



GSJ: Volume 10, Issue 5, May 2022, Online: ISSN 2320-9186

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MENTAL BREAKDOWN: MEASURING THE IMPACT OF ONLINE CLASSES ON  
THE MENTAL HEALTH OF THE THIRD-YEAR INDUSTRIAL TECHNOLOGY  
STUDENTS OF CAPIZ STATE UNIVERSITY-MAIN CAMPUS

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**Introduction**

Mental health is essential to human health and a state of well-being. The World of Health organization defines mental health as “a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stress of life, can work productively, and is able to make a contribution to his or her community”. Mental health and mental disorders are shaped by how a person’s social, economic, and physical environment operates. The absence of a mental disorder does not automatically mean a good state of mental health.

Mental health can affect the daily life, relationships, and physical health of an individual. It can preserve a person’s ability to enjoy life. Doing this, it involves reaching a balance between life activities, responsibilities, and efforts to achieve psychological

resilience. Contrary to this, conditions such as stress, depression, and anxiety can all affect mental health and disrupt a person's routine (Felman, 2020).

Mental health can be easily manipulated by various factors, one of which is distance learning. In the Philippines, distance learning through online classes has been implemented due to the global pandemic. As a result, safety measures such as social distancing was implemented in response to COVID-19. Academic institutions have shifted to an emergency online learning format and they were expected to further exacerbate academic stressors for students (Wickens, 2011 as cited by Grubic et.al., 2020). Students are now adopting a new way of learning through synchronous and asynchronous teaching because online learning is accessible anywhere and it can still cater to quality education (Dhawan, 2020)

Several online tools can be used as an alternative to face-to-face classes. However, a number of arguments have been made pertaining to time management, difficulty in grasping lessons, and mental health arouse. Students are having a hard time balancing education, family, household work, current pandemic situation, and social lives in an online learning environment (Parkers et al., 2014 as cited by Dhawan, 2020).

Another factor that affects the students' learning is that online classes depend on the available signal in the residing location. The accessibility of the students who participate in distance learning varies within the area. This is the usual case in developing countries such as the Philippines because the technology in countries like this is not ready for the online learning setup. The online assessments and online class teaching are only feasible and effective for a small proportion of students (Islam et al. 2020). Such academically related psychological burdens may lead to unstable mental states and suicidality in extreme cases (Mamun and Griffiths 2020).

Distance learning mainly affects internal equilibrium which disables students from mentally adapting and preparing for the new normal. They often feel like they lack motivation for online learning activities and academic competencies. The internet serves as the number one source or tool that a student has; but using the internet can also affect their lives in many ways (Vasquez, 2020). Students may have control over their time but because of the lack of sense of management, online learning may lead to irregular sleeping patterns and other unhealthy habits. Without the structure and face-to-face interaction with teachers, some students feel that it is difficult to focus on their studies.

At home, there are duties or chores needed to be done. It can be difficult to create a quiet and calm workspace for students to learn because not all housing areas are suitable for online learning. Some households cannot afford to provide a clean and silent space where learning through a device is feasible. Basically, distanced learning eventually creates a setup that blurs the line between doing school work and household chores, thus, may cause confusion and overfatigue for the students.

Overexposure to digital devices may lead to mental disorders (Balram, 2020). Park and Hyun reported those engaging in excessive technology use have a decreased sense of time and concentration due to multitasking. This will greatly affect the students because of the sudden shift of setup. There was not enough time for preparation on their part and the country cannot support its learning facilities to cater the implementation of distanced or online learning they have pushed through.

In addition, it makes the students not futuristic and more impulsive (Halupa, 2016). There are a number of effects on an individual's cognition who is overexposed to devices that may cause drastic changes in their mental health. By acknowledging the alarming effects of online learning on students and the unexpected shifting of classes

brought by this setup, the researchers were impelled to conduct a study to know the effects of online classes on the Third-year students of Industrial Technology of Capiz State University-Main Campus. Lastly, this study could help promote awareness of the student's mental health and it may serve as a reference to other researchers in the future.

### **Statement of the Problem**

This study aimed to determine the effects of Online Classes on the Mental Health of the Third-year students of Industrial Technology at Capiz State University-Main Campus. Specifically, this study sought to answer the following questions:

1. What was the socio-demographic profile of the students in terms of:
  - A. Age
  - B. Sex
  - C. Major
2. How feasible was an online class for the students of Capiz State University?
  - A. Accessibility to the internet
  - B. Available electronic devices
  - C. Suitable space for the online class
3. How can the respondents' mental health be described?
  - A. Emotional
  - B. Psychological
  - C. Social well-being
4. Is there a significant difference in the respondents' mental health when grouped according to their profile variable?

5. Is there a significant difference between Online Classes and the Mental Health of the Third-year Industrial Technology students of Capiz State University-Main Campus?

### **Hypothesis of the Study**

$H_0$  = There is no significant difference in the respondents' mental health when grouped according to their profile variable.

$H_0$  = There is a significant difference between the effects of Online Classes and the Mental Health of the Third-year Industrial Technology students of Capiz State University-Main Campus.

### **Scope and Delimitation**

The study mainly focused on how online classes can possibly affect the mental health of the Third-year Industrial Technology students of Capiz State University-Main Campus. The researchers chose the Food Technology, Fashion and Apparel, and Electronics students that served as their research sample and population. Furthermore, explanations and reasons for their respective answers were not concerns and were covered by this study.

The profile of the respondents covered age, sex, and grade level. The mental health of students was described in terms of emotional, psychological, and social well-being.

The respondents of the study consisted of 139 Third-year Industrial Technology students enrolled in the Capiz State University-Main Campus during the Academic Year 2021- 2022.

## **Research Design**

This study employed a quantitative, non-experimental, descriptive research design in which it attempts to characterize a population, condition, or phenomenon in a systematic and reliable manner. It can answer the questions of what, where, when, and how, but not why. A descriptive research design may examine one or more variables using a variety of research methods. Unlike experimental studies, the researcher does not influence or alter the variables; instead, they are observed and measured (McCombes, 2020). This research design helped the researchers determine and describe the independent variable, which is the online class, and the dependent variable, which is the mental health of the students.

## **Sources of Data**

The primary source of data was the respondents who answered the survey questionnaire. Secondary sources include books, online journals, articles, and other references that the researcher consulted and cited in the review of related literature.

## **Population of the Study**

The total respondents of this study consisted of 167 ( 86 Fashion and Apparel Technology, 81 Food Technology) out of 289 Third-year industrial technology students enrolled during the School year 2021-2022. The sample size was computed using Slovin's Formula. The respondents were selected using a stratified sampling strategy. The population was divided into strata as to strand and grade. The respondents were equally proportioned to calculate the number of respondents that have been selected from each major. A total of Sixty (60) respondents came from the Fashion and Apparel, and Fifty-six (56) respondents came from the Food Technology. The respondents in each section were identified using the lottery method in which the numbers 1-35 which is the

average number of students per section in the Third-year Food Technology, and numbers 1-30 which is the average number of students per section in the Third-year Fashion and Apparel, was drawn and the name corresponds to the number that was identified in the class list.

### **Instrumentation and Validation**

The researchers used a closed questionnaire when analyzing information, in which respondents picked their responses to questions by answering a scale from 1 to 5. The questionnaire is a researcher-made questionnaire and it is classified into two parts: Scale 1 included the Respondents' Socio-Demographic Profile and Scale 2 covered the Possible Effects of Online Classes at Capiz State University-Main Campus on the mental health of Third-year Industrial Technology students.

Scale 2 was subdivided into two parts: online class and mental health. Whereas for the online class: (A) accessibility to the internet, (B) available electronic devices, and (C) suitable space for the online class. Now as for the mental health: (A) Emotional Well-being, (B) Psychological Well-being, and (C) Social Well-being. The research instrument is addressed for an initial evaluation by the research adviser. The researcher consulted with language, statistics, and psychology experts for further confirmation, who provided feedback, insights, and alternative recommendations.

Pilot testing has been conducted through an online survey with 15 Third-year Industrial Technology students of Capiz State University-Main Campus who are not included as the official respondents of the study. The researchers limited the respondents to 15 students because of the COVID-19 Pandemic.

## Evaluation and Scoring

In order to measure the effects of online classes on the mental health of the Third-year Industrial Technology Students of Capiz State University, the following numerical rating, numerical range, categorical response, verbal interpretation, and verbal description were used in describing the self-esteem, emotional well-being, the social, psychological, and physical well-being of the respondents as well as the factors in having online classes:

<b>Numerical Rating</b>	<b>Numerical Range</b>	<b>Categorical Response</b>	<b>Verbal Interpretation</b>	<b>Verbal Description</b>
<b>5</b>	4.49-5.00	Highly Disagree (HD)	Very Low	The respondent experienced the indicator 1-20% of the time.
<b>4</b>	3.50-4.49	Disagree (D)	Low	The respondent experienced the indicator 21-40% of the time.
<b>3</b>	2.50-3.49	Undecided (U)	Moderate	The respondent experienced the indicator 41-60% of the time.
<b>2</b>	1.50-2.49	Agree (A)	High	The respondent experienced the indicator 61-80% of the time.
<b>1</b>	1.00-1.49	Highly Agree (HA)	Very High	The respondent experienced the indicator 81-100% of the time.

## Data Gathering Procedure

The researchers made a secured written permit to the administrators of Capiz State University-Main Campus specifically to the Industrial Technology to conduct the study. After the given permission, the researchers provided a letter to Myleen C. Abelarde, the head registrar, and asked for permission for the total number of Third-year students. After providing the letter to the head registrar, the researchers provided a



separate letter to the respondents and asked for their consent to answer the survey questionnaire attached to it is the explanation of the study.

Data needed for this quantitative research was gathered using a Likert scale Questionnaire consisting of 10 items each of 3 categories. The researchers provided a letter to Capiz State University-Main Campus to retrieve permission and allowed them to conduct a pilot testing for the Third-year industrial technology students. The researchers used the allocated time for vacancies to prevent conflict during class hours while conducting the questionnaire. The data collected were arranged, tallied, and analyzed statistically.

### **Ethical Consideration**

The researcher completed this study by considering ethical concerns, particularly in respect of confidentiality, consistency, and the security of human subjects. Permissions are obtained from the Office of the Campus Administrator of Capiz State University-Main Campus, where the researcher conducted the study. As some of the respondents were still minors, parental consent was also obtained as part of the Consent Form to ensure that they clarify their right to freely participate in the study at any time, the core aim of this study, the method that are used in the collection of data, comments on confidentiality security, statements on known risks associated with, and expected benefits to accumulate.

### **Result and Discussion**

1. What is the socio-demographic profile of the students in terms of: 1.1 age, 1.2 sex, and 1.3-grade level?

**Table 1**  
**Profile of the Respondent**

	Indicators	Frequency	Descriptive Percentage	Rank
<b>Age</b>	17 – 18 years old	18	10.8	2
	19 – 21 years old	141	84.4	1
	21 – above years old	8	4.8	3
<b>Sex</b>	Male	60	35.9	2
	Female	107	64.1	1
<b>Major</b>	Fashion and Apparel	82	49.1	2
	Food Technology	85	50.9	1

Table 1 shows the profile of the respondents in terms of their age, sex, and major. In terms of age, 18 or 10.8% of the respondents were 17 - 18 years old and ranked 2<sup>nd</sup>; 141 or 84.4% of the respondents were 19 - 21 years old and ranked 1<sup>st</sup>; 8 or 4.8% of the respondents were 21 years old and above and ranked 3<sup>rd</sup>. In terms of sex, 107 or 64.1% of the respondents were female and ranked 1<sup>st</sup> 60 or 35.9% of the respondents were male and ranked 2<sup>nd</sup>. In terms of major, 82 or 49.1% of the respondents were Fashion and Apparel and ranked 2<sup>nd</sup>; 85 or 50.9% of the respondents were in Food Technology and ranked 1<sup>st</sup>. To sum it up, the majority of the students in terms of age were 19-21 years old; in terms of sex were female, and in terms of major were food technology.

2. How feasible is an online class for the students at Capiz State University?

2.1 Accessibility to the internet

**Table 2**  
**Feasibility of Online Class in terms of Accessibility to the internet**

Indicators	Frequency	Descriptive Percentage	Rank
<b>Yes</b>	157	94	1
<b>No</b>	10	6	2
<b>Total</b>	<b>167</b>		

Table 2 shows the feasibility of the online class for the students in Capiz State University and the respondents in terms of accessibility to the internet. The first indicator which is “Yes” resulted in a 157 frequency, having a descriptive percentage of 94 and ranked 1<sup>st</sup>. The second indicator which is “No” resulted in a 10 frequency, having a descriptive percentage of 6 and ranked 2<sup>nd</sup>. The findings of the study agree with the article, Computer, and Internet use, by Ramani, K. et. al (2018). It states that in 2015, 94 percent of children ages 3 to 18 had a computer at home and 61 percent of children ages 3 to 18 had internet access at home. For those children who had access to the Internet in 2015, the two locations with the highest reported levels of internet access were at home (86 percent) and at school (65 percent), and the two most common means of internet access at home were a high-speed internet service and mobile internet service or data plan. According to Brouwer (2018), 70% of schools nationwide don't have a high-speed internet connection. High-speed internet provides users to keep up with growing website demands and access information in a timely manner. Without high-speed Internet, the educational purposes of students on the internet would be difficult such as viewing educational videos on YouTube, articles that are addressing current issues, and lastly the online quizzes and tests that are required in school.

Ninety percent of the information on the internet has been created in the past year. Having access to the internet allows students to keep up with information that might not make it into textbooks, or that might become outdated by the time it is published in a traditional format. Having access to this information makes the students take charge of their education, and the research backs that up. Test scores from after they were given access to Internet-capable devices. Other studies showed that discipline issues decreased when students were able to use technology to help with their studies, Brouwer (2018).

## 2.2 Available electronic devices

**Table 3**  
**Feasibility of Online Class in terms of Available Electronic Devices**

Indicators	Frequency	Descriptive Percentage	Rank
Cellphone	119	71.3	1
Laptop	27	16.2	2
Tablet	13	7.8	3
Computer	6	3.6	4
Ipad	2	1.2	5
Total	167		

Table 3 shows the feasibility of the online class for the students at Capiz State University and the respondents in terms of available electronic devices. The first indicator which is “Cellphone” resulted in a 119 frequency, having a descriptive percentage of 71.3 and ranked 1<sup>st</sup>. The second indicator which is “Laptop” resulted in a 27 frequency, having a descriptive percentage of 16.2 and ranked 2<sup>nd</sup>. The second indicator which is “Laptop” resulted in a 27 frequency, having a descriptive percentage of 16.2 and ranked 2<sup>nd</sup>. The third indicator which is “Tablet” resulted in a 13 frequency, having a descriptive percentage of 7.8 and ranked 3<sup>rd</sup>. The fourth indicator which is “Computer” resulted in a 6 frequency, having a descriptive percentage of 3.6 and ranked 4<sup>th</sup>. The fifth indicator which is “iPad” resulted in a 2 frequency, having a descriptive percentage of 1.2 and ranked 5<sup>th</sup>.

Smartphones become a means of communicating and learning for the learners to access the online platform and interact digitally. A recent college study “found that 95% of students bring their phones to class every day, 92% use their phones to text message during class time, and 10% admit they have texted during an exam on at least one occasion” (Tindell & Bohlander, 2012). The usage of smartphones is widely becoming an accessible learning tool used in enhancing teaching and learning in online education. In

the study of (Adjei, 2019) the findings revealed that distance learning students find it easier to use a smartphone in their learning activities. Nowadays, the use of smartphones has huge in terms of teaching and learning. To give an instance, students can quickly access their lecture materials on their smartphones, access information online to get their information needs via learning management systems, and access academic databases, and a website to mention a few. This was evident in the works of Masiu & Chukwuere (2018) where it was stated that “The smartphone has also made students’ lives easier, as they can access their school information on the gadget through electronic learning (e-learning), and mobile learning (m-learning).”

### 2.3 Suitable space for an online class

**Table 4**  
**Feasibility of Online Class in terms of Suitable Space for Online Class**

Indicators	Frequency	Descriptive Percentage	Rank
At home	163	97.6	1
At a relative’s house	2	1.2	2
At the dorm	1	0.6	3
Others	1	0.6	4
<b>Total</b>	<b>167</b>		

Table 4 shows the feasibility of the online class for the students at Capiz State University in terms of suitable space for an online class. The first indicator which is “At home” resulted in a 167 frequency, having a descriptive percentage of 97.6 and ranked 1<sup>st</sup>. The second indicator which is “At relative’s house” resulted in a 2 frequency, having a descriptive percentage of 1.2 and ranked 2<sup>nd</sup>. The third indicator which is “At the dorm” resulted in a 1 frequency, having a descriptive percentage of 0.6 and ranked 3<sup>rd</sup>. The

fourth indicator which is “Others” resulted in a 1 frequency, having a descriptive percentage of 0.6 and ranked 4<sup>th</sup>.

The findings of the study agree with the article, what are the Benefits of Distance Learning, by Emma (2020). It states that the pandemic has led students to stay at home and that includes students learning online. Parents also no longer rush to drive their children to school. Students feel most comfortable while studying and can videoconference to their classes as easily as one, two, or three. While doing school at home, it is also much simple to do other things such as house works. Staying at home while doing online classes can be done calmly and safely by many students in a comforting environment.

Also, the findings of the study agree with the article, what is distance learning - School at home vs. Homeschool, by Boschen J. (2020). It stated that doing school at home or at-home learning, students are also asked to complete work that is similar to what they do in classrooms. The school works are just in a digital format and it can be done at home and no longer be completed in the school. Teachers are required to run their classroom online, meet with the students, assign work, and create an at-home school environment. Distance learning is also for a limited amount of time. Tasks are given and students are expected to complete them at home.

### 3. How can the respondents’ mental health be described?

#### 3.1 Emotional Well-Being

**Table 5**  
**Respondent’s Mental Health in terms of Emotional Well-Being**

<b>Indicators</b>	<b>Mean</b>	<b>Verbal Interpretation</b>	<b>Rank</b>
1. I feel nervous every time I must speak through the microphone.	2.5030	Moderate	2

2. I have observed that I am more tired than usual.	2.1198	High	5
3. I am confident that I can do well in online classes.	2.9222	Moderate	1
4. Unfinished asynchronous or online tasks give me anxiety.	2.1317	High	4
5. Excessive amounts of work give me stress.	1.9222	High	6
6. I worry so much that it affects my daily routine.	2.1796	High	3
<b>Summative Mean</b>	2.964	High	

Table 5 shows the mental health of the respondents in terms of emotional well-being. The third indicator which states “I am confident that I can do well in online classes” resulted in a 2.9222 mean, having a moderate verbal interpretation, and ranked 1<sup>st</sup>. The first indicator which states “I feel nervous every time I must speak through the microphone.” resulted in a 2.5030 mean, having a high verbal interpretation and ranked 2<sup>nd</sup>.

To sum it up, a summative mean of 2.2964 revealed that the respondents had a high effect on their mental health in terms of emotional well-being. This denotes that most students are on the same level of agreement in terms of the effects of Online classes on their emotional well-being. Results also imply that Online Class plays a vital role in affecting a student’s mental health.

The findings of the study agree with the article, what is distance learning? The benefits of studying remotely, by Mheidly N., et al (2020). It states that the pandemic has led to a major shift in our way of learning and that we were forced to adapt to telecommunication by means of learning. The sudden use of online applications led students to spend more time facing screens and be exposed to different devices which increases stress and burnout measures. Burnout is emotional stress or mental exhaustion that resulted from failed management of long-term stress. Students spend most of the

time learning virtually which results in the vulnerability of gaining different emotions including exhaustion, overjoy, and detachment. Such emotions could lead students to not do their work and procrastinate. Procrastination affects one's students' mental health and it leads to chronic stress or depression.

### 3.2 Psychological Well-Being

**Table 6**  
**Respondent's Mental Health in terms of Psychological Well-Being**

Indicators	Mean	Verbal Interpretation	Rank
1. I lack the motivation to finish my schoolwork.	2.4012	High	5
2. I cannot easily deal with whatever comes my way.	2.6287	Moderate	3
3. I am distracted during online classes.	2.3533	High	6
4. I am not satisfied with my projects and assignments.	2.7126	Moderate	2
5. I want to work independently rather than doing a task by group.	2.5090	Moderate	4
6. I find online classes efficient for learning.	3.0419	Moderate	1
7. I often have negative thoughts about my academic performance.	2.2156	High	7
<b>Summative Mean</b>	2.5518		

Table 6 shows the mental health of the Third-year Industrial Technology students of Capiz State University-Main Campus in terms of psychological well-being. The number 6<sup>th</sup> indicator which states "I find online classes efficient for learning," had a 3.0419 mean, verbal interpretation of moderate, and ranked first. This only indicates that students achieved productivity and even a new model of training and learning with minimal resources will still achieve good results. The number 4 indicator which states "I



am not satisfied with my projects and assignments,” had a 2.7126 mean, verbal interpretation of moderate, and ranked second. This only inferred that student are having a problem with their work, assignments, and projects and they are not satisfied with the type of instruction or learning.

Results revealed that the psychological well-being obtained a summative mean of 2.5518 which revealed that the respondents had a moderate level of mental health in terms of psychological well-being. This only implies that psychological well-being has a moderate level.

This research is connected to the study of Ozpolat, Isgor, & Sezer (2012) which states that there is a positive and medium level relationship between psychological well-being, control, and perfectionism subscales. It was also revealed that there is a negative and medium level relationship between psychological well-being and the need to please and self-esteem scale. With respect to the findings, the students' well-being shows a moderate level of how they embrace lifestyles such as having both positive and negative effects on online class. It is oriented to the emotional response and analyzing the relationship between our personality features which personality predicts student's satisfaction. The psychological well-being scores of the students stand with the management of their lifestyle and are oriented to how a student embraces their self-esteem and feels about online classes.

Students, who embrace self-esteem and need to please oriented lifestyles, have a negative relationship with psychological well-being. A positive relationship to psychological well-being refers to the students who embrace control and perfection-oriented lifestyles and autonomy, personal growth, and environmental mastery. This indicates that a student's personality plays a vital role in their coping mechanism and new environment adaptation. Online classes serve as a reset or an introduction to a new

lifestyle, thus it varies with how a student will respond as the results show a moderate level of psychological well-being towards online classes.

The findings of the study also agree with the study of Huppert (2009) which states that it can either have a positive effect or negative effect on the student's mental health by correlating both causes of well-being and ill-being. The moderate level of mental health in terms of psychological well-being indicates that students vary differently in the ways they manage on the take on to the educational conversion. Factors that affect mental well-being can be demographic, personality, social factors (brain development), genetic factors, and other drivers which can lead either to well-being or ill-being.

A student varies widely through their accustomed or lifestyle habits and level of psychological well-being. The drivers of well-being can be determined through a flexible lifestyle which depends on how the student will take on online classes. It pertains to the balanced effect on the student's psychological well-being. Online classes serve to both have a positive and negative effect depending on the student's neurobiological basis of response and the situations where online classes have given.

### 3.3 Social Well-Being

**Table 7**  
**Respondent's Mental Health in terms of Social Well-Being**

Indicators	Mean	Verbal Interpretation	Rank
1. I communicate with my friends from time to time.	2.2156	High	7
2. My parents are there to listen to my problems.	2.5988	Moderate	1
3. I have siblings who understand me.	2.0599	High	9
4. My friends and I hang out.	2.3952	High	4
5. I attend family gatherings.	2.4759	High	2
6. There is somebody whom I can talk to about	2.2410	High	6

my problems.			
7. I often have negative thoughts about my academic performance.	2.1497	High	8
8. I talk about my problems with my friends.	2.4611	High	3
9. I share my thoughts with my friends.	2.2814	High	5
<b>Summative Mean</b>	2.3198	High	

Table 7 shows the respondents' mental health in terms of social well-being. Indicator 2 which states that "My parents are there to listen to my problems" acquired the highest rank with a mean of 2.5988 and was verbally interpreted as high. This inferred that people with siblings have stable mental health because there is someone who understands them aside from their friends. It is followed by indicator 5 which states that "I attend family gatherings" which acquired the mean of 2.4759. This indicator interpreted as high only indicates that attending family gatherings can help in having stable mental health.

Results reveal that social well-being obtained a summative mean of 2.3198 which reveals that the respondents have high or stable mental health in terms of social well-being.

The findings of the study agree with the study of UK Research and Innovation (2013) which states that social isolation has long been known as a trigger for mental illness. The support coming from friends, family, and neighbors is said to be beneficial to the mental health of individuals. Volunteering, joining clubs and organizations, and other social interactions can also boost the well-being of a person. Socializing creates a big impact on a person's mental health. People tend to forget about the negative things when they are surrounded by people who support them because they are being distracted by the situation that they are in. The mental health of a person becomes better when they are

with someone, they are comfortable with because they can open up their problems and concerns without any judgment, and they can also receive comfort and possibly, advice. We can also conclude that social relationships contribute to better health and well-being by observing and analyzing people's behaviors every day within a social context.

Factors like gender have also been found that mental health is dependent on in terms of social well-being. For women, friendship networks are more important than having regular contact with a network of a large family. While men, do perform better when they have large numbers of friends and/or family.

The findings of the study could also be of relation to Lev Vygotsky's (1934) theory entitled Sociocultural Theory, which states that community is one of the key components that play a vital role in one's mental health. The theory shows the role of social interaction in the development of cognition, as he strongly believed that community plays a vital role in the process of "making meaning".

The social interaction within the community, which also includes family and friends, can greatly affect a person's behavior and way of thinking. When they are surrounded by people who personally know them, they are comfortable enough to express and open up what they want unlike when they are with strangers. With respect to the findings, respondents who connect and interact more with their friends and family were found to have stable mental health. Being able to constantly interact and communicate with others is someone's way of distressing and as a result, their mental health becomes stable.

In terms of online classes, social interaction is also one of the components of an effective learning environment. It is related to the theory's community-centered principle on "social cognition" which states that a community-centered online learning

environment will provide a space for students to work collaboratively in creating new knowledge.

4. Is there a significant difference in the respondents' mental health when grouped according to their profile variable?

**Table 8**  
**Significant Difference in the Respondent's Mental Health when Grouped According to their Profile Variables**

Profile	Treatment		Result	Interpretation
Age	One-way ANOVA	17 -18 19 - 20 21 - above	f= 0.521 sig. (2-tailed) = 0.595	No Significant Difference
Sex	t-test	Male Female	t= 1.264 sig. (2-tailed) = 0.208	No Significant Difference
Major	t-test	Fashion and Apparel  Food Technology	t= 1.660 sig (2-tailed) = 0.208	No Significant Difference

Table 8 shows the difference in the respondents' mental health when grouped according to their profile variable. Using One-way ANOVA, results revealed that there was no significant difference in respondents age 17-18,19-20, and 21 above (f= 0.521, p= 0.595). Using t-test, results revealed that there was no significant difference in Female (M= 2.3378, SD= 0.63054) and Male (M= 2.4750, SD= 0.74304) when grouped according to their gender;  $t(165) = -1.264$  p= 0.208. T-test was also used for major which reveals that there was no significant difference in Fashion and Apparel with 82 respondents (M= 2.4748, SD= 0.62924) and Food Technology with 85 respondents (M= 2.3025, SD= 0.70802) when grouped according to their Major;  $t(165) = 1.660$  p= 0.099. They both have a probability value higher than the significant alpha of 0.05. This result implies that mental health is not affected by their age and gender. Thus, these finding leads to the acceptance of the formulated null hypothesis.

In summary, there is no difference in the mental health of the respondents when they are grouped according to their demographic profile. Results are parallel to the study of Droogenbroeck et al. (2018) which states that girls experience psychological distress, scoring significantly higher scores than boys. In the same study, it was mentioned that young adult boys aging from 20-25 years old were more likely to experience psychological distress compared to adolescent boys from 15-19 years of age. Meanwhile, there were no age differences among girls. According to the American Psychological Association, an aging person's emotional well-being can be affected by happenings such as losing their loved ones, discovering the health implications of their body, and being unable to do their once-cherished activities. Results agree with the study of Rosvall and Nilsson (2016), in which school nurses were interviewed regarding mental health and the students they serve; it was shown that they believed girls were more likely to have mental health problems than boys and that boys were harder to get to open up about mental health. Despite the nurses' assumptions, it has been found that both boys and girls were equally affected, though girls were more likely to report it. According to the study conducted by Hjorth (2016) to see how mental health affected school dropout rates across genders, it was revealed that while females were more likely to have poor mental health, men were more likely to drop out of school due to their mental health. The women were coping with their mental health challenges better, they cited this due to women getting more treatment, and therefore staying in school despite poor mental health.

5. Is there a significant difference between Online Classes and the Mental Health of the Industrial Technology Students of Capiz State University-Main Campus?

**Table 9**  
**Significant Relationship between Online Class and Mental Health**

Profile	Treatment		Result	Interpretation
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Accessibility to the internet	Independent T-test	Yes No	t= 0.115 p-value= 0.908	No significant difference
Available electronic devices	One-Way ANOVA	Cellphone Laptop tablet Computer iPad	F= 1.515 p-value= 0.200	No significant difference
Suitable space for an online class	One-Way ANOVA	At home At relative's home At dorm Others	f= 0.605 p-value= 0.612	No significant difference

Table 9 shows the difference in the respondent's mental health when grouped according to accessibility to the internet, available electronic devices, and suitable space for an online class. Using the Independent t-test, results revealed that there was no significant difference in respondent's mental health in terms of respondent's accessibility to the internet (t= 0.115, p-value= 0.908). Using One-Way ANOVA, there is no significant difference in respondents' mental health in terms of the available electronic devices used by the respondents (f=1.515m p-value= 0.200). There was also no significant difference in the respondent's mental health in terms of the respondent's preference for a suitable space for an online class (f=0.605, p-value=0.612).

In summary, there is no difference in the mental health of the respondents when grouped according to accessibility to the internet, available electronic devices, and suitable space for an online class. The researchers were able to uncover the relationship between the mental health of the respondents when grouped according to accessibility to the internet, available electronic devices, and suitable space for an online class. This result concurs with the Children Bureau (2019) Effects of Technology on Mental Health which states that it can be linked to a number of other subsequent factors such as depression, low self-esteem, and loneliness which often lead to diagnosable mental illnesses and worsening issues that were already present.

JMIR Ment Health (2016) Are Mental Health Effects of Internet Use Attributable to the Web-Based Content or Perceived Consequences of Usage? A Longitudinal Study of European Adolescents contradicted the Children Bureau's Effects of Technology on Mental Health. The magnitude of Internet use is negatively associated with mental health in general, but specific Web-based activities differ in how consistently, how much, and in what direction they affect mental health (JMIR Ment Health, 2016)

### References

- Alberta Teachers' Association. (2016). FACTORS AFFECTING MENTAL HEALTH. Retrieved from <https://canwetalk.ca/about-mental-illness/factors-affecting-mental-health/>.
- Adjei, N. (2019). THE USE AND EFFECT OF SMARTPHONES IN STUDENTS' LEARNING ACTIVITIES: EVIDENCE FROM THE UNIVERSITY OF GHANA, LEGON. Retrieved from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=6260&context=libphilprac>.
- American Psychological Association. (2012). AGING AND DEPRESSION. Retrieved from <https://www.apa.org/topics/aging-depression>
- Baker, Elizabeth H. "SOCIOECONOMIC STATUS, DEFINITION." (2014). The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society, pp. 2210–2214. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118410868.wbehibs395>.
- Biology Online. (2001). Retrieved from [https://www.biologyonline.com/dictionary/homeostatic-equilibrium#:~:text=\(2\)%20The%20ability%20of%20the,to%20regulate%20the%20inter%20nal%20conditions](https://www.biologyonline.com/dictionary/homeostatic-equilibrium#:~:text=(2)%20The%20ability%20of%20the,to%20regulate%20the%20inter%20nal%20conditions).
- Bolatov, et., at (2020). Online-Learning due to COVID-19 Improved Mental Health Among Medical Students. Retrieved from <https://link.springer.com/article/10.1007/s40670-020-01165-y#Sec7>
- Brouwer, B. (2018). WHY TODAY'S STUDENT MUST HAVE INTERNET ACCESS (AND HOW TO PROVIDE IT). Retrieved from <https://www.assetpanda.com/resourcecenter/blog/student-internet-access/>
- Capio, C., et al., Michalos, A., ed. (2014). PHYSICAL WELL-BEING. SpringerLink, Springer, Dordrecht. Retrieved from [link.springer.com/referenceworkentry/10.1007/978-94-007-0753-5\\_2166](https://link.springer.com/referenceworkentry/10.1007/978-94-007-0753-5_2166).



- Children Bureau (2019). Effects of Technology on Mental Health. Retrieved from <https://www.all4kids.org/news/blog/effects-of-technology-on-mental-health/>
- Claiborn, Charles D., and Stuart C. Yudofsky. (2020). "MENTAL DISORDER." Encyclopædia Britannica, Encyclopædia Britannica, Inc. Retrieved from <https://www.britannica.com/science/mental-disorder>.
- Davis, T. (2019). WHAT IS WELL-BEING? DEFINITION, TYPES, and WELL-BEING SKILLS. Psychology Today. Sussex Publishers, LLC. Retrieved from <https://www.psychologytoday.com/us/blog/click-here-happiness/201901/what-is-wellbeing-definition-types-and-well-being-skills>.
- Droogenbroeck F. V., et al. (2018). GENDER DIFFERENCES IN MENTAL HEALTH PROBLEMS AMONG ADOLESCENTS AND THE ROLE OF SOCIAL SUPPORT: RESULTS FROM THE BELGIAN HEALTH INTERVIEW SURVEYS 2008 AND 2013. Retrieved from <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-018-1591-4>
- E., & Roberts, K. (2020, May 28). MENTAL HEALTH AND DISTANCE LEARNING. Retrieved from <https://learnsafe.com/mental-health-and-distance-learning/>. (n.a.) EMOTIONAL WELL-BEING SERVICES
- Felman, A. (2020). MENTAL HEALTH: DEFINITION, COMMON DISORDERS, EARLY SIGNS, AND MORE. Retrieved from <https://www.medicalnewstoday.com/articles/154543>.
- Finol, M.O. (2020). ASYNCHRONOUS VS. SYNCHRONOUS LEARNING: A QUICK OVERVIEW. Retrieved from: <https://www.brynmawr.edu/blended-learning/asynchronous-vs-synchronous-learningquickoverview#:~:text=Synchrouous%20learning%20refers%20to%20all,or%20smaller%20groups%20get%20together>.
- Fusco, J. (2017). How Gender Differences Affect Mental Health Outcomes. Perspectives: Vol. 9: Iss. 1, Article 6. [https://scholars.unh.edu/perspectives/vol9/iss1/6/?utm\\_source=scholars.unh.edu%2Fperspectives%2Fvol9%2Fiss1%2F6&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](https://scholars.unh.edu/perspectives/vol9/iss1/6/?utm_source=scholars.unh.edu%2Fperspectives%2Fvol9%2Fiss1%2F6&utm_medium=PDF&utm_campaign=PDFCoverPages)
- Gold, A. (2016). NATIONAL ALLIANCE ON MENTAL ILLNESS. Retrieved from <https://www.nami.org/Blogs/NAMI-Blog/July-2016/Why-Self-Esteem-Is-Important-forMental-Health>.
- Gregorian calendar (2001), AGE DEFINITION, HANDBOOK OF VITAL STATISTICS SYSTEMS AND METHODS, VOLUME 1: LEGAL, ORGANIZATIONAL AND TECHNICAL ASPECTS UNITED NATIONS STUDIES IN METHODS, GLOSSARY, SERIES F, No. 35, UNITED NATIONS, NEW YORK 1991. Retrieved from <https://stats.oecd.org/glossary/detail.asp?ID=57>.
- Halupa, C. (2016). RISKS: THE IMPACT OF ONLINE LEARNING AND TECHNOLOGY ON STUDENT PHYSICAL, MENTAL, EMOTIONAL, AND SOCIAL HEALTH. 6305-6314. Retrieved from DOI: 10.21125/iceri.2016.0044.

- Henriksen et al., (2017) THE ROLE OF SELF-ESTEEM IN THE DEVELOPMENT OF PSYCHIATRIC PROBLEMS: A THREE-YEAR PROSPECTIVE STUDY IN A CLINICAL SAMPLE OF ADOLESCENTS. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5747942/>.
- High Focus Centers (2020). THE EFFECTS OF ONLINE LEARNING ON A TEEN'S MENTAL HEALTH. Retrieved from <https://highfocuscenters.pyramidhealthcarepa.com/the-effectsof-online-learning-on-a-teens-mentalhealth/?fbclid=IwAR3CXaIPvTCHHJ6V8FeC0QNXQbsDxPLzcMaP181ZPNiy1NE0G79ULz7Rj>
- Huppert, F. (2009, March 09). Psychological well-being: Evidence regarding its causes and consequences†. Retrieved February 24, 2021, from <https://iaapjournals.onlinelibrary.wiley.com/doi/full/10.1111/j.1758-0854.2009.01008.x>
- Hurley, Katie, et al. (2019) "WHAT IS RESILIENCE? DEFINITION, TYPES, BUILDING RESILIENCY, BENEFITS, AND RESOURCES: EVERYDAY HEALTH." Retrieved from EverydayHealth.com, [www.everydayhealth.com/wellness/resilience/](http://www.everydayhealth.com/wellness/resilience/).
- JMIR Ment Health (2016). Are Mental Health Effects of Internet Use Attributable to the WebBased Content or Perceived Consequences of Usage?. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4963606/>
- Lalu, G. P. (2020). WHY PUSH FOR CLASSES WHEN PANDEMIC AFFECTS STUDENTS' MENTAL HEALTH?. Retrieved from <https://newsinfo.inquirer.net/1323764/cegp-asksdeped-ched-why-push-classes-when-pandemic-affects-students-mental-health>.
- Mheidly N., et al (2020). COPING WITH STRESS AND BURNOUT ASSOCIATED WITH TELECOMMUNICATION AND ONLINE LEARNING. Retrieved from <https://doi.org/10.3389/fpubh.2020.574969>
- Morin, A. (2020). HOW TO IMPROVE YOUR PSYCHOLOGICAL WELL-BEING: YOUR EMOTIONAL HEALTH IS KEY TO A HAPPY LIFE. Dotdash. Retrieved from <https://www.verywellmind.com/improve-psychological-well-being-4177330#why-it-matters>.
- Orth, Robins and Widaman. (2012). LIFE-SPAN DEVELOPMENT OF SELF-ESTEEM AND ITS EFFECTS ON IMPORTANT LIFE OUTCOMES. Retrieved from <https://psycnet.apa.org/record/2011-21756-001>
- Ozpolat, A., Isgor, I., & Sezer, F. (2012, August 18). Investigating psychological well-being of university students according to lifestyles. Retrieved March 03, 2021, from <https://www.sciencedirect.com/science/article/pii/S1877042812023841>
- Quaranta, J. (2017). DESCRIPTIVE CORRELATIONAL RESEARCH: ASTHMA MANAGEMENT BY SCHOOL NURSES. SAGE Research Methods Cases. Retrieved from doi:10.4135/9781526407696.

- Personal and Guidance Journal. (2012). HOW MENTAL HEALTH AFFECTS PHYSICAL HEALTH. Retrieved from <https://onlinedegrees.bradley.edu/blog/how-mental-healthaffects-physical-health/>.
- Rafferty, Jason. "GENDER IDENTITY DEVELOPMENT IN CHILDREN." HealthyChildren.Org, 2019, Retrieved from <https://www.healthychildren.org/English/agesstages/gradeschool/Pages/Gender-Identity-and-Gender-Confusion-In-Children.aspx>.
- Ramani, K. et. al (2018). STUDENT ACCESS TO DIGITAL LEARNING RESOURCES OUTSIDE OF THE CLASSROOM. Retrieved from <https://nces.ed.gov/pubs2017/2017098/index.asp>.
- Terada, Y. (2020) COVID-19's IMPACT ON STUDENTS' ACADEMIC AND WELL-BEING. Retrieved from <https://www.edutopia.org/article/covid-19s-impact-students-academicand-mental-well-bein>
- Tindell, D., & Bohlander, R. (2012). THE USE AND ABUSE OF CELL PHONES AND TEXT MESSAGING IN THE CLASSROOM: A SURVEY OF COLLEGE STUDENTS. Retrieved from <https://eric.ed.gov/?id=EJ951966>.
- Wiles, G. (2020). STUDENTS SHARE IMPACT OF ONLINE CLASSES THEIR MENTAL HEALTH. Retrieved from [https://statenews.com/article/2020/07/students-share-impactof-online-classes-on-their-mental-health?ct=content\\_open&cv=cbox\\_lates](https://statenews.com/article/2020/07/students-share-impactof-online-classes-on-their-mental-health?ct=content_open&cv=cbox_lates).
- Wirth, J. (2020). ONLINE CLASSES CAUSE MENTAL HEALTH STRUGGLES FOR STUDENTS. Retrieved from [http://dailyorange.com/2020/10/online-classes-cause-mental-health-struggles-students/?fbclid=IwAR1XJztXRIf12mHqxDZOHZWCtvQKDN3IJNMIzn12wzp347fc84\\_a2ADz49NY](http://dailyorange.com/2020/10/online-classes-cause-mental-health-struggles-students/?fbclid=IwAR1XJztXRIf12mHqxDZOHZWCtvQKDN3IJNMIzn12wzp347fc84_a2ADz49NY)
- Word Psychiatry (2015). TOWARD A NEW DEFINITION OF MENTAL HEALTH. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4471980/>
- UK Research and Innovation. (2013, May). Mental health and social relationships. Retrieved March 07, 2021, from <https://esrc.ukri.org/news-events-and-publications/evidence-briefings/mental-health-and-social-relationships/>
- University of Nebraska, Human Resources. (1869). Retrieved from <https://hr.unl.edu/compensation/nuvalues/corecompetencies.shtml/>.