

DISTANCE LEARNING PREPAREDNESS AND ACADEMIC COPING AMONG FIRST-YEAR NURSING STUDENTS

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Abstract

Covid 19 pandemic posed adjustment challenge to every student as they abruptly shift to distance learning. Hence, this is a cross-sectional correlational study endeavored to investigate the influence between distance learning preparedness and academic coping. Two hundred five (205) first-year nursing students participated willingly in the study. This study used an adopted 30-item online preparedness questionnaire and a researcher-made 20-items 4-point Likert scale academic coping questionnaire with Cronbach alpha of 0.94. It underwent institutional ethics approval.

Results revealed that first-year student nurses seem to have good distance learning preparedness and academic coping during COVID 19 pandemic. Students with better internet connections seem to be more prepared and coped academically. While females come better prepared for distance learning, males seem to cope better in school. Those in the upper-income class depict better preparation in distance learning yet middle-income class students cope more. It highlights the importance of distance learning preparedness of a student to achieve a greater degree of academic coping. Hence, this study may be suggestive that institutions should conduct a distance learning preparedness program to assist incoming first-year nursing students in college adjustment in distance learning classes.

Keywords: Distance Learning Preparedness, Academic Coping, First-year Nursing Students.

Introduction

Since time immemorial, the educational system in the Philippines is mostly face-to-face learning. It is characterized by physical meetings in a classroom where teachers are lecturing and students are listening, taking notes, asking questions, and getting immediate feedback from their teachers. With the advancement of technology, there are few institutions that practice distance online learning education, but most of the higher education institutions remains unequipped with technological systems to support online education. With the advent of the COVID-19 pandemic, the Philippine educational system must adapt to remote learning education. While the concept and practice of distance online learning offers an “anywhere” to an

“anytime” education delivery method, this online learning requires a more expensive option for education in terms of technological requirements. The abrupt switch in teaching pedagogy from face-to-face to distance learning may pose a critical challenge to many students. This included adopting new settings, different policies, courses, schedules, academic demands, and classmates. This is particularly more difficult for the first-year students to cope with because they are transitioning not only from high school to college life but also with the pedagogical shift from face-to-face to distance learning. If the students come unprepared for distance education, it will bank more on coping difficulties.

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Furthermore, distance learning requires good self-direction, study habits, learning preferences, technology skills, and computer equipment capabilities to survive the learning platform. Although first-year students are classified as Gen Zers who are extremely tech-savvy, this skill is vanquished by certain issues relative to the use of technology. Like the Philippines ranked least in terms of internet connection in 2020 [1], the poor and unreliable internet connectivity may add struggle to the students in attending to online learning. Also, not all families have internet subscriptions in their home, hence, the sudden transition leaves the student to utilize internet data packs for their online classes which is costlier that adds to the financial burden to the family. Since most internet service provisions are concentrated in urbanized areas, students living in far-flung areas may have weaker to no internet access. More than half of the medical students (59%) in the Philippines perceived themselves physically and mentally incapable of engaging in online learning [2]. Most of the student preferred using a laptop to access their learning management system but sadly, a third (34%) of the students do not own a laptop. They either borrow laptop devices or rent desktops to nearby computer shops [3].

Students usually need time to adjust to homeschooling and lack physical contact with other family members, friends, and colleagues. Also, first-year students come from varied school settings and may not be familiar with the new learning management system. Adapting to these lifestyle changes will be particularly more difficult for students who are unprepared for distance learning [4]. While studies have shown that most college students experienced stress during regular class or face-to-face learning approaches, what else can be expected when everything that is taught and shared is only through the screen [5]? Online learning is the new and unfamiliar stimulus that requires coping processes that may influence physiological-physical, interdependence, role function, and social concept- group identity among students. Sleeping [6], eating, elimination, rest, and activity difficulties are evident to college students and may further worsen with the current educational transition. A national survey conducted recently in the Philippines revealed that students commonly encounter difficulty adjusting to learning styles, and poor communication between teachers and learners [2]. While some students may be optimistic about distance education because they can fulfill their family duties while attending school [7], others find it challenging to combine responsibilities at home and studies [5].

Even if the pandemic will be over, distance learning is here to stay. The recent study also

discovered that there is a greater acceptance of the online mode of learning amongst the students [8]. It is fast becoming an agreed and indispensable part of the mainstream education systems in both developed and developing countries, with particular significance for developing countries [9]. Given the continued growth of distance learning and its benefits, students enrolled in the program have faced a variety of challenges. With this, being prepared or acculturated to online learning may be essential to their academic coping as those can serve as a driving force for the students to continue learning [10]. Since educational institutions, being the students' primary environment during their formal educational years should explore the actual and potential learning preparedness and difficulties faced by the students to enhance the student support system. Hence, this study endeavored to investigate the relationship between distance learning preparedness and academic coping in first-year nursing students.

Research Methodology

The study utilized a cross-sectional correlational quantitative research design. It aims to investigate the influence of profile characteristics like sex, religion, family income, internet connection, living conditions, and geographical residence on distance learning preparedness and academic coping. It also endeavored to investigate the influence between distance learning preparedness and academic coping. The study was participated by 205 first-year student nurses who are enrolled in either synchronous or asynchronous online learning platforms. Students who are enrolled in total analog learning (TAL), have no internet connectivity, and have a mental health diagnosis were excluded in order not to add burden or stress to their mental health status. An online survey was used to obtain profile characteristics and measure distance learning preparedness and academic coping. This study utilized an adopted questionnaire "Online Learning Readiness Questionnaire" from Penn State University. It is a 30-item questionnaire with four (4)-point Likert scale that contains sub-variables namely: self-direction, study habits, learning preferences, technology skills, and computer equipment capabilities. Another researcher made a 20-item questionnaire with four (4)-point Likert scale which obtained a Cronbach's Alpha of 0.94 was used to investigate academic coping. It consists of physiological-physical, self-concept group identity, interdependence, and role function sub-variables. The study underwent institutional ethics approval.

Results and Discussion

Most of the participants were female (80%); belong to Roman Catholic (84%); living in an urban area (66%); belong to a family with a middle-class

monthly income (60%); with an average internet connection (54%); and reside with their families (96%).

Level of distance learning preparedness when grouped by profile characteristics.

Table 1: Level of Distance Learning Preparedness Among First-Year Nursing Students

Distance Learning Preparedness	Mean	Interpretation
Self-direction	3.48	Very good
Study habits	2.75	Good
Learning preferences	2.93	Good
Technology skills	3.00	Good
Computer equipment capabilities	2.77	Good
Total mean	2.99	Good

*1.00 – 1.75 Very Poor; 1.76 – 2.50 Poor; 2.51 – 3.25 =Good; 3.26 – 4.00 = Very Good

Distance learning preparedness is a critical dimension for students to thrive in this time of the pandemic. Findings revealed that first-year student nurses seem to have very good self-direction ($\bar{x}=3.48$). This may denote that learner can purposively regulate themselves to gain knowledge and understand how to manage complex situations. They are more actively participating in distance learning tasks such as reading online learning material, completing classroom tasks, planning, and evaluating milestones of learning. High-level self-direction also emphasizes students' ability to set learning goals and make logical choices, which are crucial to student collaborative learning. Moreover, freshmen student nurses seem to have a good level of technology skills ($\bar{x}=3.00$). It denotes that they are comfortable in using technological devices such as computers, laptops, or smartphones which are essential gadgets for online learning. They are also good at surfing the internet, searching online resources, navigating the learning management systems, and basic software utilization and management.

Additionally, the student nurse respondents seem to have good learning preferences ($\bar{x}=2.93$) towards distance learning. It denotes they are comfortable using various types of media, such as audio, watching a video online, virtual learning instruction to learn in the remote online course. This finding supports a study that gen Z students are characteristically technology savvy, multi-taskers, and digitally connected that supports success in an online learning environment [11].

Furthermore, the freshmen student nurses possess good computer equipment capabilities ($\bar{x}=2.77$).

Student nurse respondents either own or have access to technological gadgets such as a laptop, smartphones, internet connection, headphones, and/or even an updated web browser and other technological features that can support learning engagement in the online platform. Students also embody the essential skills, training, experience, and inclination to use learning technologies. Being digital natives, millennial students have higher proficiency in technology more than other older generations. Study findings also may imply that first-year nursing students acquire an increased motivation to learn as they harness resourcefulness to understand the lessons despite the online learning engagement. This is in collaboration with a study that indicates that students preferred strategies such as visuals, audio, podcasts, or even group discussion necessary to enhance distance learning preparedness and academic achievement [12]. Corollary, studies have shown that students with the appropriate technical skills and training would be more likely to complete online courses since they are capable of troubleshooting technology-related issues that help them to thrive in the online learning environment. Pieces of literature also show higher technical capability is linked with better learner engagement in online instruction.

Also, the student nurses have good study habits ($\bar{x}=2.75$). This denotes that they have a comfortable study area, and they plan on spending at least 10-20 hours each week. They are willing to reach out to their instructor and classmates when they have questions. They also have intentions to work on their learning tasks in advance. They are also surrounded by people who are supportive of their

studies. This may also highlight that amidst distractions within their homes, as the majority live with their families, they can devise ways to keep track of their learning assignments and due dates so they can plan their learning tasks. Studies have shown that students who can manage and set time limits to manage the task significantly influence their academic success efficiently and effectively [13].

A researcher identified that more than half of nursing students considered they were incapable of distance learning; this study revealed otherwise

[14]. Overall, first-year nursing students seem to exhibit a good level of distance learning preparedness ($\bar{x}=2.99$). This may be attributable to generational variances since millennial student nurses are categorically tech-savvy and regularly consume technology compared with older generations. Studies have shown that students who have higher distance learning preparedness can get easily accustomed to an alternative medium of online pedagogy. Amidst the sudden shift from face-to-face to online learning, millennial students seem to be moving to their comfortable natural zones.

Table 2: The Difference in Distance Learning Preparedness When Grouped According to Profile Characteristics

Distance Learning Preparedness	Religion		Monthly Family Income		Internet Connection		Living Situation		Sex		Geographical residence	
	F	p	F	p	F	p	F	p	t	p	t	P
Self-direction	1.21	.30	1.33	.27	4.38	.01*	1.31	.28	.04	.17	1.14	.93
Study habits	.95	.39	1.70	.19	3.97	.02*	1.48	.23	.14	.04*	.19	.46
Learning preferences	.89	.41	5.18	.01*	4.01	.02*	1.00	.37	.48	.27	.01	.67
Technology skills	2.02	.14	2.16	.12	13.71	.00*	1.31	.27	2.03	.32	.75	.16
Computer Equipment Capabilities	.38	.68	7.28	.00	24.17	.00*	1.02	.36	.12	.87	1.60	1.00

* significant @ 0.05 level

It is shown in table 2 that internet connection is a significant factor to consider across all sub-variables of distance learning preparedness. The post-hoc analysis further emphasized the significance of faster internet connectivity over slow and average internet bandwidth. Internet connection is vastly essential for the occurrence of distance learning. Most learning activities in distance education during the COVID-19 pandemic require utilization of internet connection as researching information, downloading resources, collaborating with classmates and teachers, submitting learning tasks, taking online quizzes, and receiving feedback.

Academic success is determined by the hard work of the students coupled with a good internet connection [15]. Sadly, students in the Philippines are deprived of reliable and fast internet [16]. Considering that internet connectivity does not come cheap, it is harder for low-income families to accommodate this new essential during this time of the pandemic. Likewise, even if families are financially stable, they cannot secure reliable and fast internet subscriptions because most of the Internet Service Providers (ISP) is confined within Metro Manila and few other urbanized cities and

municipalities in the country. Hence, they settle with mobile data subscriptions which charge more for data volume unlike with WiFi in the home or school with no marginal cost for the students. Most of the students are reporting suddenly interrupted network connections while taking online examinations or attending virtual conferences. They also experience throttled uploading and downloading of large file resources and streaming online video lectures. Such predicaments may affect the student's perception of their readiness to engage in online education.

Moreover, family income is a significant factor to consider student's learning preferences in distance education. Post-hoc analysis revealed that students from higher-income families perceived themselves to be more prepared in distance learning if their learning preferences are considered. This study supports the claims that shown that distance learning preparedness levels of students from moderate family income were higher than students with low income [17]. The economic stability of the family greatly influences ownership of technological devices for learning, access to the internet, and other resources significant advantage for learning to take place in remote schooling. The

additional expense of distance learning should not be underestimated as an hour of video lectures result in a consumption of about 480 MB of mobile data. At a standardized rate of roughly 23 pesos per gigabyte, 45 pesos would be spent by a student who studies four hours of videos each day [2], hence, impactful to their learning preference to engaging in online education.

Furthermore, female students seem better prepared for distance learning in terms of study habits than

their sex counterparts. This is reinforced by the data discovered that women are more digitally literate due to various online platforms such as Microsoft Word and PowerPoint [18]. It is also seen that they often use their gadgets due to insatiable needs for social support from other people rather than males. However, it negates the findings that male students are more prepared in distant learning as they showcased a more positive attitude to distance learning [19].

Table 3: The Degree of Academic Coping of First-Year Nursing Students

Academic Coping	Mean	Interpretation
Physiologic-Physical	2.25	Poor
Self-concept Group-Identity	3.00	Good
Interdependence	2.62	Good
Role Function	2.50	Poor
Total Mean Score	2.59	Good

*1.00 – 1.75 = Very Poor; 1.76 – 2.50 = Poor; 2.51 – 3.25 = Good; 3.26 – 4.00 = Very Good

As gleaned from Table 3, first-year nursing students only elicit a poor degree of academic coping concerning their physiologic-physical (\bar{x} =2.25) and role function (\bar{x} =2.50). This implies that the physiological integrity of students, such as oxygenation, nutrition, elimination, activity and rest, and protection seems to be compromised. Even during pre-pandemic, student nurses suffer from poor sleep quality and dietary changes [20]. Sleep problems during the ongoing COVID-19 pandemic became more profound because of psychological distress and vice-versa [6]. Covid 19 brought a global nutritional crisis affecting low and middle-income families. Prolonged quarantine limitations have affected family income leading to a dramatic decline in nutritive intake of the people. The affected families opt to buy the cheapest food neglecting the calories and nutritive value of the food just to feed their families. Not to consider the psychosocial burden of COVID 19 springs to lack of appetite to eat. As Filipinos, we enjoy eating food with families and friends, with this social distancing and prohibition of festive events people may seem to lessen the desire to eat. On the other hand, the pandemic crisis may lead to stress eating causing malnutrition (over nutrition).

The current pandemic situation obliged everyone to wear a mask on a daily living. Although masks never alter oxygen gas exchange, people report that wearing a mask and face shield find it uneasy to talk and breathe. Discomfort in wearing a mask and

face shield exacerbate when doing activities requiring exertion. Pandemic stress can also trigger a wide range of other gut symptoms including heartburn, nausea, bloating, altered bowel and bladder pattern, or in rare cases, even rectal pain. For students, pandemic stress may also be provoked by the adjustment with a new learning modality.

Poor degree of academic coping of first-year nursing students in terms of role function may imply they have difficulty balancing school activities alongside chores at home. COVID-19 pandemic crisis adds up to the complex roles of student nurses as they also care for the sick family or relatives and/or oversee the procurement of food and other supplies [2]. Some students are forced to earn a living while studying to augment the needs of the family.

Meanwhile, a good degree of academic coping was portrayed in terms of self-concept group identity (\bar{x} =3.00) and interdependence (\bar{x} =2.62). This can be rooted in the validation from people that fuels first-year nursing students' drive to persist despite the challenges they encounter. Such was portrayed in the findings of a study [21], wherein students' motivation to cope with academic stress stemmed from self-ideal or expectancy coupled with positive feedback and validation from people, which result in feelings of satisfaction and attainment of mental health.

As for interdependence, these findings highlight how social support necessitates how nursing students cope-up with their academics. When stress level increase, nursing students tend to vent to their friends, receive guidance from their professors and express their emotions to their trusted loved ones to garner support and comfort. Hence, they can cope with college life [22]. Through positive interdependence and how to apply its power, we can improve class climate, bolster learning, and develop our students' interpersonal skills. Good interdependence is a sign of a cooperative and caring learning community. Students seem to work together, support and encourage each other to learn and succeed. Teachers may also contribute to the creation of a flexible learning environment the

promotes interdependence making learning more enjoyable and effective.

Amidst reports of intensified academic stress and mental health issues during unexpected COVID-19 pandemic crisis, overall, the student nurse respondents seem to have good academic coping amidst the sudden pedagogical. This conforms to another study conducted in Sultan Kudarat, Philippines that Filipino students highly adjust to new learning modalities during COVID 19 pandemic [23]. This may be attributable to the embedded trait of the Filipino people showing remarkable fortitude. Historically and culturally, Filipinos are fun-loving and God-fearing people that propelled them to strive hard and adapt even in the worst possible times.

Table 4: The Difference in Academic Coping When Grouped According to Profile Characteristics

Academic Coping	Religion		Monthly Income		FamilyInternet Connection		Living Situation		Sex		Geographical residence	
	F	p	F	p	F	p	F	p	t	p	t	p
Physiologic-physical	0.11	.99	.28	.76	6.55	.00*	2.70	.07	1.37	.28	1.08	.28
Self-Concept Group Identity	3.94	.66	2.39	.09	4.96	.01*	.71	.50	.64	.61	.51	.61
Interdependence	1.15	.32	.85	.43	2.87	.05*	1.05	.35	-1.81	.57	.58	.57
Role Function	2.42	.09	2.45	.09	.36	.70	.52	.60	.55	.03*	2.24	.03*

* significant @ 0.05 level

This study revealed that internet connection is a significant factor in academic coping in terms of the physiologic-physical domain. This conveys that internet connection speed affects the student's needs associated with oxygenation, nutrition, elimination, activity and rest, and protection. Good internet connection is extensively significant to obtain course-related data from e-books, journals, and reliable websites [24], which can assist students in the acquiescence of their basic needs, sleep exercise, and nutrition. Poor internet connectivity increases the probability of stress. Indeed, buffering videos and web pages that takes long hours and interrupted internet connections during online examination is extremely stressful. Highly stressful emotions stem from poor eating habits [20]. Many students stated that their amount of eating has increased, concentrating on snacks rather than healthy dietary options. Some reports that longer screen hours limit their time to eat. Students also mentioned having inconsistent eating patterns, decreased appetite, and emotional eating during online learning. Freshmen student nurses report alteration in sleep because of slow internet.

Due to heavy network traffic during the daytime, students stay up late to make the most of internet signal strength. Even before the pandemic crisis of COVID19, students were severely sleep-restricted, averaging only 5.8 hours of sleep which is less than the recommended seven to nine hours of sleep as stated by the National Sleep Foundation [25]. This condition worsens as lockdown and online education brings about stress during a pandemic [26]. Due to intense sleep deprivation, students' energy to be active in class is lessened, which causes numerous implications to the body system of the student.

In addition, the disparity in self-concept group identity among freshmen nursing students was identified because of internet connection issues. Although overall students have good self-concept group identity, some students may find it difficult to establish group connection considering that they came from very diverse nationwide localities. Some students barely knew anybody from the cluster and virtual acquaintances may post certain screen barriers. This is most especially true for

students who are timid and introverted. Nonetheless, some students who can freely express their own opinions through various online media can feel that they can achieve group identity fulfillment. The use of social media networks and group chats makes enables them to easily immerse themselves in the group and develop a sense of group connectedness. Online learning paves the way for positive feedback and validation from people, which leads to feelings of satisfaction. The value of this grant towards a student's self-concept as they accept their strengths and weaknesses, which enables them to progress with healthy well-being [21] and harness academic coping. This supports other studies denoting that internet connection plays a significant factor in the interdependence of students. This implies that cyberspace can be a foundation for first-year nursing students' relational integrity as they can interact with their classmates even in the comforts of their screens. Even in an online medium, the human connection can be essential, especially in the new normal where students are advised to stay home. By attaining effective communication and close relationships of people, interdependence highlights the importance of significant others and support systems to cope up academically [27].

Furthermore, this study shows that female first-year student nurses have poorer academic coping in terms of role functions. For first-year nursing students, their role function is limited to being a student. However, with the pandemic situation and home-based education, students tend to be multitaskers. Alongside studying, they do household chores such as cooking, cleaning, nanny duties, marketing errands, caring for a sick family member, and more. Some may be working part-time to augment educational and family needs. The combination of working full or part-time in addition to the completion of academic requirements is also a significant source of stress for many nursing students. This leads to feelings of

exhaustion on their days off and having difficulty finding time to complete their assignments [28]. Additionally, a study indicates that alongside academic commitments, financial pressures, and illness that affect the families of students are a major source of stress among first-year nursing students since distance learning also provides students the role function of being a daughter or a son, which heightens the responsibility at home which makes it difficult for them to cope in school [29]. Role functioning further deteriorates as some of the students contracted COVID19 causing them to miss online conferences, examinations, and other assessment tasks. This dilemma loads up to their coping difficulty.

Likewise, the disparity in academic coping in terms of role functioning because of geographical residence is identified. Rural dwellers seem to have poorer academic coping in terms of role functioning than those in living the urban areas. According to Philippine Statistics Authority, most of the students residing in rural areas belong to families below the official poverty thresholds incidences among other sectors [30]. Pandemic crisis brings quarantine limitations for an extended period those branches to the closure of many businesses and unemployment. COVID-19 pandemic forced some students to secure extra jobs to augment family and educational needs. Some students engage either in online selling, call center works or delivery services. Some students juggle work and studies sets them off to endure negative impacts such as exhaustion, inability to concentrate in studies, and lack of time to comply with school requirements. Also, some students in rural areas must travel to the city to acquire a more stable internet connection access [31]. Moreover, students in rural areas also struggle with rotational power interruptions and weak internet connectivity infrastructure that limits their access to online content, like other developing countries [2].

Table 5: Pearson Correlation of Distance Learning Preparedness and Academic Coping

Computed r Value	Degree of Relationship	p-value	Decision
0.77	high positive correlation	0.00	With significant correlation

** Correlation is significant at the 0.01 level (2-tailed).

- + 1.00 perfect positive (negative) correlation
- + 0.91 - 0.99 very high positive (negative) correlation
- + 0.71 - 0.90 high positive (negative) correlation
- + 0.51 - 0.70 moderate positive (negative) correlation
- + 0.31 - 0.50 low positive (negative) correlation
- + 0.01 - 0.30 negligible positive (negative) correlation

Table 5 depicted a significantly high positive correlation between distance learning preparedness and academic coping ($r= 0.77$; $p=0.00$). This finding conforms with the study conducted in Indonesia that the higher the distance learning preparedness of first-year nursing students is linked with a greater degree of academic coping [32]. If self-direction, study habits, technological skills, computer equipment capabilities, and learning preferences of the students will be boosted there may be a higher probability of coping academically. This study highlights the importance of preparing the students in a distance learning modality during the pandemic situation to increase their ability to cope academically. In turn, high academic adjustment is associated with high academic performance and thereby may prevent dropouts or academic failure [23].

Conclusion and Recommendations

As the pedagogy skewed away from the face-to-face platform and shifted to an online medium, first-year nursing students still elicited a good level of distance learning preparedness and good coping academically. This study highlighted the importance of fast and reliable internet connections during online learning. Students with better internet connections seem to be more prepared and coped academically. While females come better prepared for distance learning, males seem to cope better in school. Those in the upper-income class depict better preparation in distance learning yet middle-income class students cope more. Significantly, there is a high relationship between distance learning preparedness and academic coping. This implies that the higher the level of preparedness of a student in terms of distance learning, the greater the degree of academic coping. Hence, this study institutes that preparedness in distance learning becomes the driving force for students to manage stress and heighten academic coping.

To establish excellent academic coping, this study may be suggestive that institutions should conduct a distance learning preparedness program to assist incoming first-year nursing students in the necessary adjustment to college life and online classes. Other than that, subsequent qualitative studies about distance learning preparedness and academic coping can be conducted to gauge the lived experiences of students and struggles they face in distance learning amidst the pandemic. Furthermore, the scope of future studies can be widened to gauge the distance learning preparedness and academic coping of students within a larger population. Lastly, future research can be focused on the staff training and development of nurses considering their heavy workload and vulnerable health status that might

affect their distance learning preparedness and coping.

Conflict of Interest

There is no conflict of interest between the authors in this manuscript.

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References

1. Ookla Speed Test, (2020). "Speed Test Global Index", Retrieved from <https://www.speedtest.net/global-index>.
2. Baticulon, R., Alberto, N., Baron, M., Mabulay, R., Rizada, L., Sy, J. and Reyes, J., (2020). "Barriers to online learning in the time of COVID-19: A national survey of medical students in the Philippines", Medrxiv.
3. Garcia, R., (2021). "Influence of self-directed learning skills on the academic adjustment in an online learning platform among level I and II student nurse". *International Journal of Recent Advances in Multidisciplinary Research*, 8(6), 6925-6929.
4. Khari, D., Sharma, V., & Agarwal, N., (2020). "Effect of pandemic Covid-19 on economic crisis and health issues globally". *Cosmos Journal of Engineering & Technology*, 10(1), 9-15.
5. American Institute of Stress, (2019). "Stress: An Epidemic Among College Students", Retrieved from <https://www.stress.org/stress-an-epidemic-among-college-students>.
6. Alimoradi, Z., Broström, A., Tsang, H., Griffiths, M. D., Haghayegh, S., Ohayon, M. M., Lin, C.Y. and Pakpour, A.H., (2021). "Sleep problems during COVID-19 pandemic and its' association to psychological distress: A systematic review and meta-analysis". *E-Clinical Medicine*, 36, 100916, <https://doi.org/10.1016/j.eclinm.2021.100916>.
7. Tyagi, M., Singh, K., Goel, N. & Sharma, R. (2021). "Hybrid perspectives in higher education". *Cosmos An International Journal of Art & Higher Education*, 10(2), 36-38.
8. Ghose, D. and Chakrabarty, D., (2021). "Prospects of online mode of learning in post pandemic times: a study amongst the students of Silchar City in Assam". *Cosmos An International Journal of Art & Higher Education*, 10(2), 18-24.
9. Frick J.L., Coffman R.E. and Dey S., (2015). "Student stress in a three-year doctor of pharmacy program using mastery learning educational model". *American Journal of Pharmaceutical Education*, 75(4). 1-6

10. Alsubaie, M.M., Stain, H.J., Webster, L.A. and Wadman, R., (2019). "The role of sources of social support on depression and quality of life for university students". *International Journal of Adolescence and Youth*, 24(4), 484-496, doi:10.1080/02673843.2019.1568887.
11. Chandan, H.C., (2018). "Technology, Learning Styles, Values, and Work Ethics of Millennials", In M. Khosrow-Pour, D.B.A. (Eds.), *Encyclopedia of Information Science and Technology*, Fourth Edition (pp. 4358-4367), IGI Global. <http://doi:10.4018/978-1-5225-2255-3.ch378>.
12. Alharbi H., Almutairi A., Alhelih E., Alshehry A., (2017). "The Learning Preferences among Nursing Students in the King Saud University in Saudi Arabia: A Cross-Sectional Survey", *Nurs Res Pract*. doi: 10.1155/2017/3090387.
13. Rabia, M., Mubarak, N., Tallat, H., (2017). "A Study on Study Habits and Academic Performance of Students", 7(10), 891-897. DOI: 0.18488/journal.1.2017.710.891.897.
14. Doculan, J., (2014). "E-Learning Readiness of the Ifugao State University". *International Journal of Engineering Research & Technology (IJERT)*, 3-2. <https://www.ijert.org/e-learning-readiness-of-the-ifugao-state-university>
15. Ackerman, C., (2020). "What is Self-Efficacy Theory in Psychology?", *Positive Psychology*. <https://positivepsychology.com/self-efficacy/>
16. Akamai, (2017). "State of the Internet Connectivity Report". <https://content.akamai.com/gl-en-pg9135-q1-soti-connectivity.html>
17. Adams, D., Sumintono, B., Mohamed, A. & Noor, A., (2018). "E-Learning Readiness Among Students of Diverse Backgrounds in a Leading Malaysian Higher Education Institution", 15(2), 227-256. Retrieved from <https://eric.ed.gov/?id=EJ1201661>.
18. Coskun, O., Ozeke, V., Budakoglu I., & Kula, S., (2018). "E-Learning Readiness of Medical Educators: A Sample from Gazi University", DOI:10.17098/amj.435257.
19. Papaconstantinou, E., Coffey, S., Zitzelsberger, S., (2017). "Coping, Perceived Stress, Eating Behaviours, and Sleep Patterns (CoPES) of Undergraduate Nursing Students While in Practicum". *Athens Journal of Health*. 4(2): 113-129. 27.
20. Sodeify, R. and Tabrizi, F., (2020). "Nursing Students' Perceptions of Effective Factors on Mental Health: A Qualitative Content Analysis", *PubMed Central*. doi:10.30476/IJCBNM.2019.81316.0.
21. Yehia, D., Jacoub, S. and Eser, S., (2016). "Predictors of Coping Strategies among Nursing College Students at AL-Zaytoonah University of Jordan", 15(7), 149-154. Retrieved from: <https://eric.ed.gov/?id=EJ1103144>.
22. Espenosa, P., Mupak, A., Bayan, H., Labtic, C. and Sanchez, W., (2021). "Anxiety, adjustment level and academic performance amidst covid 19 pandemic of grade 12 students of Esperanza National High School", *Research Gate*.
23. Emeka, U. & Nyeche, O., (2016). "Impact of Internet Usage on the Academic Performance of Undergraduates Students: A case study of the University of Abuja, Nigeria."
24. Hirshkowitz M, Whiton K, Albert S, Alessi C, Bruni O, DonCarlos L, Hillard P, (2015). "National Sleep Foundation's sleep time duration recommendations: methodology and results summary", *Sleep Health* 1: 40-43.
25. Blanco, C., Almagro, J., Zafra, M., Fernandez, M., (2020). "Sleep Pattern Changes in Nursing Students during the COVID-19 Lockdown". *Int. J. Environ. Res. Public Health* 2020, 17(14), 5222; <https://doi.org/10.3390/ijerph1714522>
26. Alligood, M.R., (2017). "Nursing theorists and their work (9th ed.)", Elsevier - Health Sciences Division.
27. Coffey S, Lindsay G, Cochrane M, Cummings K, Macdonald K, Mairs S, Sproul S, Bouchard S, Lulat Z, Salamat N, Bell R, (2016). "Making the grade through the front door: Evaluation and innovation in a Registered Practical Nurse to Bachelor of Science in Nursing Program". *Journal of Education and Training Studies* 4(1): 32-38.
28. Langtree, E.M., Rasak, A., Haffejee, F., (2018). "Factors causing stress among first-year students attending a nursing college in KwaZulu-Natal, South Africa", 10(2), 90-95. DOI: 10.7196/AJHPE.2018.v10i2.993.
29. Philippine Statistics Authority, (2020). "Farmers, Fisherfolks, Individuals Residing in Rural Areas and Children Posted the Highest Poverty Incidences Among the Basic Sectors in 2018", <https://psa.gov.ph/poverty-press-releases/nid/162541>.
30. Casillano, N., (2019). "Challenges of Implementing an E-Learning Platform in an Internet Struggling Province in the Philippines". *Indian Journal of Science and Technology*, 12(10), 1-4, DOI:10.17485/ijst/2019/v12i10/137594.
31. Ramadhana, M., Putra, A., Pramonjati, T., Haqqu, R., Dirgantara, P., (2021). "Learning Readiness as a Predictor of Academic Resilience in Online Learning during School from Home", *Library Philosophy and Practice (ejournal)*, 5362, <https://digitalcommons.unl.edu/libphilprac/5362>.