



RESEARCH ARTICLE

INFLUENCE OF SELF-DIRECTED LEARNING SKILLS ON THE ACADEMIC ADJUSTMENT IN AN ONLINE LEARNING PLATFORM AMONG LEVEL I AND II STUDENT NURSE

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ABSTRACT

This descriptive correlational study investigated the influence of self-directed learning on academic adjustment among level I and II student nurses studying in a private university practicing a student-centered learning approach. Results revealed that student nurse respondents demonstrated stage 3 self-directed learning and need teacher facilitation for learning. Moreover, amidst generally poor internet connectivity, they have good adjustment academically in online education in the COVID 19 pandemic. Surprisingly, study results refute available literature that self-directed learning insignificant influences academic adjustment among level I and II student nurses.

INTRODUCTION

COVID 19 pandemic compelled educational institutions to switch from traditional face-to-face classrooms to online learning. Relative to pedagogical transition, students are anticipated to experience some adjustment challenges students. More than three-quarters of the college students surveyed favor face-to-face classes over online classes in a recent survey. In another study, 64% of the respondents expressed concerns about the inability to focus and sustain the self-discipline essential to study remotely. Notwithstanding the notable higher levels of stress among first and second year in nursing education than students in other health sciences, the primary learning platform transition loads up to the difficulties faced by student nurses. It will challenge the academic performance and adjustment of the students. Survey reports psychological manifestations [feeling disconnected, overwhelmed, stressed] and physical symptoms [migraine, eye strain] among students concerning online learning classes. Even pre-pandemic, there are already high adjustment problems 80.8% in early years of experiences in higher education [1]. The impact of online learning transition during COVID 19 might force an adjustment difficulty among university students. Unfortunately, reports claim that more than half of students who cannot adjust to college dropped out in the university [2]. Additionally, students have been used to traditional learning where a teacher moderates and regulates the flow of

information and knowledge, while online learning is relatively teacherless. However, student nurses in university utilizing student-centered learning approach where teachers are acting as facilitators, that it wires the development of self-directed learning among them [3]. Also, the moderate positive correlation between self-directed learning and online learning [4] is a factor to be considered in thriving in online learning. According to Tekkol & Demirel, if the students are self-directed learners who can assess their personal learning needs, recognize their learning strategies, methods, and techniques [5]. They manage their learning processes, plan their time effectively, reflect on their learning outcomes, and identify ways to improve their learning deficiencies with or without the help of others. It also predicts their academic motivation and achievement. According to Cazan & Stan, all the dimensions of self-directed learning are correlated with academic adjustment among Romanian students [6]. Still, there is minimal evidence relative to student nurses in Metro Manila. While research about adjustment during the early student years in college is well-established in the Philippines [2], self-directed learning and the sudden transition to online learning platforms are emerging foci. As such, this study examined the influence of self-directed learning on academic adjustment among level I and II student nurses in an online learning platform in selected universities in Metro Manila.

METHODOLOGY

This descriptive correlational study aimed to determine the influence of learning attitude on academic adjustment among

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level I and II student nurses in an online learning platform in selected universities in Metro Manila. The first questionnaire is an adopted 40-items Self-Directed Learning Skills Scale with domains on competence, autonomy, and relatedness [7]. The second questionnaire is a 20-item Academic Adjustment Scale [8]. Both have a 4-point Likert scale where 1=strongly disagree, 2= disagree, 3= agree, and 4=strongly agree. The research instruments were pilot tested, yielding a Chronbach alpha of 92.94. Data gathering was conducted electronically. The institutional ethics committee approved the study. The sample size is based on G* Power analysis set at 0.80 effects at 0.05 degree of confidence. The study participants include 200 level I and II student nurses, ages 18-20 years old and currently engaged in online learning. Those with a pre-existing medical diagnosis of mental health illness were excluded from the study. Respondents came from a private university using Student-Centered Learning approach and Canvas Learning Management System for at least two years before COVID 19 pandemic to ensure that teachers are already familiar with utilizing the online platform.

RESULTS AND DISCUSSION

Results revealed that most of the student nurse respondents are females 85%. It goes to show that nursing remains to be a female dominant course. There are 62% who belong to Level I B.S. Nursing 62% while only 38% belongs to level II. It shows that nursing course has increasing popularity and demands as manifested in the enrolment rates. Also, most of the nursing students from level I and II belong to the middle-income class 60% with an average family income between 21,000.00 to 125,000.00. In comparison, 25% belong to a low-income class (below 21,000 pesos per month), and only 15% belong to the upper class with family earnings of more than 125,000.00 pesos per month. It can be attributable to the type of university of research locale, which commonly serves the working and middle income groups congruent to tuition fee demands. Most of them have poor 49% to good internet connectivity 50%, and only 1% have fast internet connectivity. High-speed internet is necessary tool for the students to adapt to the online school. However, the internet in the Philippines remains unreliable. According to Ookla Speed test, the average broadband download speed in the Philippines is only 25.34 megabytes per second (Mbps), making the country at the 106th spot out of 174 [9]. Most students find their connection slow, unavailable, and quite frustrating. Furthermore, most of the level I and II nursing students opted to use the laptop 66% to access their Learning Management System (LMS), while some are using smartphones 24%, computer desktops 7%, and tablet 3%. It may be attributable to the larger screen of laptop devices that better read lecture displays than mobile phones. Moreover, laptops like mobile phones are also portable but equipped with multi-browsing capabilities that enable students to multitask while learning. However, a third 34% of the students do not own laptop in as much as they prefer to use it for their online classes. They just either borrow laptop devices or rent desktops to nearby computer shops. Self-directed learning (SDL) is one of the most prominent phenomena for 21st-century learners. Self-directed learners demonstrate the ability to establish clear goals, execute their plans, take the initiative, are open to learning, and are motivated, self-confident, and self-controlled. Specifically, Table 1 shows that study respondents are at stage 3 SDL in terms of competence which means they are concerned with using skills to succeed.

If the student performs well in an activity, he derives pleasure from it and becomes intrinsically motivated. When a student developed a sense of motivation, the student gain confidence to learn on their own. A Myriad of studies has shown the relationship between competence and independent thinking. It is evident that if one believes that he can control his learning, he can process change in learning by himself. Similarly, self-directed learning skills are associated with many positive outcomes like high curiosity, confidence, innovation, and academic achievements. Thus, the assumption is that for students with high self-competence, the probability of succeeding paves the likelihood of developing self-directness in learning. If students entertain this positive thought, they will engage more in class. Henceforth, students that grab the chance to experience success. Students will believe they are achievers and trust that they can learn by themselves in the new and unfamiliar online learning platform.

Also, level I and II student nurse respondents are on stage 3 SDL in terms of autonomy. Intermediate autonomous learners are curious and willing to try new things, positively view problems as challenges, desire change, and enjoy learning as natural as play. Also, they seek guidance and obtain support from their family members or use resources as needed. Their autonomy or self-governance as part of the self-directed learning skills may help them survive the distance education in nursing on their own even without or little support from their family teachers. Hence, the higher probability of adapting to new remote learning. Studies have shown remarkable benefits of self-directed learning, which is evident in the types of learners it produced. Self-directed learners are responsible for their knowledge and can generate awareness, particularly regarding their duties and responsibilities as students. When the students develop the willingness to create awareness and build their skills in terms of one or more of these areas, they may engage more in conferences and obtain knowledge from qualified and skilled instructors.

Furthermore, this study reveals those levels I and II student nurse respondents are on stage 3 SDL regarding relatedness. They can establish connection and familiarity with the social sphere (classmates, friends, and teachers) and the environmental globe (online learning platform) to form a sense of relatedness among students. Studies have shown that social relatedness is associated with a positive mood. If the student has a positive outlook will trigger his intrinsic motivation to repeat the experience of reconnecting and engaging with peers and teacher. He will not be hesitant to make a consultation, exchange ideas and learn from them. Consequently, if the student negatively connotes a teacher who gives negative feedback or shames the student, he automatically activates flight response and refrains from engaging in school-related activities. Similarly, if students find the environmental sphere or the online learning platform a source of difficulty or stress, they will be afraid to navigate technological applications. In addition, they may experience a digital phobia, the fear of using new media and digital devices for learning. Finally, the lack/deficiency of knowledge and lack of willingness to learn about these new innovative media solutions will eventually disengage students from online conferences and lose interest in online learning. It is good to note from the overall SDL findings that level I and II student nurse respondents are classified as stage 3 or intermediate self-directed learners where the teacher can simply act as the facilitator.

Table 1. Assessment of self-directed learning skills of the level I and II student respondents in selected universities in Metro Manila

Self-Directed Learning Skills	Level I student nurses		Level II student nurses		Overall		Interpretation
	Mean	SD	Mean	SD	Mean	SD	
Competence	2.9	0.34	2.89	0.3	2.9	0.32	Stage 3
Autonomy	3.12	0.42	3.08	0.46	3.12	0.43	Stage 3
Relatedness	2.97	0.35	3.01	0.38	2.97	0.36	Stage 3
Overall	2.99	0.31	2.99	0.32	2.99	0.31	Stage 3

*1.00-1.75 = stage 1; 1.76-2.50 = Stage 2; 2.51-3.25 = Stage 3; 3.26-4.00 = Stage 4

Table 2. Assessment of academic adjustment of the level I and II student respondents in selected universities in Metro Manila

Academic Adjustment	Level I student nurses		Level II student nurses		Overall		Interpretation
	Mean	SD	Mean	SD	Mean	SD	
Engagement	2.76	0.45	2.69	0.65	2.73	0.53	Good
Motivation	3.28	0.53	3.22	0.57	3.25	0.54	Excellent
Habit	3.39	0.53	3.34	0.53	3.37	0.53	Excellent
Experience	3.1	0.55	2.96	0.63	3.03	0.58	Good
Overall	3.13	0.44	3.05	0.53	3.09	0.47	Good

Table 3. Relationship between the assessment of level I and II student nurse respondents on their learning attitude and academic adjustment

Computed r	Degree of Relationship	p-value	Decision
.035	negligible positive correlation	.727	with no significant correlation

It can be explained because study respondents are studying in a university utilizing Student-centered learning approach where teachers act as facilitators of learning. The result conforms with the study done in Manila [10] and Turkey [11] that most student nurses are self-directed learners but negates the study finding among Pakistan student nurses who have low readiness for SDL. Self-directed learners can direct their learning and determine to learn despite the abrupt shift from face-to-face classes to online learning. In support, in a study done in Turkey, self-directed learning skills are associated with academic success and motivation to pursue higher education among college students. Also, self-directed learning is linked with life-long learning tendencies [5].

It was identified that the younger nursing student is less ready for this type of learning and that readiness for this type of learning is increased with life experience. Academic adjustment refers to the students' state of habit, engagement, motivation, and experience during online learning. Even pre-pandemic era, students have a poor academic adjustment in college. It is anticipated because of the overwhelming uploads of challenges of the new online learning platform that students must do by themselves. The findings of this study refute the claim of most literature that academic adjustment difficulty is prevalent at high level [1]. Surprisingly, amidst the challenges of COVID 19 pandemic and new digital learning facility, student nurse respondents in Metro Manila have good academic adjustment [$x=3.09$]. It is a good manifestation that student nurse respondents from Metro Manila have good ways to manage the educational demands of new learning facility. It can be explained because students during COVID 19 pandemic are generally mandated to stay at home. Therefore, they never experience the homesickness adjustment common among college students [12]. Also, they get to receive more parental support during this period because parents are either working from home or simply staying home. Those students who live with their parents are more likely to have more stable emotional state. Their behavior is more likely to be under their parents' management [12]. Further, parental attention and participation in their children's educational milestones at home improve children's academic adjustment [13].

On the other hand, the lack of physicality between teachers and learners makes classroom engagement more challenging and cumbersome. Fidgeting, turning off the camera, or moving around, doing other things like taking meals/doing household chores, social media browsing are typical behaviors of students during online class meetings. These roles of distractions and teacher inability to redirect students' misbehavior make classroom engagement a significant challenge in online learning. Studies have shown that students who have problems with concentration and distractibility, trouble managing sensory input, or increased anxiety about being "on display" may act in ways that challenge engagement in an online learning. However, this study revealed that student nurse respondents have good engagement in online education ($x=2.73$), and it negates most literature. It can be explained by the effective teaching-learning engagement techniques employed by the teachers. They use active and collaborative learning measures student engagement with learning both alone and with other students, including questions on asking questions in class, making presentations, gamification of lessons, and working on group projects. They also level up the academic challenge by doing debates, online quizzes like Kahoot!, and case presentation competitions. Making them more competitive engages them more, and the reward that comes with it will motivate them even more. Motivation is the course that initiates, directs, and sustains behavior focused on the goal to learn. The inner drive pushes a nursing student to act to do something [14].

Students who are highly motivated know they can set high standards for themselves and achieving their goals. Academic motivation is essential in nursing training. Providing quality nursing services needs students with enough motivation to receive considerable information and skills and adjust to abrupt education shifts in the university. It is noteworthy that students have excellent motivation index ($x=3.25$) in online learning during COVID 19 pandemic. They fully agree that the reason they are studying is to lead them to a better lifestyle. About Table 1 on socio-economic status, most student respondents belong to low to middle-income classes. Their current economic situation also motivated them to strive harder in their

studies and aim for higher goals in life. According to the Overseas Filipino workers (OFWs), the nursing profession is one of the highest paying jobs that took home the highest income in the country. That idea earnestly motivates students from the low-socioeconomic groups to do well in their studies. Somehow, they strongly agree that they expect to complete the nursing degree in the usually allocated timeframe. As the COVID-19 pandemic continues to spread across the country, students continued to navigate the new normal of keeping up in school. They push themselves to get things done right in time, and no COVID 19 crisis can stop them from reaching their dreams. They are goal-oriented and determined to become achievers despite the odds. Furthermore, study respondents assessed themselves to have an excellent habit ($x=3.37$). This study finding supports claims of other studies that adjustment in schools is linked with study habits [15]. Characteristically, they fully agree that they entertain both negative and positive feedback on their performance to improve their learning. No one is infallible, and if the student is unable to accept criticisms, it will badly hurt their feelings, ego, reputation, and school performance. It will make them vulnerable to mental depression and maladjustment in school. On the contrary, accepting positive and negative feedback is an essential self-constructive skill that will help them improve performance and adjust better in school. Study respondents also fully concur that they always try to gain competence through learning and seek necessary assistance for education when needed. Needing help does not make a student less of himself nor weak. On the contrary, if the student is open to aid can help the student to gain tips. Someone will look over his work and steer them in the right learning direction. Student nurse respondents pay attention and show great interest in all topics presented in the class. The study respondents are in universities that exercise non-lecture pedagogies, and studies have shown fewer lapses in online class session.

This result supports well-established findings that student nurses tend to be more engaged and attentive when actively participating than listening to the teacher lecture. Moreover, student respondents have a good experience ($x=3.05$) in online learning. Students adjust well academically when the expertise is scaffolded through helpful tools and guided peer interactions; students can be more efficacious in this more difficult knowledge transfer pandemic situation [16]. Teaching and learning support inspired the students to keep going and maximize the opportunity to have an innovative learning experience. It will trigger students' enthusiasm to study and learn. Part of the adjustment ability must also come from the clinical instructor's support of the student nurses in valuing the transfer of nursing procedure skills. When learning occurs, the students are satisfied with the relevance of learning topics and happy with the quality and novelty of learning materials. Similarly, Govaerts, Kyndt, and Dochy found that supporting supervisors are good trainers and influences employees to retain skills from training and continue to use them in the workplace and eventually make them more satisfied and adjusted to work [17]. It can be gleaned from Table 3 that assessment of self-directed learning skills and academic adjustment among level I and II student nurses have no significant correlation. The sudden shift to a pure online learning platform posted several uncertainties, and students need to adjust or formulate their own best learning strategies. It is predicted that self-directed learners are more likely to get involved in learning activities online more actively, ask questions, join in discussions, and eventually adjust

academically. This study shows the self-directed learning skills have a negligible positive correlation [$r=0.35$] with academic adjustment. Still, statistically, it is insignificant to claim its correlation with academic adjustment of student nurses ($p\text{-value}= 0.727$). Moreover, it is inconsistent with previous study results, showing that self-directed learning could efficiently predict the academic adjustment of medical students at the university level [6],[18]. However, it supports that study Mahin, Zahra, & Davood, that SDL can positively predict academic adjustment but to a low level only (23%), although this study finds no significant association between the two variables [19]. The ability of a student to become a self-directed learner implies the development of their competence through demonstration of metacognitive skills, their autonomy to monitor and evaluate their learning strategies, and their relatedness to manage their interpersonal relationship, a self-directed learner being a successful student. However, this study finds no association of SDL skills with the ability of the students to adjust academically. It can be ascribed to the context of fortitude, resilience, and joy that is unique and innate attributes of Filipino student nurses. That even if Filipino students face strong adversaries in the academic realm, they can instantaneously adjust. The valorization of fortitude among Filipino students can be critically explained from historical, behavioral, social, and cultural aspects of life.

CONCLUSION

Level I and II student nurses from private university that practice student-centered learning approach exhibit stage 3 Self-directed learning skills where the teacher can simply act as the facilitators of learning. Amidst the good level of self-directedness among nurse learners, it has insignificant influence on student nurses' academic adjustment in online learning. Student nurses can have good academic adjustment in online classes during the COVID19 pandemic regardless of their self-directed learning skills. Despite their adversaries of generally poor internet connectivity during online education, they managed to adjust well because of their innate Filipino attributes of fortitude, resilience, and joyfulness. Strategies may be developed to further optimize self-directed learning skills (SDLS) among student nurses from stage 3 to 4 SDL by maximizing student-centered learning approaches like weaning students of being taught, making them more involved, use more delegation strategies, and research-oriented projects.

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