

RESEARCH ARTICLE

Readiness for Online Learning and Emotional Intelligence of Nursing Students in a Local University in NCR

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Abstract

Educators must be able to conscientiously assess their learners' readiness for online learning to achieve an effective and relevant delivery of education. Studies suggest that the extent of emotional intelligence contributes to the readiness for online learning of nursing students. Also, emotional intelligence can be a preventative factor in traversing the path to online learning during the global health crisis. The aim of the study is to assess nursing students' readiness for online learning and emotional intelligence. In addition, it seeks to identify the association between readiness in online learning and emotional intelligence. The study utilized a descriptive-quantitative survey method, including 174 nursing students from a selected local university offering nursing program in the National Capital Region. The data gathering was conducted during the 24th to 27th of March 2020 or during the 2nd week of Enhanced Community Quarantine (ECQ). The study adapted and modified the emotional intelligence scale by Hyde et al. (2002) and the Tool for Online Learning Success (TOOLS) by Kerr et al. (2006). The tools were pre-tested with reliability test results of 0.949 and 0.892, respectively, showing acceptable reliability. Then, data was gathered using an online gathering instrument and statistically analyzed using SPSS Version 24. The findings of the study suggest that nursing students are highly mindful of their academic skills ($m=3.870$) and independent learning ($m=3.767$). For the EI of the participants, based on the ten domains, the high scores are on emotional stability ($m=4.929$), self-development ($m=4.989$), and integrity ($m=4.198$). In addition, there was a significant relationship between emotional intelligence and readiness for online learning of nursing students, specifically on computer skills ($r=0.318$; $p<0.001$), academic knowledge ($r=0.675$; $p<0.001$), and independent learning ($r=0.750$; $p<0.001$). Assessing the emotional intelligence of nursing students and their readiness for online learning gives the academic institution an overview of the feelings, emotions, and capabilities of students. It creates a guide for any actions which involve the students.

Keywords: *Emotional Intelligence, Readiness for Online Learning, Nursing Students*

Introduction

The concept of Emotional Intelligence (EI) was first defined by Salovey and Mayer (1990) as the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990). In addition, it is the ability to identify, and manage personal emotions and also the emotions of other people. This is parallel to Intellectual ability or IQ, which refers to a person's ability to think critically. EI involves the capacity to accomplish a faithful analysis of emotions and the capacity to employ feelings, emotions, and emotional knowledge (Akduman, et al, 2015). According to Raz et al. (2014), EI is

defined as identifying emotions in the self and others, integrating emotions into thought processes, effectively processing complex emotions, and regulating one's own emotions and the emotions of others.

Daniel Goleman defines EI as "The capacity for recognizing our feelings and those in others, for motivating ourselves, for managing emotions well in ourselves and our relationships (Goleman, 1998). Goleman expanded Mayer and Salovey's ideals, which utilize five essential elements. Those elements are emotional self-awareness, self-regulation, motivation, empathy, and social skills. According to Goleman, EI is not a

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thing to be looked for but something that is part of you and your inner self (Riopel, 2020). Whereas & Bar-on's (2010) model emphasizes interrelated emotional and social competencies that are measured by self-report, which consists of five scales such as: intrapersonal, interpersonal, adaptability, stress management, and general mood.

Integrating emotional information into cognitive activities is essential to effective functioning. It plays a significant role in action and performance. Students who lack emotional intelligence can become less connected in school, negatively affecting performance in the classroom (Damasio, 1995). Developing emotional intelligence might take time because it affects an individual's performance (Chiruguru, 2020). In a study by Hyde et al (2002), ten factors are identified; these ten factors are self-awareness, empathy, self-motivation, emotional stability, managing relations, integrity, self-development, value orientation, commitment, and altruistic behavior.

The study by Abraham (2018) on the extent of emotional intelligence contributes to the perception of online learning. The study revealed a positive relationship between emotional intelligence and online learning. An increase in an individual's emotional intelligence and expected increase can be seen in the individual's online learning. Online learning is a form of distance education that takes place on the internet and is often referred to as "eLearning" or "e-Learning." Continuous change in teaching and learning promotes more interactive learning, encourages a collaborative approach for students, and creates a co-create learning atmosphere. Educators should continue to guide and coach the learners. Moreover, students who participate in online learning must have the basic requirements, such as access to a computer, the internet and the motivation to succeed in a non-traditional classroom.

Academicians must assess the emotional intelligence (EI) level among nursing students to achieve an effective and relevant education, more importantly, amidst the global health crisis where the Philippine government suspended classes on all levels in Metro Manila last March 10, 2020, which was a precautionary measure against the spread of the disease (Villareal, 2020; NDRRMC, 2020). As per Commission on Higher Education (CHED) advisory #3, universities used online classes during this time as of March 12, 2020. Advising the use of available distance learning, e-learning, and other alternative modes of delivery, facilitating alternative activities to enable students to complete the required practicum of OJT hours, and even shifting or adjusting the academic calendar (Bagayas, 2020). During this period, there were numerous changes in how the delivery of instructions was conducted and facilitated by

different academic institutions. It is important to assess the needs and capabilities of the learners, find strategies to mitigate stressful scenarios, and be able to prevent burnout during this period. On the other hand, emotional intelligence can be a preventative factor (Gutierrez & Mullen, 2016) and assist teachers and learners in traversing the path to online learning during this global health crisis.

The study by Ho-him (2020) revealed limitations to online learning, such as students being unable to do laboratory experiments, lack of concentration or resources, and interruption by family members. Online learning also has positive effects; for example, students who would not say anything inside the class can now communicate their thoughts, do exercises in their homes and eventually improve infrastructure. Therefore, the study assesses nursing students' readiness for online learning and emotional intelligence. In addition, it identifies the association between readiness for online learning and emotional intelligence.

Methodology and Method

The study utilized a descriptive-quantitative survey method that focused on the present and existing conditions and dealt with a chosen population's opinions, perceptions, and attitudes. Also, the study utilized a non-probability sampling technique involving nursing students from Level 1 to Level 4 of a local university in NCR. A total of 174 nursing students (from a population of 215) from the selected local university participated. The study used an adapted and modified research tool by Hyde, et al. (2002) for the emotional intelligence scale and Kerr, et al. (2006) for the Tool for Online Learning Success (TOOLS). Response options were on 5-point Likert-type scales ranging from strongly disagree (1) to strongly agree (5). The tools were pre-tested, and reliability tests showed Cronbach's Alpha of .949 (EI) and .892 (Readiness for Online Learning), respectively.

The data was gathered on the 24th to 27th of March 2020 or during the 2nd week of Enhanced Community Quarantine (ECQ). The data was gathered using an online gathering instrument and statistically analyzed using SPSS version 24. The following statistical tests were used: frequency, percentage, mean, standard deviation, and Pearson R Correlation with 0.05 significance level.

Table 1 shows the frequency and percentage of profile demographics. A total of 174 respondents were able to participate in the study. One hundred forty-three (143) nursing students are females or eighty-two-point two percent, and thirty-one (31) are males with a percentage of seventeen-

point eight percent. For age, the range of 19-20 was the biggest population with one hundred fourteen (114) or almost sixty-five-point five (65.5) percent.

Readiness for online learning was arranged and ranked according to their mean. Academic skills ranked 1st, with a mean of 3.870 and SD of .491. Independent learning was ranked 2nd with a mean of 3.767 and SD of .557. Then, computer skills had a mean of 3.492 and SD of .859. And lastly, Dependent learning with a mean of 2.72 and SD of .682.

Indicators for emotional intelligence are grouped into ten factors (Hyde et al., 2002). The top indicator with the highest mean was emotional stability, with a mean of 4.929, SD of 0.623, and the descriptive equivalent of strongly agree. This is followed by self-development with a mean of 4.198 and SD of .626. Then, integrity, with a mean of 4.174 and SD of 0.642, has the descriptive equivalent of agree. The summative measure of Emotional Intelligence has a mean of 4.051 and SD of .657.

Table 1. Result of Frequency and Percentage distribution of Nursing Students According to Demographic Profile

Age	Frequency	Percentage
17-18	33	19
19-20	114	65.5
21-22	16	9.2
23-24	1	0.6
25+	10	5.7

Gender	Frequency	Percentage
Male	31	17.8
Female	143	82.2
Total	174	100

Table 2. Result of Mean and Standard Deviation of Nursing Students' Readiness for Online Learning

Indicators	SD	Mean	Descriptive Equivalent
Computer Skills	.859	3.492	Agree
Independent Learning	.557	3.767	Agree
Dependent Learning	.682	2.720	Neutral
Academic Skills	.491	3.870	Agree

Table 3. Result of Mean and Standard Deviation of Nursing Students' Emotional Intelligence

Indicators	SD	Mean	Descriptive Equivalent
Self-awareness	.663	4.031	Agree
Empathy	.634	3.837	Agree
Self-motivation	.600	3.839	Agree
Emotional stability	.623	4.929	Strongly Agree
Managing relations	.659	3.787	Agree
Integrity	.642	4.174	Agree
Self-development	.626	4.198	Agree
Value orientation	.700	3.962	Agree
Commitment	.690	4.083	Agree
Altruistic behavior	.728	3.669	Agree
Summative Measure	.657	4.051	Agree

Table 4. Result of Correlation Analysis of Nursing Students Emotional Intelligence when grouped according to their Readiness for Online Learning

	Computer Skills				Independent Learning				Dependent Learning				Academic Learning			
	M	P	D	I	M	P	D	I	M	P	D	I	M	P	D	I
Self-Awareness	0.271	0.000	R	S	0.679	0.000	R	S	-0.102	0.182	A	NS	0.554	0.000	R	S
Empathy	0.319	0.000	R	S	0.635	0.000	R	S	0.035	0.649	A	NS	0.594	0.000	R	S
Self-motivation	0.325	0.000	R	S	0.682	0.000	R	S	-0.038	0.622	A	NS	0.609	0.000	R	S
Emotional Stability	0.295	0.000	R	S	0.713	0.000	R	S	-0.051	0.500	A	NS	0.569	0.000	R	S
Managing Relations	0.370	0.000	R	S	0.617	0.000	R	S	0.035	0.646	A	NS	0.490	0.000	R	S
Integrity	0.233	0.002	R	S	0.601	0.000	R	S	0.004	0.960	A	NS	0.551	0.000	R	S
Self-Development	0.198	0.009	R	S	0.522	0.000	R	S	-0.046	0.549	A	NS	0.535	0.000	R	S
Value Orientation	0.202	0.007	R	S	0.570	0.000	R	S	0.039	0.614	A	NS	0.523	0.000	R	S
Commitment	0.165	0.029	R	S	0.568	0.000	R	S	-0.024	0.753	A	NS	0.595	0.000	R	S
Altruistic Behavior	0.257	0.001	R	S	0.605	0.000	R	S	0.023	0.764	A	NS	0.552	0.000	R	S
Summative Measure	0.318	0.000	R	S	0.750	0.000	R	S	-0.014	0.854	A	NS	0.675	0.000	R	S

Table 4 shows Nursing Students' Emotional Intelligence when grouped according to Readiness for Online Learning. Results of the Pearson product correlation on computer skills and managing relations were found to be a low correlation ($r = .318$; $p < .001$), while academic learning and emotional intelligence were moderately positive and statistically significant ($r = 0.675$; $p < 0.001$); independent learning and emotional intelligence was a high positive correlation ($r = 0.750$; $p < 0.001$). It was markedly low for dependent learning and emotional intelligence, with negligible negative correlation, and not statistically significant ($r = -0.014$; $p > 0.001$).

Discussion

Readiness for Online Learning and Emotional Intelligence

The study's findings suggest that nursing students understand the role of academic skills, independent learning, and computer skills in their readiness for online learning. This is reinforced by the study of Chung et al. (2020), which revealed that high readiness on computer and internet self-efficacy was found, as well as moderate motivation for learning and self-directed learning. However, it was low for learners' control. This is further strengthened by the study of Händel et al. (2020), which includes 1,826 higher education students, which showed that a relatively good prerequisite to online learning, with a high level of education, high skills in handling and communication via digital media and good access to technology.

Furthermore, the study's findings suggest that nursing students have a higher emotional intelligence. This is reinforced by the study of Holston and Taylor (2016), who have done a longitudinal study to characterize nursing students' level of emotional intelligence in the student's last two years. It revealed that high emotional intelligence promotes comprehensive coping skills in nursing students to address stress, conflicts, or negative behaviors. Understanding emotional intelligence will illuminate foundational intrinsic and extrinsic skills during nursing education. Furthermore, it is strengthened by the study of Štiglic et al. (2018), which revealed higher emotional intelligence of nursing students compared to non-medical students. Moreover, the emotional intelligence score is not associated with the previous caring experience of the participant.

Computer Skills and Emotional Intelligence

The findings suggest that computer skills and emotional intelligence have a low correlation. This is reinforced by Alenezi (2020), who investigated the influence of students' emotional intelligence on their preparedness for online learning. The study revealed a considerable effect of EI on students' preparedness for online learning. Furthermore, it is strengthened by Pappas (2015) that a safe online learning environment boosts self-confidence and motivation, encourages taking risks, and further enhances the expression of creativity, which are critical factors for a practical online learning experience. Online learning involves teamwork and

shared responsibilities. Teamwork builds bonds, collaboration with other people, and conflict management during challenges. This fosters the creation of an environment conducive to productive relationships, development of trust, motivation, and commitment to results, which are essential in online learning.

Independent Learning and Emotional Intelligence

The result on independent learning and emotional intelligence suggests a high positive correlation. This is reinforced by the study of Öznacar, et al (2017) on the significant relationship between independent learning style and emotional intelligence. The participants are candidate teachers, which revealed that independent learning expresses persons' skills to manage their emotions, decision-making, and coping-stress, almost identical to emotional intelligence. And according to Mesarsova (2017), self-development is a critical element in the education system. Meanwhile, self-development is the motivating force of human development. The ability of students to continually reach their full potential. And the desire to grow and develop their personality amidst circumstances.

Dependent Learning and Emotional Intelligence

The findings suggest a negative correlation between dependent learning and emotional intelligence. This is strengthened by Yuen, et al. (2018) that digital learners were seen to be highly dependent on sources from the internet. However, somehow, they struggle to become independent learners due to fear of failure and self-criticism. This is reinforced by Öznacar (2017), where 406 teacher participants revealed that emotional intelligence significantly differs with their learning style. Diaz & Cartnel (1999) further strengthened this, revealing a positive relationship between collaborative learning style and dependent and participant learning styles. This means that learners who are dependent and participant learning styles are more collaborative. In addition, dependent learners must be instructed or coached in whatever they need to do; they need someone else to help them in the learning process.

Academic Learning and Emotional Intelligence

The findings suggest a moderate positive correlation between academic learning and emotional intelligence. The result of the study is reinforced by MacCann et al. (2020), who conducted a meta-analysis of emotional intelligence as a predictor of academic performance. Their study shows a small to moderate relationship between emotional intelligence and academic performance. This is further strengthened by Sánchez-Álvarez et al. (2020) meta-analysis, where 44 studies included and revealed a moderate association between emotional intelligence and academic performance.

EI plays a crucial role in action and performance. Students who lack emotional intelligence can become less connected to school, affecting their classroom performance (Damasio, 1994). According to Mayer and Salovey (1990), individuals with high emotional intelligence pay attention to, use, understand, and manage emotions that help them be more adaptive and potentially benefit themselves and others around them. Being intelligent and hardworking is not enough. Students must understand and manage their emotions to succeed at school (MacCann, 2019). Learners who do well in academics can do well in their transition into adulthood and in achieving economic and occupational success (Regier, 2011).

Conclusions

The research assessed and identified the association between nursing students' readiness for online learning and emotional intelligence. Nursing students agreed on readiness for online learning and emotional intelligence (computer skills, independent learning, and academic learning). Furthermore, there is an association between computer skills, academic learning, and independent learning with Emotional Intelligence. This research suggests that emotional intelligence affects the readiness for online learning. However, it also raises the question if the dependent learning of a learner can be improved with emotional intelligence. Emotional intelligence is an integral part of cognitive activity to achieve effective functioning, accomplish a faithful analysis of emotions, and have the capacity to employ emotions or feelings adequately. Emotionally stable students will yield more excellent academic outcomes and potentially be successful in this digital age. Assessing the emotional intelligence of nursing students and their readiness for online learning gives the academic institution an overview of a student's feelings, emotions, and capabilities. It creates a guide for any actions that involve the students.

A more extensive study should be done on the relationship between dependent learning and emotional intelligence. Increasing the number of participants, including other nursing schools, and incorporating quantitative and qualitative approaches. Educators must be able to conscientiously assess their learners' online learning readiness to achieve an adequate and relevant education delivery.

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“Remember, nurses are like icebergs.
At any one time, you are
only seeing what they are actually doing.”

– Ian Miller