

#### CORRELATES OF LICENSURE EXAMINATION PERFORMANCE OF RADIOLOGIC TECHNOLOGY GRADUATES FROM 1998 TO 2004

A Master's Thesis
Presented to
the Faculty of the Graduate School of Education, Arts and Sciences
De La Salle University – Dasmariñas
Dasmariñas, Cavite

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education
Major in Educational Management

**LOWELA E. MAGSINO** 

June 2005



#### **ABSTRACT**

Name of Institution

De La Salle University – Dasmarinas

Address

Dasmarinas, Cavite

Title

**CORRELATES OF LICENSURE** 

**EXAMINATION PERFORMANCE OF** 

RADIOLOGIC TECHNOLOGY

**GRADUATES** 

FROM 1998 TO 2004

**Author** 

Lowela E. Magsino

Degree

Master of Arts in Education

Major

Educational Management

**Date Started** 

November 2004

**Date Completed** 

June 2005

#### STATEMENT OF THE PROBLEM:

This study sought to investigate the correlates of licensure examination performance of Radiologic Technology graduates of De La Salle – Health Sciences Campus from 1998 to 2004 with the end goal of developing a revitalized review class program, which will serve as a tool towards improving the licensure examination performance of RT graduates.



Specifically this study answered the following questions:

- 1. What is the performance of the graduates in the following correlates, namely: (a) GPAs in English, Mathematics and Science, (b) professional courses and (c) internship training program?
  - 1.1 Are there significant correlations to the licensure examination performance of the graduates from 1998 to 2004?
- 2. What is the licensure examination performance of the respondents from 1998 to 2004?
  - 2.1 Are there significant differences in the licensure examination performance of the graduates from 1998 to 2004 when grouped according to college intervention policy?
  - 3. Based on the findings of the study, what could be proposed in order to revitalize the existing review class program?

It was hypothesized in the study that:

- 1. GPAs in English, Mathematics and Science, professional courses and internship training program are not significantly correlated to the licensure examination performance of the graduates from 1998 to 2004.
- 2. There are no significant differences in the licensure examination performance of the graduates from 1998 to 2004 when grouped according to college intervention policy.



#### SCOPE AND COVERAGE

The study covered 295 graduates of the Bachelor of Science in Radiologic Technology of De La Salle - Health Sciences Campus from 1998 to 2004.

The present undertaking focused on the correlates of licensure examination performance. Specifically, it delved on the correlation of GPAs in English, Mathematics, Science, professional courses and internship training program to the licensure examination performance. Furthermore, significant difference in the licensure examination performance according to college intervention policy was investigated. Part of the limitation of the study focused on the number of graduates included in the study. Only those graduates from a particular year and those who had taken the licensure examination for the first time were included in the study. Repeaters were not included in the study.

#### METHODOLOGY

The study made use of the descriptive-correlational method of research. Documentary analysis of data was extensively utilized by the researcher in connection with data coming from the Registrar's Office and from the Educational Statistics Task Force (ESTF) of the Professional Regulation Commission. The study covered Radiologic Technology graduates from 1998 to 2004 who took the licensure examination for the first time. A total of 295 graduates were included in the study.



Frequency, percentage, mean, standard deviation, Pearson' product moment of correlation, t-test of uncorrelated means and multiple regression were the statistical tools employed in the study.

#### **FINDINGS**

The following were the findings of the study:

- 1. The <u>GPA in English</u> of the respondents was <u>satisfactory</u> with a mean of 84.40 and a standard deviation of 3.88. Furthermore, it was also revealed in the table that the grades of the graduates of 2002 and 2003 were more dispersed as compared to the other years. This was evidently shown by the standard deviation value of 4.83 and 4.18 respectively.
- 2. The <u>GPA in mathematics</u> of the respondents was <u>satisfactory</u> with a mean of 84.10 with a standard deviation of 5.08. Moreover, the table revealed that the grades of the graduates of 2004 were more dispersed as compared to the other years. This was clearly shown by the standard deviation value of 5.16.
- 3. The <u>GPA in science</u> of the respondents was <u>satisfactory</u> with a mean of 83.27 and a standard deviation of 4.53. In addition, the highest standard deviation value of 5.52 indicated that the GPA in science of 2001 graduates was more dispersed as compared to the graduates of the other years.
- 4. The performance of the respondents in the professional courses was <u>satisfactory</u> with a mean of 84.71 and a standard deviation of 4.11.



Additionally, the table revealed that the performance of the graduates of 2003 in the professional courses was slightly dispersed as compared to the other years. This was indicated by the standard deviation value of 4.52.

- 5. The performance of the graduates in the <u>internship training</u> program was <u>satisfactory</u> with a mean of 86.02 and a standard deviation of 4.50. Moreover, the highest standard deviation value of 5.02 indicated that the internship performance of the 2000 graduates was more dispersed as compared to the graduates of the other years.
- 6. The r value of 0.53 indicated a <u>high positive correlation</u> between GPA in English and <u>licensure examination performance</u>. The null hypothesis was rejected.
- 7. The r value of 0.48 showed that <u>moderately small positive</u> correlation, existed between <u>GPA in math</u> and <u>licensure examination</u> performance. The null hypothesis was rejected.
- 8. The r value of 0.43 indicated a <u>moderately small positive</u> correlation between <u>GPA in science</u> and <u>licensure examination</u> <u>performance</u>. The null hypothesis was rejected.
- 9. The r value of 0.64 indicated a <u>high positive correlation</u> between <u>performance in the professional courses</u> and <u>licensure examination</u> performance. These findings warrant the rejection of the null hypothesis.



- 10. The r value of 0.41 showed that <u>moderately small positive</u> correlation existed between <u>performance in the internship training program</u> and <u>licensure examination performance</u>. The null hypothesis was rejected.
- 11. The computation arrived at a regression formula of  $Y = -57.465 + 0.205 (X_1) + 0.272 (X_2) + -0.015 (X_3) + 0.754 (X_4) + 0.306 (X_5)$

Moreover, the computed p-value for the five correlates of licensure examination performance are as follows, (a) GPAs in English (0.092 – not significant), Math (0.001 – significant) and Science (0.879 – not significant), (b) performance in the professional courses (0.000 – significant) and (c) internship performance (0.000 – significant).

- 12. The highest mean of 75.61 (passed) with a standard deviation of 6.64 was posted in 2003 while the lowest mean of 67.72 with a standard deviation of 6.90 was posted during 2000. In general, the mean of 71.52 and standard deviation of 7.61 revealed that the licensure examination performance was <u>failed</u>. Furthermore, out of 295 examinees, 154 or 52.20% failed in the licensure examination from 1998 to 2004. On the other hand, 7 or 2.37% had satisfactory performance, 37 or 12.54% had fair performance and 97 or 32.88% had passing licensure examination performance.
- 13. The graduates who took the licensure examination without the college intervention policy (provisions for review class) had a mean of 70.31 and a standard deviation of 7.60 while those graduates who took the



licensure examination with the college intervention (with review class) had a mean of 72.73 and a standard deviation of 7.45. The computed t – ratio of 2.769 and p – value of 0.006 revealed the existence of significant difference in the licensure examination performance when the respondents were grouped according to college intervention policy. An increase in the mean score in the licensure examination was noticed among the graduates who were given college intervention policy. Therefore, the null hypothesis was rejected.

#### CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn.

- 1.The respondents had a <u>satisfactory performance</u> in <u>English</u>,

  Mathematics, Science, professional courses performance and internship

  training program.
  - 1.1 <u>GPA in English</u> and <u>performance in the professional</u> courses are highly correlated with the licensure examination performance.
  - 1.2 <u>Moderately small positive correlation</u> existed between GPAs in Mathematics, <u>Science</u>, <u>performance in the internship</u> <u>training program</u> and <u>licensure examination performance</u>.
- 2. <u>Failed licensure examination performance</u> was recorded when the respondents were taken as a whole. More than half of the examinees



included in the study had failed in the licensure exam. Moreover, only a few number of examinees had satisfactory licensure examination performance and greater number of examinees had passing performance in the licensure examination.

2.1 Heterogeneity existed in the licensure examination performance when the respondents were grouped according to college intervention policy. The licensure examination score was improved with the presence of the college intervention policy.





#### **TABLE OF CONTENTS**

	PAGE
TITLE PAGE	1
ABSTRACT	2
APPROVAL SHEET	10
ACKNOWLEDGMENT	11
TABLE OF CONTENTS	14
LIST OF TABLES	17
LIST OF FIGURES	19
CHAPTER	
1 THE PROBLEM AND ITS BACKGROUND	
Introduction	20
Conceptual Framework	23
Statement of the Problem	26
Hypotheses of the Study	27
Scope and Delimitation of the Study	27
Significance of the Study	28
Definition of Terms	29
2 REVIEW OF RELATED LITERATURE	
Conceptual Literature	31

(3)	De La Salle University – Dasi GRADUATE PROGRAM	mariñas	15
	Research Literature	37	
	Synthesis	40	
3	METHODOLOGY		
	Research Method	43	
	Sources of Data	44	
	Data Gathering Procedure	46	
	Statistical Treatment of Data	47	
4	PRESENTATION, ANALYSIS AND		
٠	INTERPRETATION OF DATA		
	Problem Number 1	51	
	Problem Number 1.1	59	
	Problem Number 2	71	
	Problem Number 2.1	75	
	Problem Number 3	76	
5	SUMMARY, CONCLUSIONS AND		
	RECOMMENDATIONS		
·	Summary	83	
	Findings	85	
	Conclusions	88	
	Recommendations	89	
REFERE	NCES	93	i

16

175



# De La Salle University – Dasmariñas GRADUATE PROGRAM

Α	P	ΡI	FI	V	ח	IC	F	2
$\boldsymbol{\Gamma}$				A			_	u

Curriculum Vitae

Α	Licensure Examination Review Guide	99
В	Answer Key to the Licensure Examination	
	Review Guide	159
C	Letter of Request to the Professional Regulation	
	Commission	169
D	Letter of Request to the University Registrar of	
	De La Salle – Health Sciences Campus	170
Ε	Certification	171

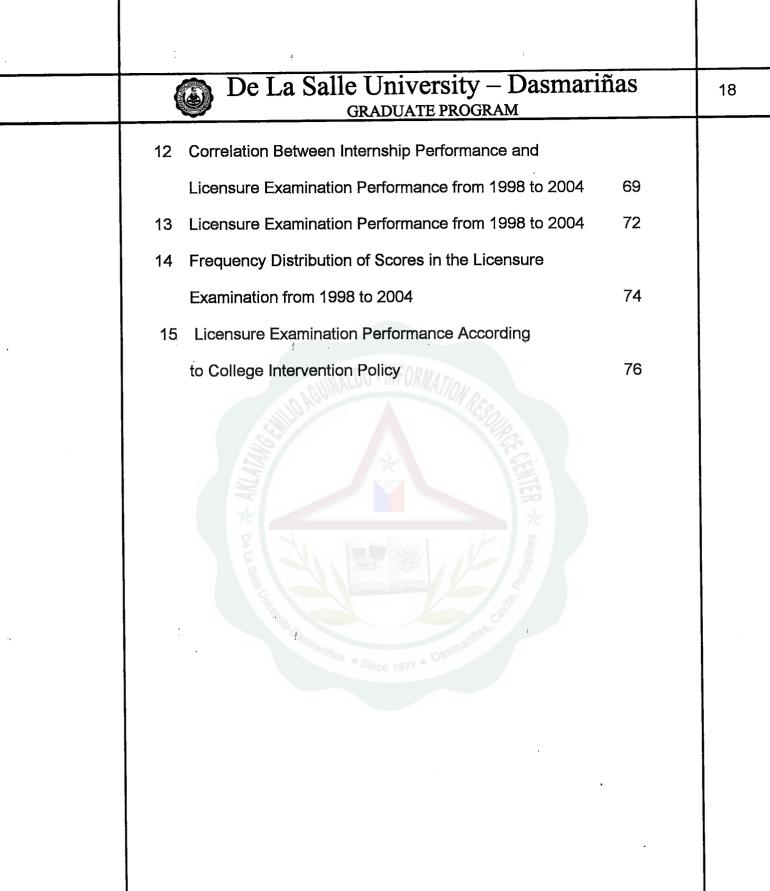


#### LIST OF TABLES

TA	BI	F

$\mathbf{D}$	Λ	a	

1	Distribution of the Respondents According to Year	45
2	Percentage of Passing from 1998 to 2004	46
3	Grade Point Average in English from 1998 to 2004	52
4	Grade Point Average in Mathematics from 1998 to 2004	54
5	Grade Point Average in Science from 1998 to 2004	55
6	Performance in the Professional Courses from	
;	1998 to 2004	57
7	Performance in the Internship Training Program from	
	1998 to 2004	59
8	Correlation Between GPA in English and	
	Licensure Examination Performance from 1998 to 2004	61
9	Correlation Between GPA in Math and	
	Licensure Examination Performance from 1998 to 2004	63
10	Correlation Between GPA in Science and	
	Licensure Examination Performance from 1998 to 2004	65
11	Correlation Between Professional Courses Performance ar	ıd
	Licensure Examination Performance from 1998 to 2004	67





### LIST OF FIGURE

FIGURE PAGE

1 The Paradigm of the Study 25

