

Emotional Intelligence in Relation to the Academic Performance among Graduating Nursing Students

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Abstract - The study was conducted at Liceo de Cagayan University, College of Nursing located at Kauswagan – Carmen junction, Rodolfo N. Pelaez Boulevard, Carmen, Cagayan de Oro City. The significance of the study is to fully equip the efficient data to support Gardner's and Daniel Goleman's stand on the degree of relevance between emotional intelligence and academic performance. Top of this, a systematic sampling procedure was conducted to draw samples from fourth year Nursing students enrolled in the first semester AY 2011-2012. In performing this, only the first odd-numbered students in the class list were considered. A copy of the EQ questionnaire was asked from the Dean's Office as suggested during the proposal defense. The survey's results were later evaluated and analysed using the Pearson Product moment correlation. The results have shown that the emotional intelligence of the graduating nursing students has nothing to do with their academic performance.

Keywords - Emotional intelligence, academic performance, nursing students

INTRODUCTION

Research proved that IQ does not influence the level of performance in school and in the workplace. Not long ago, intelligence quotient, or IQ, was considered as a strong predictor on the level of success an individual could attain. Parameters measured in standard IQ tests cover analysis, writing, reading, reasoning, and logic skills. Another element is involved and it is emotional intelligence, also known as EQ. Emotional intelligence measures how one is able to understand emotions, collaborate with others, and tolerate stressful situations. In contrast to IQ, EQ changes with profound experience or self-discipline. Nevertheless, both are in tandem and equally important in personal success and development (Daily OM, 2005). How do IQ and EQ influence clinical performance among future nurses studying in University Y?

The study was done in response to the directive of the Philippine Nurses Association to uplift the standard of nursing practice in the country. Last June 2008, the Association of Deans of Philippine Colleges of Nursing co-sponsored a workshop and came up with a consensus regarding the vision, mission and core values of the nursing sector and further clarifies strategic objectives. Their vision is to produce globally competitive nurses in 2030 and shall be a leader in promoting the nursing profession in the Asia Pacific Region and that Philippine Nursing will become the top provider of world-class, excellent caring nurses. One strategy to this 2030 roadmap is dynamic leadership through growth and learning perspectives. It underscores the significance of developing human capital by means of education, training, professional advancement, research, publication of evidence-based practices, nurse competency programs, and career development. Likewise, nurses have a professional social responsibility to promote respect pluralism, diversity and freedom of expression through training, education, and role modelling.

The Philippine Board of Nursing (PNA) together with the Commission on Higher Education (CHED) on Nursing Education in April 2001 created a committee on Core Competency Standards Development. The principal objective of this initiative is to develop competency standards by which nursing practice will be grounded in the Philippines which is stipulated in Article 3 Sec. 9 (c) of R.A.

9173 or the “Philippine Nursing Act of 2002” stating that PNA will examine and enforce standards of quality nursing care. This enables the nurse to uphold efficient, ethical, technical, moral, and professional standards of nursing practice taking into consideration of nation’s health needs. The outcome of this collaboration is the 11 core nursing competencies which included: Safe and quality nursing care, Management of resources and environment, Health education, Legal responsibility, Ethico-moral responsibility, Personal and professional development, Quality improvement, Research, Record Management, Communication, and Collaboration and teamwork. These standards will be the unifying framework in nursing education, regulation and practice. In the context of nursing practice which is this research’s area of concern, the standards protect the public from incompetent nurses and a yardstick for ethical and professional nursing practice.

In nursing schools all over the country, the curriculum must provide opportunities for students to be gradually exposed to patients through their educational years. This is done in suitable environments in hospitals and communities. All nursing students must be able to practice certain procedures like taking blood pressure, intradermal, intramuscular, and subcutaneous injection, rectal examination, vaginal examination, IUD introduction, male and female genitalia examination, male and female catheterization, nasal pack, attendance of normal labor, administering a BT/IVF, proper gowning and gloving, and many others. The researchers focused on either IQ or EQ predicts clinical performance among nursing students in University Y.

In actual nursing settings, nurses are to interact with patients, the medical team, and other health care professions. This is why nurse-patient interaction is the lifeblood and pulse in nursing practice. This interaction does only include having conversations but an intricate process which involves nurse perception, understanding patient’s emotions, utilizing these perceptions in patient management towards the provision of quality and effective patient care which is a sought after outcome.

The researchers have conducted this study to see if the emotional intelligence can affect the academic performance of graduating nursing students. Moreover, the researchers wanted to find out what particular aspect of the emotional intelligence the nursing students are at their highest as well as their lowest performance.

FRAMEWORK

The study was anchored on Gardner's Multiple Intelligence Theory which asserts that intelligence can be differentiated into a number of specific modalities which is primarily sensory rather than viewing it as a single general ability. Gardner argued there are various cognitive abilities which are very weakly associated with one another, despite close correlations between elements of intelligence traditionally measured in psychometrics. He provided a list composed of eight types of intelligence to date namely: spatial, linguistic, logical-mathematical, bodily-kinesthetic, musical, interpersonal, and intrapersonal (Slavin, 2009). Spatially intelligent individuals are able to visualize using the mind's eye; linguistic, pertains to either spoken or written words, thus display high language facility and are fond of memorizing words, telling stories, writing, and reading; logical-mathematical, denotes the area which has to do with numbers, reasoning, abstractions, and logic and this aspect of intelligence strongly correlates with conventional concepts of IQ or "intelligence"; bodily-kinesthetic, refers to the ability to control movements of the body and skilfully handle things; musical, sensitivity towards music, tones, rhythms, and sounds; interpersonal, very good in interacting with other people and exhibits high extroversion; intrapersonal, very high self-reflective and introspective capabilities and has deep sense of understanding of their own feelings, motivations, strengths and weaknesses; and naturalistic, very nurturing and has wide knowledge about the surroundings.

Another theory was the behavioural model of Daniel Goleman which focuses on concept that emotional intelligence is a collection of skills and competencies that motivate leadership performance. His model outlined the following constructs:

1. Self-awareness – the ability of reading one's own emotions and recognizing its impact while using gut feelings in guiding decision-making;
2. Self-management – involves the control of personal emotions and impulses and adaptability in changing scenarios and circumstances;
3. Social awareness – the ability of sensing, understanding, and

- reacting to others' emotions while figuring out social networks;
4. Relationship management – the ability of inspiring, influencing, and developing others while resolving conflict.

Goleman included a set of emotional competencies in each emotional intelligence construct. Emotional competencies are not innate but learned which should be worked out and developed to perform excellently. Goleman posited that individuals are inherently born with a general emotional intelligence which determines the potential for learning emotional competencies. His model is being criticized by many workers for being merely a “pop psychology” (Mayer, Roberts, & Barsade, 2008).

A new model of EI was proposed in 2006 by Bar-On which serves as the theoretical basis for the EQ-I originally made to provide assessment of various aspects of EI and examine its conceptualization. In the model, emotional-social intelligence is a cross section of inter-related social and emotional factors, skills, and competencies that determine how effectively individuals understand and express themselves, comprehend others, relate with them, and cope with everyday demands. Bar-On (2006) asserted that this model of social and emotional intelligence share common features with earlier models that have at least one of the following components: (a) the ability of recognizing, understanding, and expressing feelings and emotions; (b) the ability of understanding how others feel and relating with them; (c) the ability to managing and controlling one's emotion; (d) the ability to managing change, adapting, and solving interpersonal and personal problems and the ability of generating positive effects and being self-motivated. According to Baron's model, to be socially and emotionally, one has to express and understand oneself in a more effective way, relate with others well, and successfully handle the pressures, challenges, and demands of everyday life. Interpersonally, it involves self-awareness, understanding of one's strengths and weaknesses, and expressing one's thoughts and feelings non-destructively. At the interpersonal aspect, one's social and emotional intelligence is high if the individual is very cognizant of others' needs, feelings, and emotions and establish satisfying, constructive, and cooperative relationships. Hence, to be socially and emotionally intelligent implies effective management of

personal, social and environmental change by flexibly dealing with immediate situations, finding solutions to problems, and deciding.

According to Cherniss (2002), emotional intelligence is a concept which is increasingly acknowledged in social psychology and is appearing in various nursing journals (Cadman & Brewer, 2001; Evans & Allen, 2002; Freshman & Rubino, 2002). It is viewed as an asset in instances where understanding other people and effective management are of paramount importance (Vitello-Cicciu 2002). Therefore, EI seems to be relevant in the health care sector, when considered important by practitioners.

The concept of emotional intelligence has become increasingly popular among nurses in the early 1980s in both social and professional levels (Freshwater & Stickley, 2004). In the nursing profession, emotional intelligence is viewed in two dimensions: 1) The perception and understanding of the nurse towards the patient's emotions and 2) The utilization of these perceptions by the nurse in achieving the goal in managing complex situations for quality patient care.

Freshwater and Stickley (2004) suggested that emotional intelligence must be appropriately and realistically integrated in the nursing profession through a model of transformatory learning for nurse education. Nowadays, emotional intelligence is regarded an important characteristic in successfully building nursing leadership (Vitello-Cicciu, 2002), enhancing performance and reducing burnout.

Studies have shown that patient characteristics such as gender, age and health condition influence application of EI. For instance, it would be difficult for a young nurse to be interacting with an old patient who may have a hearing impairment thus EI use is reasonably low. Research on factors associated with nurse interactions with elderly people showed that nurses' educational level affected these interpersonal relationships (Wilma et.al, 1999). Non-verbal interactions also play an important role in nurse-patient perceptions and include instrumental touch, touch, leaning forward, smiling, nodding, and eye contact (Wilma, 1999).

Montes and Augusto (2007) determined the role of perceived emotional intelligence (PEI) and showed that it minimizes the negative effects of stress. A literature review by Anne (2004) concluded that modern day demands of nursing depend on EI skills and there is no doubt that EI results in more positive attitudes, higher adaptability,

enhanced relationships, and greater orientation towards positive values (Kristin & Elisabeth, 2007). Clearly, in caring for mentally retarded patients, EI clearly correlated with adaptive success.

A study by Gerits et al. (2004) among 180 Dutch nurses who completed the Bar-On Emotional Quotient Inventory, Utrecht-Coping List, Utrecht-Burnout Scale, MMPI-2, and GAMA revealed that the higher the emotional intelligence, the lower is the nurse burnout. Kristin and Elisabeth (2004) concluded that EI stimulates a deeper sense of nursing identity.

Humpel and Caputi (2001) highlighted nurse-patient relationship, responsibility, motivation, and supervision as important factors in EI. They found that emotional competency grows with clinical experience of the nurse.

Clinical evaluation serves both a formative and a summative purpose. By means of this evaluation, the clinical instructor is able to monitor the progress of students in accordance to the clinical objectives and whether he or she is competent in clinical practice. Formative evaluation provides valuable information on students' learning needs and areas where added clinical instruction is necessitated. Formative clinical evaluation is not done for the purpose of grading students instead it is a way of diagnosing their learning needs as baseline information for further instruction. Summative evaluation, on the other hand, takes place at completion of the learning process to determine if objectives have been achieved and competencies developed. This is the basis for rating clinical practice performance (Gaberson&Oermann, 2006).

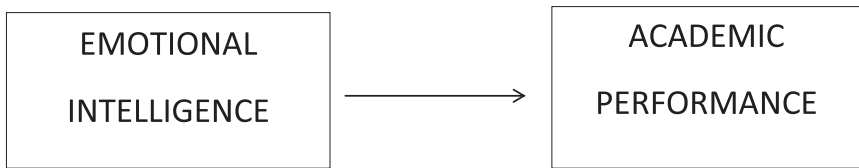
In Beauvais et al. (2010), mean EI score was 0.53, $SD\pm 0.06$ which is interpreted as moderate. A moderate performance was computed based on the mean score of 3.14, $SD\pm 0.40$. Overall, EI correlated positively with nursing performance and four out of six nursing performance indicators significantly correlated with total emotional intelligence scores.

The research of Benson, Ploeg, and Brown (2010) provided evidence that nursing students' EI scores differed across year level; with those in Year 4 to be more socially and emotionally effective than those in Year 1.

OBJECTIVES OF THE STUDY

1. To describe the emotional intelligence of the graduating nursing students;
2. To determine the academic performance of the graduating nursing students; and
3. To relate the emotional intelligence and the academic performance of the graduating nursing students.

RESEARCH FLOW



SCOPE AND LIMITATION OF THE STUDY

The data was on emotional quotient scores obtained from the Bar-On Emotional Competency Inventory which was tested for correlation with academic performance. Only fourth year graduating Nursing students in University Y SY 2011-2012 were the respondents. In emotional quotient, scores were based on self-awareness, self-management/self-regulation, motivation, empathy, and social skills. In the assessment of academic performance, secondary data from Level Coordinators were obtained consisting of grades in N200, N201, N202, N203, and N204.

SIGNIFICANCE OF THE STUDY

Creating a stress-free learning environment by incorporating practice and reflective learning will help students develop an independent level of functioning. This is where the researchers would like to work on.

Dean. This study will be a significant resource for the Dean so that programs and interventions can be thought of in helping out

nursing students with low emotional intelligence and poor academic backgrounds.

Academic Chair. The Academic Chair can work in tandem with the Dean in the implementation of enhancement programs geared towards improving the academics of the student nurses.

Health care team members. Members of the health care team could coordinate well with the student nurses in caring for patients in the clinical area.

Guidance Counselors. This will enable the Guidance Counselors to conduct periodic assessment of emotional intelligence and academic performance.

Nursing students. The study is conducted to aware the fourth year graduating nursing students of their own emotional quotient and academic performance.

Instructors. The outcome of the proposed study will help instructors teach their students more effectively and facilitate good knowledge with students.

Patients. This will give patients optimum wellness rendered by student nurses in University.

Researchers. This study will give researchers additional knowledge and understanding about the impact of emotional quotients on academic performance of students. The results of the study will encourage other researchers to conduct similar studies that may be utilized to advance research in the concept on how EQ affects nursing student academic performance.

MATERIALS AND METHODS

The descriptive design was employed in the study. Best (1999) emphasized that in a descriptive study, the concern is on conditions or relationships that exist, prevailing attitudes, points of view, and beliefs that are held, effects being felt, or developing trends. A descriptive method is useful in gathering and organizing research data so that findings can be reported conclusively. The study was performed to determine the relationship between EQ and academic performance among fourth year BS Nursing students in University Y. All of these justify the appropriateness of applying a descriptive method to the proposed study.

A systematic sampling procedure was conducted to draw samples from fourth year Nursing students enrolled in the first semester AY 2011-2012. In performing this, only the first 10 odd-numbered students in the class list were considered. A copy of the EQ questionnaire was asked from the Dean's Office as suggested during the proposal defense.

To collect the primary and secondary data, the researchers prepared a letter of permission addressed to the Dean of the College of Nursing in University Y. The objective of the letter is to formally ask the Dean's consent of conducting the study among fourth year Nursing students through administration of research instruments at a designated time and venue as well as procuring ratings of students from N200 to N204. Once approved, the researchers started distributing the questionnaires, and then submitted to the University Statistician for further statistical analysis. The results of the analysis were the bases of discussion, conclusion, and recommendations.

Descriptive and inferential statistics were applied in presenting the data. For descriptive, means were reported. To determine whether the null hypothesis was accepted or rejected, a Pearson Product Moment Correlation was employed.

RESULTS AND DISCUSSION

Emotional quotient of 60 respondents was measured in terms of self-awareness, self-management/self-regulation, motivation, empathy, and social skills. All these indicators were moderate except for self-awareness. In self-awareness, the highest mean is in emotional awareness (3.12). This means that they are cognizant of personal feelings. According to Hudson (2010), the better is one's understanding of the self; the higher is the likelihood of accepting and changing the self. When a person is in the "dark" because of not being able to know one's own capabilities, he or she will be caught up with internal struggles allowing outside forces to shape and mold him or her. Self-confidence got a lowest mean (2.88); again verbally described moderate. This indicates they are moderately realistic and positive about themselves and their abilities. They are also moderately assertive, optimistic, enthusiastic, affectionate, proud, independent, trustworthy, and able to handle criticism, and emotionally mature (Hudson, 2010). In the subscale, Self-management/self-regulation,

the highest mean is computed in trustworthiness (3.12) and conscientiousness (3.12). This means that students are maintaining standards of honesty and integrity and taking responsibility for one's performance; however, they have not fully internalized these because it is only moderate. Lowest mean is in self-control (2.80) with the verbal description of moderate. This shows that the students display the capability of keeping disruptive emotions, temper, and impulses. Same as trustworthiness and conscientiousness, there is a tendency to less self-regulate. Implications of trustworthiness, conscientiousness, and self-control cannot be denied. When self-control is low, individuals tend to be insensitive, show preference for non-challenging, physical, and exciting assignments, short-sighted and immediate gratification seekers. In short, they have not established intimate attachments and aspirations (Hirschi, 2002 as cited by Wolfe & Higgins, 2008). With respect to motivation, students moderately facilitate initiative to act on opportunities (3.07). This item got the highest mean which has a verbal description of moderate. On the other hand, lowest mean is in "facilitate drive to meet standards of excellence" and "facilitate commitment on the alignment of goals with the group or organization" (3.02). Zhang and Chiu (2011) said that selfish pursuits of personal goals in group contexts conflict with goals of the group. They argued that when individuals are committed to their personal goals, these results in higher group identification if members of the group acknowledge they share the goals with the rest of the group. Awang (2007) said that when students are motivated in meeting the standards of excellence, they would give their undivided attention in class and accomplish assignments or homework promptly and well. In empathy, the highest mean is in "shows actions/gestures to let others know that he/she feels their feelings, emotions, and problems" at 3.27 which is moderate. On the other hand, "determine and sensing the development needs of others" had the lowest mean (2.95) and described as moderate. In the last subscale, social skills, highest mean is in "being able to communicate effectively by listening openly to others and send convincing messages" (3.2, moderate). It would not be surprising if students have established a positive student-teacher relationship which is a predictor of optimal, holistic learning (White, 2007). The level in which students are able to inspire groups/individuals is moderate as shown by the lowest mean of 2.83. This indicates that students possess good leadership skills.

Table 1. EQ Respondents

INDICATORS	WEIGHTED MEAN (AVERAGE)	DESCRIPTION
A. Self-Awareness		
1. Emotional awareness (being able to recognize one's own feelings as it happens)	3.12	Moderate
2. Accurate self-assessment	2.9	Fair Extent
3. Self-confidence	2.88	Moderate
AVERAGE	2.39	Fair Extent
B. Self-Management/Self-Regulation		
1. Self-control (being able to keep disruptive emotions/temper/and impulses)	2.8	Fair Extent
2. Trustworthiness (maintain standards of honesty and integrity)	3.12	Moderate
3. Conscientiousness (take responsibility for one's performance)	3.12	Moderate
4. Adaptability (handle change effectively)	3.08	Moderate
5. Innovation (comfortable with new ideas and approaches)	2.93	Moderate
AVERAGE	3.01	Moderate
C. Motivation		
1. Facilitate achievement drive to meet standard of excellence	3.02	Moderate
2. Facilitate commitment on the alignment of goals with the group or organizations	3.02	Moderate
3. Facilitate initiative to act on opportunities	3.07	Moderate
4. Facilitates (optimism (persistent, feelings, and concerns)	3.05	Moderate
AVERAGE	3.04	Moderate
D. Empathy		
1. Understand others by being aware of their needs, perspectives, feelings, and concerns.	3.2	Moderate

2. Show actions/gestures to let others know that he/she feel their feelings/emotions/problems.	3.27	Moderate
3. Determine and sensing the developmental needs of others	2.95	Moderate
4. Show a committed and involved service orientation	3.05	Moderate
AVERAGE	3.12	Moderate
E. Social Skills		
1. Being able to influence or induce desirable responses of others by using effective diplomacy to persuade	2.88	Moderate
2. Being able to communicate effectively by listening openly to others and send convincing messages	3.2	Moderate
3. Being able to inspire groups/individuals	2.83	Moderate
4. Being able to guide groups/individuals	2.92	Moderate
5. Being able to collaborate and cooperate with others toward a shared goal	3.15	Moderate
6. Being able to create group synergy in pursuing collective goals	3.05	Moderate
AVERAGE	3.08	Moderate

LEGEND: 3.25-4.00 High Extent; 2.50-3.24 Moderate; 1.75-2.49 Fair Extent; 1.0-1.74 Low

It could be seen that student grades over the course of their academic career at the College of Nursing has progressively decreased. Initially, the average is high, and then started to become fair during N201 until N204. This is expected because during the early years in college, instruction focuses on the fundamentals until content of subject matter becomes more and more difficult and specialized especially in the latter part of the Nursing program.

Table 2. Grades of N205 students

Grade	Weighted Mean (Average)	Description
N200	2.48	Good
N201	2.59	Fair
N202	2.69	Fair
N203	2.75	Fair
N204	2.77	Fair
Average	2.66	Fair

A Pearson Correlation was applied to determine any significant correlation between emotional quotient and grades of N204 students. As shown, the correlation coefficient is -0.142 with a p-value of 0.278. Since the p-value is greater than 0.05 level of significance, there is reason to accept the null hypothesis which states that emotional quotient or intelligence is not significantly correlated with academic performance. This is contrary to the study of Yahaya and Yahaya (nd) and Romanelli, Cain, and Smith (2006).

Table 3. Pearson product moment correlation between EQ and academic performance

Variables	R	p	Decision	Interpretation
EQ-Grades	-0.142	0.278	Accept H_0	No significant correlation

CONCLUSIONS

After careful analysis of data, emotional intelligence had no significant correlation with academic performance of N204 students based on the grade point averages. The highest weighted mean is empathy. The graduating nursing students knows very well how to understand others by being aware of their needs, perspectives, feelings and concerns; show actions/gestures to let others know that he/she feel their feelings/emotions/problems; determine and sensing the developmental needs of others and show a committed and involved service orientation. The lowest weighted mean is self-awareness which

means graduating nursing students are weak in recognizing one's own feelings as it happens; has no accurate self-assessment and lacks self-confidence.

RECOMMENDATIONS

1. Conduct workshops on how to better improve emotional intelligence.
2. Follow up studies related to this subject should involve more samples/respondents
3. To explore other factors which could affect the grades of the students
4. To conduct self-awareness seminars among all levels in nursing to improve the self-awareness among nursing students.

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