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Relationship between Academic Performance and the Nursing Licensure Examination of Graduates from a City-Subsidized University

Abstract

This study determined the relationship between the academic performance and nursing licensure examination of graduates of a city-subsidized university and the nursing professional subjects that best predict the outcome of the nursing licensure examination. The study used a descriptive-correlation design. Academic records of two batches in 2012 and 2013 were used. Independent variables included the nursing professional subjects and the dependent variables were the subtests in the licensure examination. Means, standard deviations, Pearson r correlation, and Multiple Regression Analysis were used for the quantitative data. Findings reveal that graduates were average performers in their academics. This was inversely correlated with the nursing licensure examination. This still suggests direct relationship since the grading system in the university ranged from 1.0 to 5.0 where 1.0 is excellent. Critical Appraisal II, Nursing Care Management 104, and Nursing Care Management 106 were significant predictors of performance in the licensure examination.

Key words: *Academic Performance, Licensure Performance, Predictors of Nursing Examination*

Introduction

The Philippine government is responsible for the establishment of public educational institutions in the country via legislation. However, through the passage of Republic Act 7160 or the Local Government Code in 1991 with specific provisions in Sections 447, 458, and 468, Local Government Units (LGUs) have been allowed to establish and operate their own colleges and universities which paved the way for the formation of city subsidized universities.

A locally subsidized university located in Pasay City offers 10 degree programs in different areas and one of the courses being offered is the Bachelor of Science in

Nursing (BSN) degree. This is a four-year degree program that teaches students the necessary skills and knowledge to care for the sick and injured. The Commission on Higher Education (CHED) is the agency responsible for the regulation of the nursing education in the country. Regulation ensures the quality of nursing education that is being provided to the students. CHED Memorandum Order No. 30 which was promulgated in 2001 contains the updated policies and standards for nursing education. This was replaced by CHED Memorandum Order No. 14, series of 2009 which contains the policies and standards for Bachelor of Science in Nursing (BSN) including the new prototype nursing curriculum.

As mandated in Section 12, Article IV of the Philippine Nursing Act of 2002 or Republic Act 9173, in order to practice nursing in the Philippines, a new practitioner is required to pass the Nursing Licensure Examination (NLE). Licensure aims to ensure that a professional meets the minimum requirements required by law in order to practice the profession.

In addition, the quality of nursing program in the country is also measured by the number of nursing professionals that passed the nursing licensure examination. With respect to NLE performance of the institution being studied, it was noted that in recent years the first batch of graduates did well but such performance standard declined in the succeeding years.

The study aims to determine the academic and the NLE performance of the graduates of the university Batches 2012 and 2013, as well as, the relationship between the two variables and predictors of the NLE from the academic performance.

Study Framework:

Nursing programs are considered substandard if less than 30 percent of their graduates passed the licensure examination in the last three years, or if they lack competent faculty, training hospital, laboratories, and libraries. According to the CHED Memorandum Circular No. 14, Series of 2009, the bottom 30% of nursing schools whose passing average is below the national passing rate will be phased-out and closed down. Universities concerned receive a notice from CHED regarding their poor performance in the nursing board examination from the periods 2004-2006. As a result, the said academic institutions need to prove their sustainability. Hence, ratings in Figure 1 show much higher rating than the national passing rate since some schools have been affected by this circular starting 2013.

The reality presented above serves as the main context of this study in determining the performance in the academic and licensure examination of nursing graduates, as well as, the nursing subjects that best predict the performance in NLE.

Methodology:

Research Design

The study utilized a descriptive, correlational method which is used to determine the relationship between two variables. It aimed to describe the academic and the NLE performances of Batch 2012 and 2013 and to also determine the relationship between the two. Furthermore, predictors of the NLE were also determined.

Setting of the study

The study was conducted in a public, locally subsidized university. It was chosen because it was one of the 14 educational

Figure 1. Performance and the National Passing Rate in the Nursing Licensure Examination (2007-2014)

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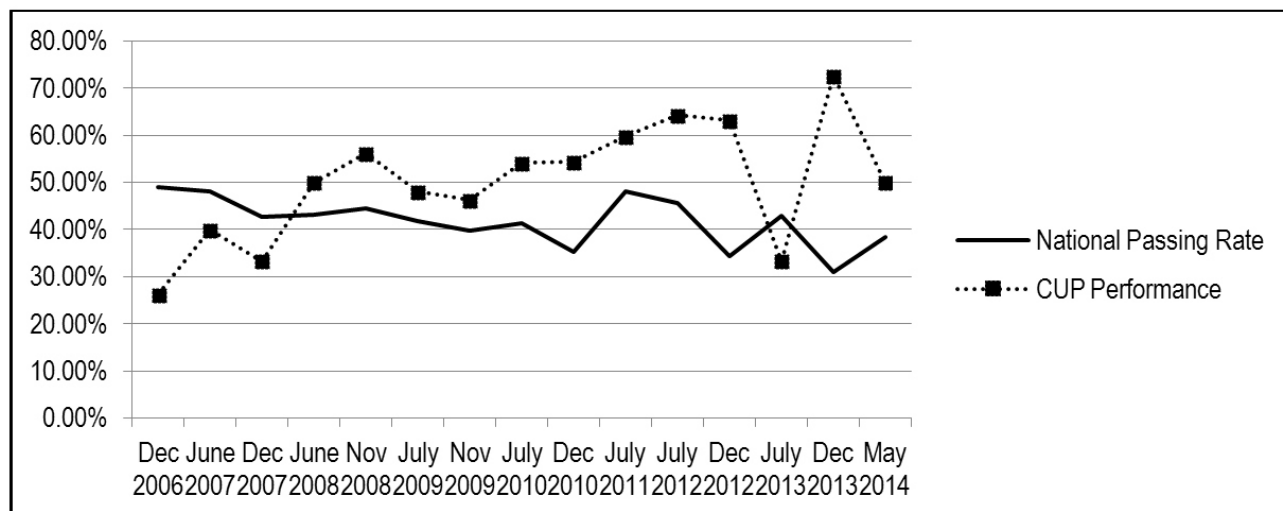
institutions that first responded to the Local Government Code since its implementation in 1992. In addition, it is also one of the universities that have an inconsistent board examination performance through the years. The study was conducted in the second semester of the school year 2014-2015.

Population and sampling procedure

Purposive sampling technique, a non-probability scheme in the quantitative phase, was used in the study. Records of graduates' grades from Batches 2012 and 2013 were also obtained upon the approval of the Office of the Registrar. These said batches are the graduates of the new prototype nursing curriculum who are not only first time takers but who also took the board exam from the periods of June 2012, December 2012, June 2013, December 2013 and May 2014. It does not include retakers. This study also included 46 students from Batch 2012 and 29 students from Batch 2013. In addition, records of the board performance of the graduates in the NLE were obtained upon the approval of the Office of the Dean of the College of Nursing. All the said records of these batches were used in the study and no sampling was done.

Ethical Consideration

The research was approved by the ethics committee of the university. Academic records of the 2012 and 2013 graduates of the institution were obtained from the university. Since all these academic records was not treated as individual student records but rather completely anonymized and treated as one dataset, there was no need for any sampling procedure to be done and for the researcher to contact each graduate for their consent. Instead, full administrative clearance was secured from the dean of the College of Nursing to access these records.

Data Collection

Prior to the collection of data, a letter of approval to conduct the study was obtained from the Office of the University Registrar and the Dean of the College of Nursing. Data was collected from the academic and board performance of students from batches 2012 and 2013. Actual data on the summative examinations from the two batches in the respective nursing professional subjects were used and did not contain any identification of any particular student. This means that the identity of the student remained anonymous.

The data collection procedures had two phases. The quantitative phase included the review of records of the grades of the students in Nursing. These included all Professional Subjects namely Theoretical Foundations of Nursing, Health Assessment, Community Health Nursing, Health Education, Nursing Research I, Nursing Research II, Competency Appraisal I, Competency

Appraisal II, NCM 100: Fundamentals of Nursing Practice, NCM 101: Care of Mother, Child and Family, NCM 102: Care of Mother, Child, Family and Population Group At-risk or With Problems, NCM 103: Care of Clients with Problems in Oxygenation, Fluid & Electrolyte Balance, Metabolism and Endocrine, NCM 104: Care of Clients with Problems in Inflammatory and Immunologic Response, Perception and Coordination, NCM 105: Care of Clients with Maladaptive Patterns of Behavior, NCM 106: Care of Clients with Problems in Cellular Aberrations, Acute Biologic Crisis including Emergency and Disaster Nursing, NCM 107: Nursing Leadership and Management and Intensive Nursing Practicum. The other set of variables were the subtests of the NLE such as Nursing Practice Test I, Nursing Practice test II, Nursing Practice Test III, Nursing Practice Test IV, and Nursing Practice Test V.

Analysis of data

In order to answer the research question posed, the first step in the data analysis was to get the mean grade of the graduates in the nursing professional subjects and subtests in the NLE to determine the overall index of performance of students and the standard deviation to describe the homogeneity or heterogeneity of their performance. Statistical Analysis was then conducted and data was entered using SPSS and Stata software. Then, Pearson's r correlation was employed to determine relationship between the academic performance in nursing professional subjects and licensure examination ratings on the different subtests in the nursing board examination. Multiple Regression Analysis was used to determine what nursing professional subjects may predict the results of the nursing licensure examination.

Results

Academic Performance of Nursing Graduates

Table 2 shows the academic performance of the nursing graduates. Overall, highest mean grade was noted in Health Education with a grade of 1.58 and lowest in Competency Appraisal I with 2.72 based on the grading system used in the university as shown in Table 1. Most of the grades in the different academic subjects were higher among Batch 2013 graduates. There was a significant difference in the performance of batch 2012 and batch 2013 using t test specifically in their grades in TFN, NCM 101, CHN, NCM 102, Health Education, NCM 103, NCM 104, NRES I, NCM 107, NRES II, and INP with p values <0.05 showing better performance among graduates of Batch 2013. On the other hand, no significant difference was noted in the grades in NCM 100, HA, NCM 105, NCM 106, CHN, and CA II with p values >0.05. However, the greatest variability in the mean score was found to be in the subjects TFN, Health

Table 1. Grading System in the University

Numerical Grade	Quantitative Equivalent	Qualitative Equivalent
1.0	98-100 percent	Outstanding
1.25	95-97	
1.5	92-94	Very Good
1.75	89-91	
2.0	86-88	Good
2.25	83-85	
2.5	80-82	Fair
2.75	77-79	Passed
3.0	75-76	
4.0	70-72	Conditional
5.0	<70	Failed

Table 2. Academic Performance of Nursing Graduates

Academic Subjects	Batch 2012 (n=46)		Batch 2013 (n=29)		Overall (n=75)	
	Mean Grades (SD)	Lowest-Highest Grades	Mean Grades (SD)	Lowest-Highest Grades	Mean Grades (SD)	Lowest-Highest Grades
TFN	2.66 (0.24)	2.25 – 3.00	2.34 (0.32)	1.75 – 3.00	2.53 (0.32)	1.75 – 3.00
NCM 100	2.58 (0.26)	2.25 – 3.00	2.53 (0.26)	2.25 – 3.00	2.56 (0.26)	2.25 – 3.00
HA	2.50 (0.33)	1.50 – 3.00	2.36 (0.29)	2.00 – 3.00	2.44 (0.32)	1.50 – 3.00
NCM 101	2.60 (0.20)	2.25 – 3.00	2.40 (0.18)	2.25 – 2.75	2.53 (0.22)	2.25 – 3.00
CHN	2.48 (0.26)	2.00 – 3.00	2.10 (0.26)	1.50 – 2.50	2.33 (0.32)	1.50 – 3.00
NCM 102	2.74 (0.24)	2.00 – 3.00	2.56 (0.18)	2.25 – 3.00	2.68 (0.23)	2.00 – 3.00
Health Ed	1.72 (0.29)	1.25 – 2.75	1.36 (0.20)	1.00 – 2.00	1.58 (0.32)	1.00 – 2.75
NCM 103	2.77 (0.18)	2.25 – 3.00	2.56 (0.20)	2.25 – 3.00	2.69 (0.22)	2.25 – 3.00
NCM 104	2.51 (0.21)	2.25 – 3.00	2.38 (0.22)	2.00 – 3.00	2.46 (0.22)	2.00 – 3.00
NCM_105	2.47 (0.20)	2.00- 2.75	2.53 (0.24)	2.00 – 3.00	2.50 (0.22)	2.00 – 3.00
NRES 1	2.61 (0.26)	2.00 – 3.00	2.46 (0.26)	2.00 – 3.00	2.56 (0.26)	2.00 – 3.00
NCM 106	2.34 (0.28)	1.75 – 3.00	2.25 (0.18)	2.00 – 2.75	2.30 (0.24)	1.75 – 3.00
NCM 107	2.52 (0.16)	2.25 – 2.75	2.36 (0.28)	2.00 – 3.00	2.46 (0.22)	2.00 – 3.00
NRES 2	2.71 (0.24)	2.00 – 3.00	2.42 (0.31)	2.00 – 3.00	2.60 (0.30)	2.00 – 3.00
CA 1	2.70 (0.20)	2.25 – 3.00	2.76 (0.24)	2.00 – 3.00	2.72 (0.22)	2.00 – 3.00
INP	2.27 (0.20)	2.00 – 3.00	2.16 (0.18)	1.75 – 2.50	2.22 (0.20)	1.75 – 3.00
CA 2	2.72 (0.22)	2.00 – 3.00	2.67 (0.20)	2.25 – 3.00	2.70 (0.22)	2.00 – 3.00

*p value of <0.05 is considered significant

Assessment, CHN, and Health Education with standard deviation of 0.32.

Performance in the Licensure Examination for Nurses

To pass the examination, an examinee must obtain a general average of at least seventy five percent (75%) with a rating of not below sixty percent (60%) in any of five test subjects and based on the results. Overall mean score in NP III showed 73.98, with batch 2012 having a mean score of 73.28, and batch 2013 with 75.10. On the other hand, performance of graduates in NP IV shows an overall mean score of 72.17 with batch 2012 having a mean score of 71.56 and batch 2013 with 73.14. The performances of both batches in these two subtests were much lower compared with the three other subtests. In the last nursing practice test, batch 2012 got a mean score of 74.44 and batch 2013 got 78.10. Overall mean score for this test was 75.85. For the general average, batch 2012 got a mean score of 74.41 and batch 2013 got 75.72. Overall mean score shows 74.92. In sum, the highest mean grade was noted in Nursing Practice I with a mean score of 76.93 and lowest in Nursing Practice IV with a mean score of 72.17. Furthermore, the latter also showed greater variability with an overall standard deviation of 6.52.

Correlation of the Academic Performance and Licensure Examination Results of Nursing Graduates

Correlation coefficients of the nursing graduates' (Batch 2012 and 2013) academic performance in each subject with the NLE results are shown in Table 4. The results showed that there were significant correlations using Pearson r as proven by all p values of <0.05 except for health education with p value of 0.075 and NRES I with a p value of 0.097. The null hypothesis is therefore rejected since an inverse correlation was noted as shown by the negative sign in the correlation coefficients. The grades used in the university were numerical grade with 1.00 as highest and 5.00 as failure while the licensure grades were expressed in percentile ranks.

Predictors of Performance in the Licensure Examination for Nursing

In determining the nursing professional subjects that best predict the performance in the

Table 3. Performance in the Nursing Licensure Examination of Graduates

NLE Test Subjects	Batch 2012 (n=46)		Batch 2013 (n=29)		Overall (n=75)	
	Mean (SD)	Lowest-Highest Grades	Mean (SD)	Lowest-Highest Grades	Mean (SD)	Lowest-Highest Grades
Nursing Practice I	77.80 (5.43)	62 – 85	75.55 (6.67)	54 – 83	76.93 (6.00)	54 – 85
Nursing Practice II	74.98 (6.24)	56 – 85	76.69 (4.69)	62 – 83	75.64 (5.72)	56 – 85
Nursing Practice III	73.28 (6.98)	57 – 82	75.10 (4.44)	59 – 83	73.98 (6.16)	57 – 83
Nursing Practice IV	71.56 (5.80)	56 – 79	73.14 (7.51)	56 – 84	72.17 (6.52)	56 – 84
Nursing Practice V	74.44 (6.44)	50 – 84	78.10 (3.83)	68 – 83	75.85 (5.82)	50 – 84
GWA	74.41 (4.80)	60 – 80	75.72 (4.18)	64.6 – 82	74.92 (4.59)	60 – 82
Remarks	Frequency (%)		Frequency (%)		Frequency (%)	
Passed	28 (60.9%)		23 (79.3%)		51 (68.0%)	
Failed	18 (39.1%)		6 (20.7%)		24 (32.0%)	

*p value of <0.05 is considered significant

Table 4. Correlation of the Academic Performance and Licensure Examination Results of Nursing Graduates

Academic Subjects	r coefficient	P value	Interpretation
TFN	-0.373	0.001	Significant
NCM 100	-0.492	0.000	Significant
HA	-0.463	0.000	Significant
NCM 101	-0.47	0.000	Significant
CHN	-0.44	0.000	Significant
NCM 102	-0.45	0.000	Significant
Health Ed	-0.21	0.075	Not Significant
NCM 103	-0.43	0.000	Significant
NCM 104	-0.40	0.000	Significant
NCM_105	-0.36	0.002	Significant
NRES 1	-0.19	0.097	Not Significant
NCM 106	-0.52	0.000	Significant
NCM 107	-0.34	0.003	Significant
NRES 2	-0.445	0.000	Significant
CA 1	-0.43	0.000	Significant
INP	-0.34	0.003	Significant
CA 2	-0.50	0.000	Significant

*p value of <0.05 is considered significant

NLE, a backward step multiple regression analysis was done. The findings indicate that among the 17 nursing professional subjects, only three came out as the predictors of NLE. These three predictors are CA II, NCM 104 and NCM 106.

The regression model of the study as shown in Table 5, explained that the 3 predictors namely: CA II, NCM 104, and NCM 106 bears an inverse relationship with the NLE results as noted by negative regression coefficients, thereby, rejecting the null hypothesis. This outcome means that the lower the numerical value in the three subjects, the higher the chance of passing the board examination and vice versa. The regression equation is Nursing Licensure Examination Performance= 120.79 – 7.08 Competency Appraisal II- 5.77 Nursing Care Management 106- 5.45 Nursing Care Management 104.

In combination, however, the three predictors resulted only to 43.19% chances of passing the licensure examination. Therefore, 56.81% of passing the licensure examination is related to factors other than the academic performance of the graduates. Possible factors not included in this study which are shown to be predictors in other studies are the College Entrance Examination, Nursing Aptitude Tests, Nursing Board Review Grades, the number of times a student repeat a nursing course, demographic profiles, study habits, teaching-learning methods utilized, faculty profile, as well as, clinical facilities.

Discussions

The purpose of this study is to determine the relationship between the academic performance and the NLE of the nursing graduates and the nursing professional subjects that best predict the outcome of the NLE.

One of the most important criteria for the evaluation of the scholastic standing of a students is his/her academic performance (Salustiano, 2013). In the study, academic performance includes the grades of the graduates in all the nursing subjects The findings revealed that the two batches performed satisfactorily with an overall mean grade of 1.75 to 2.75 especially in

Table 4. Predictors of Performance in the Licensure Examination for Nursing

Variable	Regression Coefficient	Std. Err. Coefficient	Tolerance	Probability	Interpretation
Constant	120.79	6.54	18.48	0.0000	
CA 2	-7.08	2.09	-3.38	0.0010	Significant
NCM 106	-5.77	1.88	-3.07	0.0030	Significant
NCM 104	-5.45	1.94	-2.82	0.0060	Significant

*p value of <0.05 is considered significant   S= 3.532 ; R sq=43.19%

the subjects that are significantly related with the NLE. Specifically, grades of the graduates in NCM 104, Nursing Care Management 106, and Competency Appraisal 1 ranges from 2.25 to 2.75. The said subjects are proven to be predictors of board exam which is also related to the result of their licensure examination rating which ranges from 72.17 to 76.93. This shows that the students are average performers both in the academic performance and also in the board examination. It was supported by the study conducted by De Guzman and Guy (2013) and De Leon (2016) stating that nursing students perform fairly in major subjects

Within the university, the College of Nursing is the only college with the highest grade requirements when it comes to the admission and retention policy where a general average of 85% or better is required before students can enrol in the program and in addition, must also consequently have a minimum grade of 2.75 or better in all their nursing professional and minor subjects. Moreover, in case they got a grade of 3.0, they must not accumulate three 3s and must get a score of 500 and above in the Nursing Aptitude Test (NAT) in order to proceed to the next level.

In terms of the nursing licensure examination, the overall mean ranged from 72.17 to 76.93 which are much higher than the minimum grade of 60% in any subject. Furthermore, the board rating of the university is much higher than the national passing rate. Despite political pressures leading to transgression of admission and retention policies, the academic preparations of the college were able to prepare most of the graduates to take the licensure examination with successful results. Furthermore, the findings conform to the results of the study conducted by Martinez (1980) and Hilario (2000) that admission and retention policies predict the nursing graduates' performance in the NLE.

Finally, out of the five nursing practice tests, Nursing Practice IV has the lowest rate in both batches. This part is dubbed as the hardest part in the entire NLE that covers Medical-Surgical Nursing concepts. This finding is supported by the study conducted by Neri (2009) that stressed that although graduates succeed in hurdling the exam, they get low passing scores and

that the lowest scores are in the areas of Medical-Surgical Nursing concepts. According to Rosales, Arugay, Divina Gracia, and Palaganas (2014) this is a reflection of lack of learning experiences and competencies of nursing board examinees brought about by limited learning hospitals. This result also conforms with another study of Palaganas, Divina Gracia and Rosales (2013), De Leon (2016) and De Leon et al. (2016).

In the study, grades of the graduates in all the nursing professional subjects are positively correlated with graduates' performance in the NLE's Health Education and Nursing Research 1 parts. It shows an inverse correlation between the academic performance and the nursing board examination performance which means that as the grade of the graduates decrease numerically, the higher the chance the student will pass the board examination using the numerical grade of the student in the grading system of the university. Such correlation is supported by the study conducted by Navarro et al. (2012), Neri (2009), Tolentino (2010), Besingue et al. (2000), Ong et al. (2012), Naron and Wedlack (1991), McClleland (1992), Salustiano (2013) and Rubio (1992).

Competency Appraisal 1, Nursing Care Management 106, and Nursing Care Management 104 were shown to be significant predictors in passing the. These subjects are being offered primarily in the 3rd year 2nd semester and 4th year 1st semester of the school year. All these courses are covered in the said examination. This finding is supported by Martinez et al. (1980) that academic achievement is a good predictor of performance in the NLE. However, no other literature was found regarding the specific nursing subjects primarily because these batches are the graduates of new prototype nursing curriculum which is stipulated in the CHED Memorandum Order No. 14 series of 2009.

Conclusion

Graduates of the city government-subsidized university are average performers in their academics. Although they were able to pass the licensure examination for nursing, they tend to have lower passing scores especially in the Nursing Practice 4 and 5.

Competency Appraisal II, Nursing Care Management 104, and Nursing Care Management 106 are found to be predictors in passing the licensure examination. When combined, the three courses accounted for 43 percent predictability. It is recommended that strict admission and retention policies be implemented especially in the subjects that correlates with the NLE. Also, further research must be done focusing more on other factors affecting the board examination performance of nursing graduates and involving more city-subsidized university to have a bigger picture. •

References

Besinque, K.; Wong W., Louie W., and Rho, J. (2000) Predictors of success rate in the California State Board of Pharmacy Licensure Examination. *American Journal of Pharmaceutical Education.* Vol. 64, 16-18

Commission on Higher Education (CHED) (2007). CHED Memorandum Order 30 series of 2001 Updated Policies and Standards for nursing education. 2001.n.pag

Commission on Higher Education (CHED) (2009). CHED Memorandum Order 14 series of 2009 Policies and Standards for Bachelor of Science in Nursing (BSN). 2001.n.pag

De Leon, J. (2016). Academic and Licensure Examination Performances of BSN Graduates: Bases for Curriculum Enhancement. International Journal of Educational Policy Research and Review Vol.3 (4), 64-72

De Leon, J., Mejilla, J, Sagun C., Alviar, P, Garcia, M. (2016). E-Learning and general weighted average as predictors of nurses licensure examination. International Journal of Educational Policy Research and Review. Vol 3 (2), 14-19

Hilario, I. (200) *Factors influencing the licensure examination performance of teacher education institutions in the Cordillera Administrative Region.* Unpublished Dissertation. St. Louise University, Baguio City.

McClelland E. (1992). *A statewide study of academic variables affecting performance of baccalaureate nursing graduates on licensure examination.* Journal of Professional Nursing Vol. 6, 342-350

Martinez, C. (1980), *An analytical and correlative State Board Examination on grades and academic achievement of the College of Nursing of X hospital.* Nursing Research in the Philippines: A Sourcebook, Quezon City, JMC Press Inc.

Naron, R. and Widlak, F. (1991*) Relationship of academic variables to National Council for Licensure Examination for Registered Nurse Performance of Graduates in a Selected Associate Degree Nursing Program* (eric.ed.gov)

Navarro, R., Vitamog A., Tierra R., and Gonzalez D. (2012*), Predictors of Nursing Board Examination Performance.* National Peer Reviewed Journal Vol. 6 pp 232-246

Neri, D. (2009). *Academic, Clinical and Inhouse Review Performances as Predictors of Outcomes in Nursing Licensure Examination.* Liceo Journal of Higher Education Research Social Science Section. Vol 6 (1), 56-75

Ong M, Palonpon D, Banico L (2012). Predictors' of Nurses Licensure Examination Performance of Graduates in Cebu Normal University, Philippines. Asian Journal of Health.

Palaganas E., DivinaGracia C., Rosales A. (2012). Nurse Licensure Examination Performance of Graduates of Philippine Colleges of Nursing in the Philippines: Policy Implications. 23rd International Nursing Research Congress. Sigma Theta Tau International, the Honor Society of Nursing, Brisbane, Australia.

Republic Act (RA) 7160, Local Government Code of 1991. (1991). n. pag.

Republic Act (RA) 9173, Philippine Nursing Act of 2002. (2002). n. pag.

Rosales A., Arugay Y., DivinaGracia C., Palaganas E. (2014). Analytical Study of the Nurses Licensure Examination Performance of Graduates of Philippine Colleges of Nursing.Philipp J Nurs. 84(1): 4-20.

Rubio, V. (1992*), Factors Associated with the Licensure Examination Performance of Nursing Graduates in Region I and NCR.* Unpublished Master's Thesis, University of Northern Philippines, Vigan City

Salustiano RP (2013). Correlation Analysis of Performance in College Admission Test, Nursing Aptitude Test, General Weighted Average and Nurse Licensure Examination of Nursing Graduates. Arellano University Graduate School J.

Tolentino, L.S. (2010), *Factors related to Passing the Philippine Nurses Licensure Examination among Graduates of Tarlac State University.* Unpublished Master's Thesis, University of Northern Philippines

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