# IN TIME OF UNCERTAINTIES: DISTANCE LEARNING AND FUNCTIONAL HEALTH OF GRADE 11 STUDENTS IN A PUBLIC SENIOR HIGH SCHOOL IN THE PHILIPPINES

### CRISTETA R. TAPIA<sup>1</sup>, PABLO B. MATEL<sup>2</sup>, LIBRADA A. VIDALLON<sup>3</sup>

https://orcid.org/0000-0002-4118-77351, https://orcid.org/0000-0001-7175-16942, https://orcid.org/ 0000-0002-9592-5123 cristeta.tapia@deped.gov.ph¹, pablo.matel001@deped.gov.ph², librada.vidallon@deped.gov.ph³ Trece Martires City Senior High School Trece Martires City, Cavite, Philippines¹-³

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### **ABSTRACT**

The COVID-19 pandemic has a massive impact globally more specifically in the education sector. In the Philippines, the Department of Education offered varied modes of learning delivery to continue the education of the Filipino learners amidst the contagion. Online Learning Delivery (ODL) is one favored by students who have gadgets and access to the internet. However, this kind of modality may affect the functional health of the learners. This descriptive-comparative study examined the functional health status of the 77 Grade 11 online distance learners of Trece Martires City Senior High School. It also aims to develop intervention activities to lessen the adverse effects of online learning to the functional health of the students. The Online Learning and Physical Inactivity Questionnaire was used to collect data which were analyzed through descriptive statistics such as frequency and percentage, mean, and Mann Whitney U test in ascertaining the significant differences between the profile of the respondents and the eight contributing factors to their functional health. Findings of the study revealed that majority of the respondents were 17 years old and below, with more female than male students. No significant difference was found between age and any of the factors of functional health. However, it was found out that that there was a significant difference between gender and role limitations due to emotional problems, but no significant difference was determined between gender and the seven factors of functional health. This implies that the functional health status of the respondents does not differ significantly. Lastly, the functional health of the students stands at fair denoting that their participation in online learning lowers their functional health. Thus, it is recommended that physical activities like energizers be regularly incorporated and conducted during online classes to lessen the prolonged sedentary period. Furthermore, the school, teachers, parents and students should coordinate to provide necessary intervention activities for a better functional well-being of the ODL learners.

Keywords: online distance learning, functional health, Grade 11 students

### **INTRODUCTION**

The rapid outbreak of the Coronavirus disease (COVID-19) evidently spawned immeasurable and adverse impact on almost all

sectors globally. Among these sectors is the academic community in which teachers and students actively interact and regularly conduct classes inside the classrooms prior to the plague. However, when the pandemic struck, academic institutions across the world were placed in a

temporary closure to prevent the spread of the virus and to reduce further infections (UNESCO, 2020). In addition, local community lockdown and quarantine in all countries affected by the contagion compelled teachers and students to stav in their homes and continue the learning process in the absence of the traditional face-toface interaction. Consequently, online learning platforms (Crawford et al., 2020, cited in Tria, 2020) turned out to one the most appropriate mode of learning delivery in the prevalence of this health emergency. international Distance education was the sole kind of schooling appropriate to address this unforeseen situation for everyone involved in the teaching and learning process (Astafeva, Astafiev & Osipova, 2020).

Online learning is defined as distance learning conducted by using desktops, laptops, and cellphones in which the teachers and the students meet through the screen or monitor of these gadgets (Xu & Jaggars, 2013). Through online learning, teachers and students meet based on their availability, create a digital room or space where learning materials are stored and distributed and avoid limitations like time and place which are common concerns in the traditional face to face classes (Bates & Khasawneh, 2007, cited in Mangis, 2016).

Additionally, virtual platforms become the dominant classroom of online learning modality where studentsinteract with their teachers in real time and are offered with varied learning materials which allow them to discover and learn at their personal pace to accomplish their academic requirements (Schleicher, 2020). According to Zou, Li and Jin (2021), online education has more advantages compared with the traditional face-toface education such as flexibility, accessibility, independence, interactivity, multimodality, costeffectiveness, ubiquitous learning, convenience, and learner-centeredness. Nevertheless, this learning modality caused students to sleep and wake up the next day very late (Gruber, et al., 2021). In addition, in spite of the easier access to education, online learning could result to an idle way of living and related health issues among teachers and students. This is supported by Wang

et al. (2012) who emphasized that spending too much time on screen is correlated with an increase of a dormant manner of everyday life.

Mangis (2016) explained that functional health consists of both physical and mental health behaviors categorized by "physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, pain, and general health". Physical behavior refers to any movement of the body caused by "skeletal muscles that requires energy expenditure" (World HealthOrganization, (2010, cited in Mandolesi, et al., 2018). Moreover, any motor behavior suchas daily and leisure activities are considered a determinant lifestyle for general health status (Burkhalter & Hillman, 2011).

To address the prevailing pandemic, the Department of Education issued DepEd Order No.12 series of 2020 to create new modalities of learning in all grade levels in the basic education to ascertain that learning will still be continued while guaranteeing that everyone int the academic setting will be kept safe and will be in the best of their health, as outlined in the Learning Continuity Plan (LCP) for the school year 2020-2021 (Guiamalon, Alon & Camsa, 2021). Consequently, DepEd pursued the opening of classes amidst the outbreak of the pandemic. Various learning modalities were offered and structured for the 28 million Filipino learners. Based on data gathered via DepEd's National Learner Enrolment and Survey Forms (LESFs), prior to the resumption of classes in October 2020, it was reported that 3.8 million parents opted for online learning (Magsambol, 2020, cited in Guiamalon, Alon & Camsa, 2021 ).

In the Senior High School, four hours is the maximum allowable time for students to participate in online classes (Malipot, 2020). However, this extensive screen time period is only for the actual conduct of classes and does not include the time they have to spend in researching the internet for the accomplishment of activities and requirements, communication and interaction with their classmates and consultations with their teachers using social

media platforms. It is notable that online distance learning "decreased physical activity, and fewer locations visited" among students (Huckins et al., 2020, cited in Lischer, Safi, & Dickson, 2021 p.2) which apparently would also impact their learning abilities and academic performance.

Hence, it is a common knowledge that healthy students obtain higher grades specifically in actual teaching-learning process where they interact personally with their teachers. Consequently, in an online learning, computers have become the platform of educating the learners since it makes easier for them to continue their studies specifically in this time of pandemic. However, this stagnant screen-based learning modality which ties them in their seats for a longer time would inevitably cause health risks. In addition, frequent use of the computer led to insufficient sleep (Guo, et al., 2021); sleeping in later times, prolonged waking static hours and later getting up decrease one's strength which makes a person to perform unsatisfactorily and eventually live in a dormant manner (Wang et al., 2012).

A preponderous number of literatures on online or distance learning and mental health of learners amidst the Covid-19 pandemic exist. Barrot (2021, p.3) reviewed some of these current studies; on mental health and coping mechanisms of college students (Copelandet al., 2021; Fawaz et al., 2021); online teaching modalities and learning environment (Almiah et al., 2020; Hew et al., 2020; Tang et al., 2020; Suryaman, et al., 2020; home learning (Suryaman et al., 2020); self-regulation (Carter et al., 2020); and students' overall learning experience (e.g., Adarkwah, 2021; Day et al., 2021; Khalil et al., 2020; Singh et al., 2020).

Nonetheless, to date, in the Philippines, there is only one study that focused on the functional well-being of students specifically in the senior high school. In a pilot study, Mangis (2016) recommended to conduct a similar investigation with actual online learners. In addition, only 35 college students served as respondents in her study which is considerably small. Hence, the researchers decided to address such recommendation with a significant number of samples among senior high school

students who are in the online learning modality as a result of the current pandemic. The study entitled "In Time of Uncertainties: Distance Learning and Functional Health of Grade 11 Students in a Public Senior High School in the Philippines examined the state of the functional health of the respondents in order to suggest ways or activities that would help them maintain their physical well-being while continuing their studies. Also, results of the study could benefit the institution in creating interventions and modifications in the schedule and learning materials used to take care of the functional health of their students in the midst of the Covid-19 pandemic.

### **OBJECTIVES OF THE STUDY**

The study examined the functional health status of the Grade 11 online distancelearners in a Public Senior High School in the Philippines. Specifically, it aimed to: 1) determine the profile of the Grade 11 students in terms of age, and gender; 2) describe the functional health status of the Grade 11 online distance learners in terms of physical functioning, role limitations due to physical health, role limitations due to emotional problems, emotional energy/fatigue, well-beina. functioning, pain, general health; 3) determine the significant difference between the profile of the students and the eight contributing factors to the functional health of the respondents; and develop interventions to lessen the adverse impacts of online learning on the functional health of the students.

### **METHODOLOGY**

The study is in the context of the existing effects of COVID-19 to the physical health as one of the aspects of functional health. There were eight sub variables adopted from the instrument utilized by Mangis (2016) which were "physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well- being, social functioning, pain, and general health" (p.4). These were important contributing factors to the over-all



physical state of a person which according to literature was one of the aspects highly impacted by the pandemic. The respondents were limited to the Grade 11 senior high school students who were under the online distance modality of learning during the School Year 2020-2021. This grade level had a greater number of online classes compared to Grade 12. Since the study aimed to fill in the gap in terms of a bigger number of samples, these group of learners were deemed appropriate. However, all students in the TVL strand were in the modular distance learning modality; hence, they were not included. Lastly, the study was conducted at Trece Martires City Senior High School where the researchers are currently teaching.

Grade 11 Senior high school students served as the respondents of the study. Total enumeration of the target participants from the Accountancy, Business and Management (ABM), Humanities and Social Sciences (HUMSS), and Technology, Engineering Science. Mathematics (STEM) strands was utilized. All students in the online distance learning were included to provide significant data and a general representation of the institution. The students were enrolled since October 5, 2020 and must regularly attending and actively participating in their online classes. However, only 77 students willingly participated and responded in the electronic questionnaire.

The Online Learning and Physical Inactivity Questionnaire (Mangis, 2016) was utilized in the study. The questionnaire was adopted and modified. Some statements were changed according to the grade level of the respondents. Since modifications were applied, the instrument was validated. To ensure the validity of the instrument, the modified questionnaire was submitted to a panel of experts composed of teachers and master teachers, for the examination of item contents.

Next, informed consent was distributed to the respondents through their class advisers. When the participants agreed to be part of the study, the link of the questionnaire was sent to them, and they were motivated to answer honestly and accurately. Retrieved data were tallied and statistically analyzed to address the research problem and research questions posted.

Permission of the School Head was sought prior to the conduct of the study. Then, the respondents were asked to share the Informed Consent to their parents since they were still of minor age. Answering the instrument was done during the vacant time of the students so that their classes were not interrupted. All inquiries were directly address to the researchers to avoid confusion and difficulty among the learners. Lastly, data gathered from the respondents were certainly kept confidential, and true identities were not revealed at any cost.

The descriptive-comparative method was utilized in this study to describe the profile of the students and to determine the difference between the variables of the study. It provided data on the demographics of the respondents and determine the effects of the ODL modality to their functional well-being of the physical health of the respondents while they are pursuing their studies in the middle of the current pandemic.

Descriptive statistics of frequency and percentage were used for the profile of students, age, and gender. Mean was employed in describing the functional health status of the Grade 11 online distance learners in terms of the eight sub variables included in the instrument used. Finally, a non-parametric test of Mann-Whitney U test was utilized to determine the significant differences between the profile of the students and the eight contributing factors to the functional health of the respondents.

### **RESULTS AND DISCUSSION**

### 1. Profile of Students

**Table 1**Distribution of student-participants according to age and gender

le of Students	Frequency	Percentage
17 and below	63	82
18 and above	14	18
Male	26	34
Female	51	66
Total	77	100
	17 and below 18 and above Male Female	17 and below 63 18 and above 14 Male 26 Female 51

The profile of students involving age and gender is shown in Table 1.

**Age.** The age of the participants ranged from 16 to 22 years old. Results revealed that 63 (82%) were 17 years old and below, and 14 (18%) were 18 years old and above. Majority of the respondents were 17 years old and below.

Age is an important factor among the learners who are engaged in online learning. Online students who are older than their classmates tend to be more successful learners since they already have the knowledge and skills in time management compared to the younger ones (Xu & Jaggars, 2013).

**Gender.** Table 1 shows that of the 77 respondents, 51 (66%) were female and 26 (34%) were male. This implies that there were more female Grade 11 students than male students in Trece Martires City Senior High School.

The 2020 Global Gender Gap Report of the World Economic Forum (WEF) showed that in the Philippines, Filipino women are enrolled in high school and college at significantly higher number compared with men. In addition, enrolled females comprised 71.3 percent in secondary education and 40.4 percent in college, compared to only 60.2 percent and 40.4 percent, respectively, among males. Furthermore, it was also noted that enrollment data in primary education were almost similar, with 93.7 percent of girls and 93.9 percent of boys enrolled (Cruz, 2022).

### 2. Status of Functional Health of the Students

The status of functional health of the students is indicated in Table 2. It consists of physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, pain, and general health.

Data reveal that physical functioning, role limitations due to physical health, and role limitations due to emotional problems, all had a good functional health status. While,

energy/fatigue, emotional well-being, social functioning, pain, and general health, had a functional health status of fair.

**Table 2**Status of functional health of the students

Functional Health	Mean	Sd	Verbal
			Interpretation
Physical functioning	2.10	0.98	Good
Role limitations due to	2.39	0.90	Good
physical health			
Role limitations due to			
emotional	2.34	0.84	Good
problems			
Energy/Fatigue	3.10	0.79	Fair
Emotional well-being	2.58	0.92	Fair
Social functioning	2.53	0.94	Fair
Pain	2.52	0.92	Fair
General health	2.85	0.94	Fair
Status of Functional	2.55	0.95	Fair
Health			

Results also show that mean status of functional health is 2.55. This reveals that the functional health status of the Grade 11 students of Trece Martires City Senior High School is fair. This denotes that the participation of the students in online learning lowers their functional health.

Surkhali and Garbuja (2020) emphasized that consuming lengthy period of time in front of a computer or any other devices could generate adverse physical impacts. They added that engaging too much and glaring very close at the computer screen for hours continuously is tedious and may possibly result to various health "including problems visual discomfort, exhaustion, and muscle or joint aches" (p. 2). In addition, Huckins, et al. (2020) found that aside from mental and behavioral consequences, distance learning created an inactive life and reduced number of areas which could be visited among students.

# 3. Difference Between Profile of Students and Status of Functional Health Age and Functional Health

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### 3.1. Age and Status of Functional Health

Table 3
Difference between age and status of functional health

Dinoronoo bottio	on age and	0.00.00	0		• •
Physical functioning	17 and below	39.71	-0.594	0.553	Accept H₀
yoloai ranoaoiii.ig	18 and above	35.82			·
Role limitations due	17 and below	40.59	-1.330	0.184	Accept H₀
to physical health	18 and above	31.86			71000pt 110
Role limitations due	17 and below	40.37	-1.152	0.250	Accept H <sub>o</sub>
to emotional problems	18 and above	32.82	-1.102	0.200	Accepting
	17 and below	41.32	-1.947	0.052	Accept H <sub>o</sub>
Energy/Fatigue	18 and above	28.57		0.002	Accopting
Emotional well-	17 and below	40.20	-1.002	0.316	Accept H₀
being	18 and above	33.61			, ,
Casial functioning	17 and below	39.99	-0.831	0.406	Accept H <sub>o</sub>
Social functioning	18 and above	34.54			7.000pt 1.10
Dain	17 and below	40.17	-0.980	0.327	Accept H <sub>o</sub>
Pain	18 and above	33.75	2.500		, 1000pt 110
O I b IIIb	17 and below	40.76	-1.477	0.140	Accept H₀
General health	18 and above	31.07		2	, ,

Table 3 exposes the difference between age and status of functional health. It can be noted that no significant difference was found between age and any of the factors of functional health: physical functioning (U = -0.594, p > .05), role limitations due to physical health (U = -1.330, p > .05), role limitations due to emotional problems (U = -1.152, p > .05), energy/fatigue (U = -1.947, p > .05), emotional well-being (U = -1.002, p > .05), social functioning (U = -0.831, p > .05), pain (U = -0.980, p > .05), and general health (U = -1.477, p > .05).

McCrindle, et al. (2014), in a crosssectional observational study on patients aged 10–18 years old, discovered a "marginally lower physical functioning". Though the study was conducted for medical purposes, the results could still be considered to support the data presented in the above Table since the ages of participants of this study were inclusive to that age range.

### 3.2. Gender and Functional Health

Table 4 reveals the difference between gender and status of functional health.

Table 4
Difference between gender and status of functional health

Functional	Gender	Mean	<i>U</i> -value	p-value	Remarks
Health					
Physical functioning	Male	41.87	-0.811	0.447	
	Female	37.54		0.417	Accept H₀
Role limitations due to physical health	Male	45.63	-1.071	0.001	Modeputi
	Female	35.62			0
Role limitations due to emotional problems	Male	46.77	-2.193	0.028	Reject H₀
	Female	35.04		0.020	
Energy/Fatigue	Male	37.21	-0.506	0.613	Accept H <sub>o</sub>
	Female	39.91		0.0.0	/tooopt rig
Emotional well- being	Male	42.06	-0.860	0.390	Accept H <sub>o</sub>
	Female	37.44	0.000	0.000	,
Social functioning	Male	41.81	-0.792	0.428	Accept H <sub>o</sub>
	Female	37.57		520	7.000pt 110
Pain	Male	35.00	-1.131	0.258	Accept H₀
	Female	41.04		0.200	Accepting
General health	Male	34.48	-1.275	0.202	Accept H₀
	Female	41.30			•

It can be noted that there is a significant difference between gender and role limitations due to emotional problems (U = -2.193, p < .05). The female online learners obtained lower mean than the male learners. This means that female students can perform and accomplish school works better than male students without causing emotional problems.

However, no significant difference was found between gender and the seven factors of functional health: physical functioning (U = -0.811, p > .05), role limitations due to physical health (U = -1.871, p > .05), energy/fatigue (U = -0.506, p > .05), emotional well-being (U = -0.860, p > .05), social functioning (U = -0.792, p > .05), pain (U = -1.131, p > .05), and general health (U = -1.275, p > .05). This implies that the functional health status of male and female students of Trece Martires City Senior High School does not differ significantly. These results contradict the findings of Mangis (2016) who found out a total of 14 parallel relationship exist between the personal profile of the respondents and the eight measures of functional health. Also, in another studies, (Wang, et al.; Xu &Jaggars, 2013) it was found out that compared with men, women have the tendency to

adjust easier in transitioning from in-person to distance learning since the latter have greater motivation, more familiar in communicating online, and possess a number of applicable strategies employed to manage their education. However, it should be noted that the ongoing study focused on senior high school students who are in the distance online learning as the sole mode of learning delivery while the later involved college students who opted to attend online classes in some of their courses. Consequently, differences of the results between the two studies are highly feasible.

### Interventions

Based on the findings of the study, the following interventions may be implemented to assist the students be functionally healthy to continue their studies amid the COVID-19 pandemic.

A short physical exercise be executed before the class session to energize the brain and renew student's energy. Exercise boosts the endorphins, which make people more energized. There should be a limit with the activities in Weekly Home Learning Plan which is enough to attain the Most Essential Learning Competencies.

It is recommended to conduct a regular communication to student in a form of questionnaire about mental/emotional status. The questionnaire will be prepared in a non-intimidating manner. Questionnaire will be prepared by a qualified person from guidance office or a psychology major. The result will be assessed and endorse to guidance for proper action. Training of teachers to the proper use of social and emotional learning in their lesson through LAC session is also suggested.

#### **Conclusions**

With the findings of the study, the following conclusions were drawn:

- 1. The majority of the Grade 11 online students of Trece Martires City Senior High School are female, 17 years and below.
- 2. The functional health status of the Grade 11

- students of Trece Martires City Senior High School is fair. This implies that the participation of the students in online learning lowers their functional health.
- 2.1 The functional health status of the students in terms of physical functioning is good.
- 2.2 The functional health status of the students in terms of role limitations due to physical health is good.
- 2.3 The functional health status of the students in terms of role limitations due to emotional problems is good.
- 2.4 The functional health status of the students in terms of energy/fatigue is fair.
- 2.5 The functional health status of the students in terms of emotional well-beingis fair.
- 2.6 The functional health status of the students in terms of social functioning is fair.
- 2.7 The functional health status of the students in terms pain is fair.
- 2.8 The functional health status of the students in terms of general health is fair.
- 3. No significant difference was found between age and the aspects of functional health. Likewise, no significant difference was found between gender and the sevenother aspects of functional health. However, when gender was compared to the factors of functional health, there was a significant difference between gender and role limitations due to emotional problems. The female students can perform and accomplish school works better than male students without causing emotional problems.

### Recommendations

Based on the conclusions of the study, the researchers recommended the following:

Teachers who handle online classes should

- include activities that will engage the students to be active physically to lessen the time of prolonged sitting during the class.
- Students should be informed of the importance of functional health so they would be aware of their status on this aspect in order for them to seek the necessary assistance to avoid further problems and difficulties.
- The parents should also be educated on the functional health of their children so they could check and help the students continue their studies in spite of the ongoing pandemic.
- 4. The teachers, parents, and the Guidance Counselors could coordinate to regularly monitor the emotional health of the students, both gender since it was found out that it affects their role limitations.
- There is a need to conduct a further study on the physical health of students which includes the total population to provide a more accurate assessment in order to conduct a more effective intervention activity.
- Lastly, a similar study can be conducted among students under the modular distance learning so that they could also be assessed in terms of functional health and be offered with specific intervention activities.

#### REFERENCES

- Astafeval, O. Astafiev, E. & Osipova, I. (2020). The impact of online learning on the education system in the context of the spread of coronavirus infection. https://www.e3sconferences.org/articles/e3sconf/pdf/2020/68/e3sconf\_ift2020\_0 9044.pdf.
- Barrot, J. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies* 26(2). https://www.researchgate.net/publication/35195 6944. doi:10.1007/s10639- 021-10589-x

- Burkhalter, T M., & Hillman, C. (2011). A narrative review of physical activity, nutrition, and obesity to cognition and scholastic performance across the human lifespan. *Advances in Nutrition*. 2(2). doi:10.3945/an.111.000331
- Cruz, M. R. (2022). More women in HS, college than men in PH, says report. *Inquirer.Net* https://newsinfo.inquirer.net/1206375/more-women-in-hs-college-than-men-in-ph-says-report.
- DepEd Order No. 18 s, 2020 Policy Guidelines for the revision of learning resources in the implementation of basic education learning continuity plan (July, 2020). https://www.deped.gov.ph.
- Guo, Yf., Liao, Mq., Cai, WI. et al.(2021). Physical activity, screen exposure and sleep among students during the pandemic of COVID-19. *Sci Rep* 11, 8529 https://doi.org/10.1038/s41598-021-88071-4
- Gruber, R., Gauthier-Gagne, G., Voutou, D. et al. (2021). Pre-pandemic sleep behavior and adolescents' stress during Covid-19: a prospective longitudinal study. Child Adolesc *Psychiatry Ment Health* 15, 43, https://doi.org/10.1186/s13034-021-00399-x
- Kecojevic A, Basch CH, Sullivan M, Davi NK. (2020). The impact of the COVID-19 epidemicon mental health of undergraduate students in New Jersey, cross-sectional study. doi.org/10.1371/journal.pone.0239696
- Lischer, S., Safi, N., & Dickson, C. (2021). Remote learning and students' mental health during the Covid-19 pandemic: A mixed-method enquiry. *Prospects*, 1–11. Advance online publication. https://doi.org/10.1007/s11125-020-09530-w
- Malipot, M H. (September 2021). DepEd limits screen time for online classes. *Manila Bulletin*. https://mb.com.ph/2020/09/04/deped-limits-screen-time-for-online- classes
- Mangis, J. (2016). Online learning and the effects on functional health: A pilot study. A published master'sthesis. Eastern Washington

- University.https://dc.ewu.edu/cgi/viewcontent.cgi? article=1386&context=theses
- McCarthy H, Potts H, & Fisher (2021). Physical activity behavior before, during, and after COVID-19 restrictions: Longitudinal smartphone-tracking study of adults in the United Kingdom. *J Med Internet Res.* 23(2). https://doi:10.2196/23701
- McCrindle, B. W., Zak, V., Pemberton, V. L., Lambert, L. M., Vetter, V. L., Lai, W. W., Uzark, K., Margossian, R., Atz, A. M., Cook, A., Newburger, J. W., & Pediatric Heart Network Investigators (2014). Functional health status in children and adolescents after Fontan: comparison of generic and disease-specific assessments. *Cardiology in the young*, 24(3), 469–477.
  - https://doi.org/10.1017/S1047951113000632
- Schleicher, A. (2020). The Impact Of COVID-19 on education Insights from education at a glance.

  OECD. https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf
- Tarhata S. G., Alon, S. A., & Camsa, S. U. (2021).

  Teachers issues and concerns on the use of modular learning modality. *IJASOS-International E-Journal of Advances in Social Sciences*, 7, 20, https://doi.org/10.18769/ijasos.970927
- Tria, J. (2020). The COVID-19 pandemic through the lens of education in the Philippines: The new normal. *International Journal of Pedagogical Development and Lifelong Learning*. doi:10.30935/ijpdll/8311.
- Wang, L., Luo, J., Gao, W., & Kong, J. (2012). The effect of internet use on adolescents' lifestyles: a national survey. *Computers in Human Behavior*, 28 (6). https://dl.acm.org/doi/abs/10.1016/j.chb.2012.04 .007
- World Health Organization11. (2012). Developing tools for strategic communication to themedia on emerging infectious diseases (EID): Report of an

- informal consultation, WHO-SEARO, New Delhi, 26 May 2011. WHO Regional Office for South-East Asia. Geneva, Switzerland: World Health Organization.
- Xu, D., & Jaggars, S.S. (2014). Performance gaps between online and face-to-face courses: Differences across types of students and academic subject areas. *The Journal of Higher Education* 85(5), 633-659. doi:10.1353/jhe.2014.0028.
- Zhang, C. Ye, Fu. Yang, M. Luo, F. Yuan, J. Tao, Q. (2020). The psychological impact of the COVID-19 pandemic on teenagers in China. Journal of Adolescent Health. (67). 747-755
- Zou C, Li P, Jin L. (2021). Online college English education in Wuhan against the COVID- 19 pandemic: Student and teacher readiness, challenges and implications. *PLoS ONE* 16(10): e0258137.

https://doi.org/10.1371/journal.pone.0258137

### **AUTHORS' PROFILE**



Cristeta R. Tapia is an English and a research teacher at Trece Martires City Senior High School. She is also a part-time faculty at Lyceum of the Philippines

University Cavite. She obtained her master's degree at the University of Santo Tomas, Manila in 2016 and is currently pursuing her PhD in Education, major in English at the University of Batangas. The author had conducted some studies and presented at international conferences.



Pablo B. Matel is a mathematics and research teacher at Trece Martires City Senior High School. He earned a Ph.D. in Education from Cavite State University in

2019. The author has conducted several research and presented at national and international conferences.





**Librada A. Vidallon** is an ABM Specialized Subject and a research teacher at Trece Martires City Senior High School. She earned her Master's in Business Administration

at Philippine Christian University. The author had written and recently presented a study in an international conference.

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