondents’ assessment on the factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of the above mentioned aspect when they are grouped according to the respondents’ profile:

* In terms of age, there is a significant difference among the following factors: learning factors with F-value of 378.386, physical factors with F-value of 284.760, emotional and social factors with F-value of 241.419 and environmental factors with F-value of 293.845 with the decision of rejecting the hypothesis. In terms of gender, there is a significant difference among the following factors: learning factors with F-value of 338.823, physical factors with F-value of 210.485, emotional and social factors with F-value of 207.182 and environmental factors with F-value of 168.634 with the decision of rejecting the hypothesis. In terms of civil status, there is a significant difference among the following factors: learning factors with F-value of 64.650, physical factors with F-value of 93.009, emotional and social factors with F-value of 76.224 and environmental factors with F-value of 85.392 with the decision of rejecting of the hypothesis. In terms of college year level, there is a significant difference of the following factors: learning factors with F-value of 296.342, physical factors with F-value of 216.037, emotional and social factors with F-value of 190.767 and environmental factors with F-value of 203.932 with the decision of rejecting hypothesis.

**Conclusion**

Based on the results presented on this study, the researchers conclude the following:

* As regards to the profile of the respondents, the researchers find out that most of the respondents come from the 3rd year level with a total population of 192 or 64% while most of their ages range from 21-22 years old with a population of 169 or 53.3 of the are single.
* The following identified indicators such as students tend to multi-task playing computer games, sending message, and using Facebook during online classes, weight gain due to stress eating since the online classes was implemented, Social disconnection from classmate and friends indicator and transferring from to one place to another to attend the online classes conveniently get the lowest score as rated by the respondents. Therefore, this indicators need to be addressed for further improvements.
* With regardless to the profile of the respondents, the researchers find out that there is a significant difference as to the result of the assessment of the factors affecting online classes among entrepreneurship students’ of Quezon City University (QCU) during pandemic era.

**Recommendations**

* The respondents population of the study must be equal in terms of college year level, and gender to avoid biased results.
* Give attentionto the lowest point of the study to make sure that the learning outcomes of the students are in line with the course syllabuses as well as the activities given to avoid any inconvenience and stress.
* As activities aligned with the subject syllabuses are provided, compensate with the time allotted given to the students that balance activity for both synchronous and asynchronous to ensure the school work balance and lessen the stress level of the students .
* The cooperation of the entire households is really important in today’s virtual learning at home to balance the school work and household chores.
* It is important for all HEIs to prepare for possible crises to come in the future. This results of this current study will provide useful insights to design the effectively online classes by considering all the factors impacting students’ learning.
* Further research studies can expand the scope of this study since most studies have examined the impacts as well as the suggestions of incorporating with and gauge responses.

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**Appendix 1**

**Survey Questionnaire**

**PART I. Profile of the Respondents**

*Instructions: Put a check on the box/circle provided that corresponds to your answer.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1.1 | Age |  |  |  |  |
|  |  |  |  |  |  |
|  |  | 17 | - | 18 | years old |
|  |  |  |  |  |  |
|  |  | 19 | - | 20 | years old |
|  |  |  |  |  |  |
|  |  | 21 | - | 22 | years old |
|  |  |  |  |  |  |
|  |  | 23 | - | 24 | years old |
|  |  |  |  |  |  |
|  |  | 25 | - | years old and above | |

1.2 Gender

|  |  |
| --- | --- |
|  | Male |
|  | Female |
|  | Member of the LGBT |

1.3 Civil Status

|  |  |
| --- | --- |
|  | Single |
|  | Married |
|  | Single Parent |
|  | Legally Separated |

1.4 Year Level in College

|  |  |
| --- | --- |
|  | 1st year level |
|  | 2nd year level |
|  | 3rd year level |
|  | 4th year level |

**PART II.**  Factors affecting online classes among Entrepreneurship students of Quezon City University during the pandemic era in terms of the following aspects when they are grouped according to profile.

**Instruction:** Kindly assess the factors affecting online classes during the pandemic era using the following indicator.

*Please click on the box provided that corresponds to your answer.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **5** |  | **4** |  | **3** |  | **2** |  | **1** |
| Strongly Agree |  | Agree |  | Somewhat Agree |  | Disagree |  | Strongly Disagree |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Factors affecting Online classes among Entrepreneurship students during Pandemic Era** | | | **Agreement Level** | | | | |
| **2.1** | **Learning Factors** | | **5** | **4** | **3** | **2** | **1** |
| 2.1.1 | | Speed, quality and cost of internet hinder the proper delivery of study materials to meet deadlines. | 5 | 4 | 3 | 2 | 1 |
| 2.1.2 | | Student’s span of attention during class discussion. | 5 | 4 | 3 | 2 | 1 |
| 2.1.3 | | Professor’s technical know-how on various mode of instructions and platforms. | 5 | 4 | 3 | 2 | 1 |
| 2.1.4 | | Professor’s motivation efforts for students to participate in the class recitation but they remain passive. | 5 | 4 | 3 | 2 | 1 |
| 2.1.5 | | Students tend to multi-task - playing computer games, sending message, and using Facebook during online classes. | 5 | 4 | 3 | 2 | 1 |
| **2.2** | **Physical Factors** | | | | | | |
| 2.2.1 | | Weight gain due to stress eating since the online classes are implemented.. | 5 | 4 | 3 | 2 | 1 |
| 2.2.2 | | Episodes of headache, dizziness, or migraine due to long exposure to laptop and other gadgets. | 5 | 4 | 3 | 2 | 1 |
| 2.2.3 | | Occurrence of body pains while attending to classes and other activities online due to sedentary position. | 5 | 4 | 3 | 2 | 1 |
| 2.2.4 | | Experience eye strain caused by over exposure to laptops and other gadgets and blue light effect. | 5 | 4 | 3 | 2 | 1 |
| 2.2.5 | | Physical weakness due to lack of physical activity since most of the activities are done online. | 5 | 4 | 3 | 2 | 1 |
| **2.3** | **Emotional and Social Factors** | | | | | | |
| 2.3.1 | | Losing enthusiasm due to lack of social life. | 5 | 4 | 3 | 2 | 1 |
| 2.3.2 | | Feeling anxious meeting deadlines especially when there is a poor internet connections. | 5 | 4 | 3 | 2 | 1 |
| 2.3.3 | | Feeling depressed with the day-to-day routinary activities. | 5 | 4 | 3 | 2 | 1 |
| 2.4.4 | | Social disconnection from classmates and friends. | 5 | 4 | 3 | 2 | 1 |
| 2.4.5 | | Discomfort due to lack of privacy being observed by family members while studying online. | 5 | 4 | 3 | 2 | 1 |
| **2.4** | **Environmental Factors** | | | | | | |
| 2.4.1 | | Communication barriers particularly noises from neighbors, dogs, roosters, loud music, and lighting are predominant distraction during online classes. | 5 | 4 | 3 | 2 | 1 |
| 2.4.2 | | Household chores and other unforeseen tasks are greatly affecting student’s focus during online classes. | 5 | 4 | 3 | 2 | 1 |
| 2.4.3 | | Distractions from family members such as children, siblings, partners during online classes. | 5 | 4 | 3 | 2 | 1 |
| 2.4.4 | | Transferring from one place to another to attend the online classes conveniently. | 5 | 4 | 3 | 2 | 1 |
| 2.4.5 | | Poor illumination, ventilation, overcrowding, sitting position, and uncomfortable study areas. | 5 | 4 | 3 | 2 | 1 |

**Appendix 2**

**Certificate of Editing**

**CERTIFICATE OF PROOF READING AND EDITING**

This research entitled

**“FACTORS AFFECTING ONLINE CLASSES among ENTREPRENEURSHIP sTUDENTS of quezon city university DURING**

**the PANDEMIC ERA”**

**by**

**Entrepreneurship Faculty**

Was proofread by the undersigned.

This certification is issued on **September 18, 2021** upon the researcher’s request for whatever legal purpose it may serve.

**Jun M. Aranquez, PhD**

Chairperson

Quezon City University

**Appendix 3**

Biographical Statement



DR. GERARDO T. BAUTISTA, is a certified public accountant (CPA) and professional teacher by profession. He has been in the academe for 22 years and presently the Dean of the College of Business Administration and Accountancy of Quezon City University. He has authored accounting and business books such as: Financial Accounting and Reporting - Sole Proprietorship, Financial Accounting and Reporting - Partnership and Corporation, Cost Accounting & Control, Business Mathematics and Business Plan Handbook.



Dr. Ronilo B. Ramilo is presently worked as a full-time College Professor since 2015 at the Quezon City University, College of Business Administration in Entrepreneurship. Before joining the academe he worked for 15 years in corporate occupying managerial position. He obtained his Doctor in Business Administration from the Polytechnic University of the Philippines, Graduate School. He is also a notable researcher as he presented his research papers both in Local and International Higher Education Research Conference. He is a member of the Asian Pacific Consortium of Research and Educator, Inc. (APCoRE), Philippine Council of Deans and Educators in Business (PCDEB) Entrepreneurship Educators Association of the Philippines, Inc. (ENEDA), Lifetime Associate Member of the Ascendens Asia International Researchers Club (AAIRC) and elected Alumni Officer interim 2021 of the College of Business Administration Graduate School, Polytechnic University of the Philippines.



Dr. Federico B. Ramos Jr. is a full-time Lecturer of Quezon City University and formerly as Human Resource Personnel Unit Head (HRDM), Acting Chair and Vice Chairman of Health and Safety Committee, Part time Faculty, Purchasing manager and Proware Specialist at STI College Munoz EDSA Inc. He received his Doctor’s Degree in Business Administration at the Polytechnic University of the Philippines Graduate School and his Dissertation entitle Level of Job Motivation in Tertiary Institutions in the National Capital Region and his Master’s degree in Business Administration at the Trinity University of Asia Graduate School. His Master’s thesis entitled “Hygiene and Motivational Factors on the Job and Work Performance of Employees in a Private Higher Education institution”. He is also a bonafied member of different local and international organization namely: Royal Institute of Singapore: member MRIBASr., member Toastmaster International and obtained two (2) norms Competent Communicator (CC) and Competent Leader (CL), member and Past President of Rotaract Club of Cubao and Past District Rotaract Secretary of Rotary International D3780, a member of Association of Scholarly Peer Reviewers, member Association of Scholarly Editors, member Philippine Associations of Institutions for Research Inc., affiliate of Association for International Research PAIR, USA, member ASIA-Pacific Consortium of Researchers and Educators, Inc. Member Entrepreneurship Educators’ Association of the Philippines, Inc..and elected as PRO officer for the CBAGS Alumni (College of Business Administration Graduate School) - Polytechnic University of the Philippines as interim Officer for 2021. A highly motivated, resourceful and result-driven oriented person with 21 years of significant and progressive experience in Tertiary Institutions. With proven records of accomplishment in searching out opportunities for improvement, which contribute in the University success, improving quality and increasing Student’s/customer satisfactions.

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Dr. Jona C. Marquez is a Part-time Professorial Lecturer in Quezon City University. She graduated Doctor in Business Administration in Polytechnic University of the Philippines as State scholar. She is a former accountant in Australia and an a former Accounting Officer in Los Angeles, California. She is a member of Ascendens Asia International Researchers Club, Asia-Pacific Consortium of Researchers and Educators, Inc., Philippine Higher Education Research Consortium-Manila, Inc and Philippine Council of Deans and Educators in Business. Her recent publication includes Service Quality Strategies of Quick Service Food Industry (2018), Co Author of Graphic Health Warning and Its Impact to Smokers (2017) and Problem and Prospect of Food Franchising in Manila University Belt (2014).



Dr. Melissa Caballes is a wife and a mother of two teenagers. She is a Professor in Quezon City University and a contributing editor in Factors affecting Online Classes Among Entrepreneurship Students of Quezon City University during the Pandemic Era”. She obtained her Doctorate Degree in Pamantasan ng Lungsod ng Marikina. Melissa academic experienced has provided many opportunities that further improved her personality and help the under privileged through outreach and community extension activities.



Dr. Edmond P. Freo is a full-time faculty of the Quezon City University, College of Business and Accountancy (Entrepreneurship Department) that teaches various subjects in undergraduate and formerly as Legal officer of Destileria Limtuaco & Co., Inc. He graduated with a Bachelor of Science and Business Administration Major in Legal Management and Bachelor of Laws (LL.B) at New Era University and he received his Master’s degree in Business Administration and Doctor of Philosophy in Business Management at Pamantasan ng Lungsod ng Marikina. He is also a lifetime member of different organizations namely: Philippine Institute of 21st Century Educators, Inc., International Multidisiplinary Organization for Research and Extension Inc., Center for Scholarly Researches of Educators in the Philippines, Industry 4.0 Comprehensive Organization of Revitalized Educators Inc., and Marikina Organization of Learning Leaders (MOLL).



Geraldine S. Adlawon is currently the Chairperson of Entrepreneurship Department under College of Business Administration and Accountancy. She has been serving the University since 2010. She is an alumna of the University with the degree in BS Entrepreneurial Management. She obtained her Masters in Business Administration at National College of Business and Arts in 2016.

In 2017 she took a Certificate in Teaching Program at Philippine Normal University, in 2018 she became a Licensed Professional Teacher.Aside from teaching, she is also a Licensed Financial Advisor and an Events Planner.





Erlee Angel S. Reyes is a full-time faculty of the Quezon City University, College of Business and Accountancy (Entrepreneurship Department) and holds an Assistant Professor I rank. Passionate faculty member focused on engaging students and sharing love in the field of specialization. She is currently pursuing a Doctor in Business Administration and completed the academic requirements of the program at Eulogio “Amang” Rodriguez Institute of Science and Technology (EARIST). In 2018, she finished her Master in Business Administration in the same institution. In 2008, obtained her Post-Baccalaureate degree in Entrepreneurial Management at then Quezon City Polytechnic University now Quezon City University. She also finished her Bachelor of Science in Computer Engineering at the Lyceum of the Philippines University in 2001. She actively participated in various seminars and conferences to keep herself updated in business education. She also published papers in international peer-reviewed journals such as Gender Difference in Self-reported Symptoms of Cabin Fever among Quezon City University Students during the Covid19 Pandemic, Brand Image of Selected Convenience Stores: Inputs to Customers Awareness, and Causes of Rejects in The Injection Process of a Plastic. She worked as Document Analyst in Saztec Philippines Incorporated under Litigation Support Business Unit and hold cases of JP Morgan Chase, Enron, Lehman Brothers, Arthur Andersen, Marlboro Country, and Philip Morris.





Lorna Fuensalida Suyat is a full-time faculty of Quezon City University under the College of Business and Accountancy. She holds a degree in Business Management and Master’s Degree in Business Administration at Colegio De San Juan De Letran. Being an advocate of social entrepreneurship, she directed her master’s thesis research entitled: Defining Social Entrepreneurship and its Critical Success Factors, in recognition of the country’s local social entrepreneurs.





Jo Ann General is one of Quezon City University full time faculty members. She holds a Bachelor’s Degree in Tourism Management and a Master’s Degree in Business Administration both taken at the Polytechnic University of the Philippines. Before she fully changed her career to academe almost three years ago, she used to work at a corporate office of an international hotel chain for over eight years, where she learned most of her skills, knowledge, and expertise. She is planning to pursue her Doctorate Degree this year.

A person smiling for the camera

Description automatically generated with low confidence

Elma Lyn Padlan is currently worked as Assistant Lecturer at the Quezon City University. Prior to joining the academe, she has a vast experienced in the industry, particularly in food manufacturing, franchising, marketing, sales, and quick service restaurant. Currently receiving her Master in Business Administration at the Rizal Technological University. Received her degree in Bachelor of Science in Business Administration Major in Marketing at National College of Business and Arts-Fairview, wherein she received a Silver Medal- Departmental Award.



Daryl R. Panganiban is a full-time Assistant Lecturer at Quezon City University under the Entrepreneurship Department-College of Business and Accountancy since 2012. He is a graduate of Bachelor of Science in Entrepreneurial Management and currently taking up Masters Degree in Business Administration at World Citi Colleges. He is the current President of Quezon City University Alumni Association and also a member of the Quezon City University Board of Regents.