

Screen time spent for synchronous classes, Stress, and Mental Well-Being of Undergraduate Students during COVID-19 Pandemic

The coronavirus disease (COVID-19) has already affected the global economy, healthcare sector (Haleem et al., 2020), the mental health of the people (Tee et al., 2020) as well as the utilization of education (Montemayor, 2020). Despite the pandemic, the education sectors in the Philippines intend to promote the continuance of learning (Joaquin, 2020). The Department of Education (DepEd) introduced the Basic Education Learning Continuity Plan to protect the wellbeing and welfare of students, teachers, and staffs. This strategy makes use of self-study materials via online platforms and print formats, as well as radio, television, and the internet. (Montemayor, 2020). On the other hand, the Commission on Higher Education for tertiary and graduate education implements flexible learning. This learning system refers to the combining and matching of learning methods according to the situation of the students (Cruz, 2021). In some higher education institutions (HEI's) which comprises of public and private universities and colleges, they integrate tailored methods of online learning. Synchronous includes simultaneous online discussion and timed assessments while asynchronous comprises activities that occur at a later time. For instance, pre-recorded lessons and self-paced assessments (Oztok et al., 2013).

Compared with the other student groups, college students bear more physical and mental well-being concerns (Gao et al., 2020). College students' fears of long-term school suspensions, home confinement, and distance learning could be harmful to their physical and mental health (Wang et al., 2020). Also, the transition from face-to-face classes to online learning is producing a lot of problems, especially among students in developing countries like the Philippines (Rotas & Kahapay, 2020). On September 13, 2021, when the school year 2021-2022 has opened in public schools, hashtag #PagodNaKami and #AcademicBreakNow trends on Twitter to express the

students' frustration and dissatisfaction with the various online learning modalities used for both the basic and tertiary education (Malipot, 2021).

The complaints are pandemic stress related while some concerns are observed by experts (Joaquin, 2020). First is the concern about social integration and peer culture as students may learn less in a distance learning due to a lack of human interaction in the learning process. (Gamage et al., 2020; Edge & Loegering, 2000). Since the set-up goes against the usual method of teaching and learning process, concerns in irregularity and outcomes of online class were also asserted (Larreamendy-Joerns & Leinhardt, 2006; Adnan & Anwar, 2020). Although online courses are not new and have increased over the past several years, students in higher education display unfamiliarity with remote learning and experience, academic stress that focuses on the students' ability to succeed in this new learning setup. The increasing mental health concern in higher education (Son et al., 2020) simultaneously focuses on dealing with stressors associated with the unfamiliar online learning environment and coping with the emotional burden of COVID-19 (Calabaugh, 2021).

Moreover, the amount of screen time use in pandemic increased because of the consequence of implementing public health safety protocols. (Pandya & Lodha, 2021). With the increase in screen time spent for online learning (Singh, 2021) and concerns about its adverse effects (Rajkumar, 2020; Lallie et al., 2021), the effect of screen use on mental well-being arises (Pandya & Lodha, 2021). Online learning is beneficial among students, but research findings reported that screen time can harm the brain development and well-being of the younger generation (Wong, 2021). Moreover, a recent study reported an association between stress and screen time spent in synchronous classes. It implies an increased risk of physical and psychological adverse effects due to stress and screen time exposure (Mangkuliguna, 2021).

The need to raise awareness of possible mental health influence of home-schooling during COVID-19 (Yang et al., 2021), the importance of considering the development of appropriate strategies to minimize stress (Bataineh, 2013) and the status of mental well-being of the undergraduate students (Lee et al., 2021; Verma, 2020; Ryerson et al., 2021; Capone et al., 2020; Labrague & Ballad, 2020) prompted the researcher to conduct a cross-sectional study. The research focuses on determining the screen time spent for synchronous classes, stress level, and mental well-being of undergraduate students. The relationship between screen time spent in synchronous class, level of stress, and well-being among undergraduate students was determined. The findings shows that, the participants in the research study reported having 8 hours and 30 minutes of average screen time for synchronous classes per week, moderate stress levels, and low mental well-being. The analysis also shows that there is a positive significant correlation between screen time and stress; an inverse relationship between screen time and mental well-being; and between stress and mental well-being.

The study implies that a prolonged period of digital use and an increase in screen time would culminate a threat in physical and mental health of undergraduate students who are subjected in remote learning. Despite the susceptibility of students to the adverse effect of screen time on both physical and mental health, it is difficult to refrain them from screen time use, especially in modern-day times (Pondya & Lodha, 2021). Yet, the majority of students in higher education with mental well-being concerns do not seek help (Eisenberg et al., 2011). Therefore, HEI's should regulate the amount of screen time spent of undergraduate students for synchronous classes and lead the promotion of healthy digital use and self-care. Moreover, it is also important to consider the development of appropriate strategies to lessen the stress.