

GRADUATE STUDIES STUDENTS' SCHOLASTIC ABILITIES AND THEIR EFFECTS ON COMPREHENSIVE EXAMINATION

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Abstract

The major problem of this study was to determine the effect of graduate studies students' scholastic abilities on comprehensive examination. The study made use of the descriptive-correlational method of research in which standardized instruments were the primary data gathering tool. The respondents of the study were selected graduate school students from a private Catholic university in Malolos. The data were presented using tables and the results of the study were tabulated and processed using Statistical Packages for Social Sciences (SPSS). The study revealed the students' academic performance in the following categories; (1) Verbal Reasoning – 8.36 (average), (2) Non-Verbal Reasoning – 14.65 (superior), (3) Reading Vocabulary – 10.80 (average), (4) Reading Comprehension-16.20 (superior), and (5) Math Application – 9.77 (average). Moreover, the students' performance in the comprehensive examination mean was 1.49 (proficient). The findings of the study indicated that students' scholastic abilities bear no significant effect on the students' performance in comprehensive examinations when considering the joint effects of all variables of scholastic abilities.

Keywords: Student, Scholastic Abilities, Comprehensive Examination, Academic Performance, Graduate School Program.

Introduction

Comprehensive examinations mark one of the final student assessments within graduate school programs (Schafer, et.al, 2008). Moreover, Comprehensive examination is evaluated according to its ability to satisfy the educational program goals of developing critical thinking and communication skills together with knowledge of the discipline (Pelfrey, et.al, 2000). Student assessment like comprehensive examination yields understanding of learning experiences and departmental effectiveness (Tobin, K., & Gebo, E. 2008).

Comprehensive exams mark the barrier that separates graduate course work from the thesis and dissertation phase. The purpose of the exams is to determine whether a student should be permitted to "advance to candidacy"—that is, to go on and write a thesis/ dissertation (Taylor, 2012).

Scholastic abilities are brain-based skills, which an individual need to carry out any task from the simplest to the most complex. It is somehow related to the mechanisms of how an individual learn, remember, problem-solve, and pay attention, rather than with any actual knowledge. For instance, answering the telephone involves perception- hearing the ring tone, decision taking- answering or not, motor skill- lifting the receiver, language skills- talking and understanding language, social skills- interpreting tone of voice and interacting properly with another human being (Gottfredson as cited on Volodina, 2015).

On a study conducted by Tobin, et.al. (2008), it was revealed that scholastic abilities do not yield positive significance to comprehensive examination. Whilst, it was concluded that the comprehensive examination depicts positive correlation on the effectiveness of the academic department performance.

It is deemed necessary to conduct a study that will determine the relationship between graduate school students' scholastic abilities and their relation on the results their comprehensive examination.

Moreover, the findings of the study can help institutions identify the scholastic ability profile and the academic profile of graduate school students that will help improve their admission criteria for the selection and retention of graduate school students and the services and programs they provide for all graduate school students. More specifically, the present study can help prescribe insights that would improve the students' engagement, which is seen to be beneficial for the institution and students.

Statement of The Problem

The present study aims to determine effects between graduate school students' scholastic ability and students' academic performance in their comprehensive examination. The study also aims to answer the following specific questions.

1. What is the level of students' scholastic ability?
 - 1.1. Verbal Reasoning

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- 1.2. Non-Verbal Reasoning
- 1.3. Reading Vocabulary
- 1.4. Reading Comprehension
- 1.5. Math Application
2. How can the academic performance in comprehensive examination of the students be described?
3. Does scholastic ability exert significant effects on comprehensive examination of students?
4. What implications can be derived in light of the findings of the study?

Methodology of The Study

Methods and Techniques

Correlational research is a systematic investigation of the relationship present between two or more variables. The study used a quantitative research approach in analyzing and understanding the predictor and criterion variables. Standardized test on Students' scholastic ability were used as primary data gathering tools. The descriptive-correlational method of research was utilized in this study to determine the relationship between students' scholastic ability and students' academic performance in their major subjects.

Respondents of the Study

The respondents of the study were graduate school students from Master of Arts in education and

Master in business administration in one higher education institution in Malolos.

The study Utilizes Raosoft sample size calculation with the following standards: The margin of error of 5% and confidence level of 95%. A Raosoft sample calculator is basically software that primarily calculates or generates the sample size of a research or survey.

Instruments of the Study

The study adapted the instrument of Scholastic Abilities Test for Adults (SATA) with a Cronbach's alpha of 0.85.

The SATA measures scholastic competence using nine subtests: Verbal Reasoning, Nonverbal Reasoning, Quantitative Reasoning, Reading Vocabulary, Reading Comprehension, Math Calculation, Math Application, Writing Mechanics, and Writing Composition. Raw scores can be converted to estimated grade equivalents and standard scores. Several composite scores are also generated (Bryant, et.al, 2003).

Results and Discussions

Level of Students' scholastic ability

Table 1: Students' Scholastic Ability - Verbal Reasoning

Indicators	MAED		MBA		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
17 – 20 (Very Superior)	2	6.4	0	0.0	2	5
15 – 16 (Superior)	1	3.2	0	0.0	1	2
13 – 14 (Above Average)	0	0.0	1	8.3	1	2
08 – 12 (Average)	14	45.1	6	50.0	20	47
06 – 07 (Below Average)	9	29.0	3	25.0	12	28
04 – 05 (Poor)	1	3.2	2	16.7	3	7
01 – 03 (Very Poor)	4	12.9	0	0.0	4	9
Total	31	100.0	12	100.0	43	100
Mean	8.38 (Average)		8.33 (Average)		8.36 (Average)	
Std. Deviation	3.8788		2.6742		3.2765	

Table 1 shows that the over-all weighted mean scholastic ability in verbal reasoning of the students is 8.36 (average). Average mean was manifested by the following indicators namely; 47% - Average, 28% - below average, 9% - very poor, 7% - poor, 5% - very superior, 2% - superior and 2%- above average.

MAED: 45.1% has a scholastic ability in verbal reasoning of average, followed by 29%- with verbal ability of below average, 12.9% with verbal ability of very poor, followed by 6.4% with verbal ability of very superior and 3.2 % with verbal ability of superior, and 3.2% -poor.

MBA: 50% of the respondents from the Master in business administration has scholastic ability in verbal reasoning of average, followed by below

average which is 25%, followed by poor which is 16.7%, and above average which is 8.3%.

Table 2: Students' Scholastic Ability - Non-Verbal Reasoning

Indicators	MAED		MBA		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
17 – 20 (Very Superior)	11	35.6	7	58.4	18	42
15 – 16 (Superior)	3	9.7	0	0.0	3	7
13 – 14 (Above Average)	3	9.7	3	25.0	6	14
08 – 12 (Average)	10	32.3	1	8.3	11	25
06 – 07 (Below Average)	1	3.2	0	0.0	1	2
04 – 05 (Poor)	2	6.4	0	0.0	2	5
01 – 03 (Very Poor)	1	3.2	1	8.3	2	5
Total	31	100.0	12	100.0	43	100
Mean	14.22 (Superior)		15.08 (Superior)		14.65 (Superior)	
Std. Deviation	6.0921		5.7439		5.9180	

It can be gleaned from table 2 that on general the students have a mean of 14.65 (Superior). Superior mean was manifested in the following; Very Superior non-verbal reasoning - 42%, Average non-verbal reasoning – 25%, above average non-verbal reasoning – 14%, superior non-verbal reasoning – 7%, poor non-verbal reasoning – 5%, very poor non-verbal reasoning – 5%, and below average non-verbal reasoning – 2%.

MAED: 35.6% of students from Master of Arts in education have scholastic ability in non-verbal

reasoning of very superior, 32.3% has non-verbal ability of average, 9.7% has non-verbal ability of superior, and also, 9.7% has non-verbal ability of above average, 6.4% has non-verbal ability of poor, and 3.2% has non-verbal ability of very poor.

MBA: 58.4% respondents from the Master in business administration has very superior non-verbal reasoning, 25% has non-verbal ability of above average, 8.3% has non-verbal ability of average, similarly 8.3% has non-verbal ability of very poor.

Table 3: Students' Scholastic Ability -Reading Vocabulary

Indicators	MAED		MBA		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
17 – 20 (Very Superior)	0	0.0	1	8.3	1	2
15 – 16 (Superior)	4	12.9	2	16.6	6	14
13 – 14 (Above Average)	7	22.6	0	0.0	7	16
08 – 12 (Average)	10	32.3	8	66.7	18	42
06 – 07 (Below Average)	6	19.4	0	0.0	6	14
04 – 05 (Poor)	1	3.2	0	0.0	1	2
01 – 03 (Very Poor)	3	9.7	1	8.3	4	10
Total	31	100.0	12	100.0	43	100
Mean	10.35 (Average)		11.25 (Average)		10.80 (Average)	
Std. Deviation	3.9543		4.1369		4.0456	

Table 3 reveals that the over-all scholastic ability in reading vocabulary of the students is 10.80 (Average). The average mean was manifested in the following indicators; 42% of the students has scholastic ability in reading vocabulary of below average, 16% has reading vocabulary of above average, 14% has superior reading vocabulary, similarly, 14% has also reading vocabulary of below average, 10% has reading vocabulary of very poor, 2% has reading vocabulary of poor and 25 also has reading vocabulary of very superior.

MAED: based on the data presented 32.3% of the respondents has average scholastic ability in reading vocabulary, 22.6% has above average scholastic ability in reading vocabulary, 19.4% is below average, 12.9% is superior, 9.7% is very poor, and 3.2% is poor.

MBA: the scholastic ability in reading vocabulary of the respondents is as follows; 66.7% - average, 16.6% - superior, 8.3% very superior, and 8.3% - very poor.

Table 4: Students' Scholastic Ability -Reading Comprehension

Indicators	MAED		MBA		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
17 – 20 (Very Superior)	21	67.6	5	41.7	26	60
15 – 16 (Superior)	1	3.2	4	33.3	5	12
13 – 14 (Above Average)	5	16.1	1	8.3	6	14
08 – 12 (Average)	3	9.7	2	16.7	5	12
06 – 07 (Below Average)	0	0.0	0	0.0	0	0
04 – 05 (Poor)	1	3.2	0	0.0	1	2
01 – 03 (Very Poor)	0	0.0	0	0.0	0	0
Total	31	100.0	12	100.0	43	100
Mean	16.32 (Superior)		16.08 (Superior)		16.20 (Superior)	
Std. Deviation	4.9959		31.467		18.2305	

Table 4 depicts that the over-all scholastic ability in reading comprehension of the students is 16.20 (Superior). The superior scholastic ability in reading comprehension of the students is manifested by the following percentage; 60% - very superior, 14% - above average, 12% - superior and 12% - average.

MAED: Generally, the respondents from the Master of Arts in education have superior scholastic ability in reading comprehension. The superior scholastic ability in reading

comprehension is manifested by the following percentage; 67.6% - very superior, 16.1% - above average, - 9.7% - average, 3.2% - superior, and 3.2% - poor.

MBA: the respondents from master in business administration has over-all mean of 16.20 (Superior), the superior scholastic ability in reading comprehension of the students is manifested in the following percentage; 41.7% - very superior, 33.3% - superior, 16.7% - average, and 8.3% above average.

Table 5: Students' Scholastic Ability - Math Application

Indicators	MAED		MBA		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
17 – 20 (Very Superior)	2	6.4	1	8.3	3	7
15 – 16 (Superior)	2	6.4	1	8.3	3	7
13 – 14 (Above Average)	2	6.4	3	25.0	5	12
08 – 12 (Average)	8	32.3	4	33.3	12	28

06 – 07 (Below Average)	7	22.6	3	25.0	10	23
04 – 05 (Poor)	5	16.2	2	16.6	7	16
01 – 03 (Very Poor)	3	9.7	0	0	3	7
Total	31	100.0	12	100.0	43	100
Mean	9.12 (Average)		10.41 (Average)		9.77 (Average)	
Std. Deviation	4.6672		4.4611		6.8978	

It can be gleaned in table 5 that the scholastic ability in math application of the students has a mean of 9.77 (average). The average mean is manifested by the following percentage in the scholastic ability in math application of the students; 28% - average, 23%- below average, 16% - poor, 7% - very superior, 7% - superior, and 7% very poor.

MAED: Generally, students from Master of Arts in education has scholastic ability in math application of 9.12(average). The average mean is manifested by the following percentages in scholastic ability in math application; 32.3% - average, 22.6% below average, 16.2% - poor, 6.4% - Very superior, 6.4%

- superior, 6.4% - above average, and 9.7% - very poor.

MBA: The weighted mean of the respondents from Master in business administration has scholastic ability in math application of 10.41 (Average). The average mean is manifested by the following percentages; 33.3% - average, 25% - below average, 25%- above average, 16.6% - poor, 8.3% - very superior, and 8.3% - superior.

Students' academic performance in their comprehensive examination

Table 6: Students' Academic Performance – Comprehensive Examination

Indicators	MAED		MBA		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1.00-1.24 (Exemplary)	5	10.4	2	7.7	7	9
1.25-1.49 (Proficient)	6	12.5	2	7.7	8	11
1.50-1.74 (Accomplished)	27	56.3	15	57.7	42	57
1.75-1.99 (Emerging)	10	20.8	5	19.2	15	20
2.0 (Beginner)	0	0.0	2	7.7	2	3
2.25 below- (Failed)	0	0.0	0	0.0	0	0
Total	48	100.0	26	100.0	74	100
Mean	1.46 (Proficient)		1.52 (Accomplished)		1.49 (Proficient)	
Std. Deviation	.21651		.23798		.22725	

Table 6 reveals that generally, comprehensive examination of graduate school students has a mean of 1.49 (Proficient). The proficient mean is manifested by the following percentages; 57% - Accomplished, 20% - emerging, 11% - proficient, and 9% - exemplary.

MAED: The over-all academic performance in the comprehensive examination of the students in Master or Arts in education is 1.43(Proficient). The proficient means is manifested by the following percentages; 56.3%- accomplished, 20.8% - emerging, 12.4% - proficient, and 10.4% - exemplary.

MBA: Generally, the students' from master in business administration academic performance in their comprehensive examination is 1.52 (Accomplished). The accomplished mean is manifested by the following percentages; 57.7%- accomplished, 19.2% - emerging, 7.7% - exemplary, 7.7% - proficient and 7.7% - beginner.

Effects of Students' scholastic ability on graduate school students' academic performance in the comprehensive examination

Table 7: Regression Analysis of Students' Scholastic Ability on Comprehensive examination – MAED

Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.844	0.117		15.803	0
Verbal reasoning	0.002	0.014	0.027	0.108	0.915
Non-verbal reasoning	0.011	0.007	0.295	1.611	0.12
Reading vocabulary	0.01	0.014	0.179	0.698	0.491
Reading comprehension	0.002	0.005	0.116	0.44	0.664
Math application	0.021	0.01	0.433	2.063	0.05
R-squared = .378					
F-value = 3.033					
p-value = .068					
alpha = 0.05					

It can be seen from table 7 that the f-value equal to 3.033, which is less than the p-value .068, which is higher than the alpha value of 0.05. This indicates that graduate school students' scholastic abilities of Master of Arts in education bears no significant effects on students' academic performance in their comprehensive examination when considering the jointed effects of all the variables of scholastic abilities.

However, regression analysis also accounts for individual effects. It can be seen from the data's beta coefficients that math application is the best predictor (.433), followed by non-verbal reasoning, reading vocabulary (.179), reading comprehension (.116), and verbal reasoning (.027). Moreover, math application is the only predictor found significant.

Table 8: Regression Analysis of Scholastic Ability Test on Comprehensive Examination- MBA

Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.409	0.269		5.247	0.002
Verbal reasoning	0.032	0.019	0.672	1.699	0.14
Non-verbal reasoning	0.014	0.009	0.638	1.539	0.175
Reading vocabulary	0.023	0.015	0.739	1.487	0.187
Reading comprehension	0.000	0.012	0.004	0.014	0.99
Math application	0.019	0.013	0.66	1.503	0.183
R-squared = .497					
F-value = 1.186					
p-value = .414					
alpha = 0.05					

Table 8 depicts that the f-value equal to 1.186, which is more than the p-value .414, which is higher than the alpha value of 0.05. This indicates that graduate school students' scholastic ability of Master of business administration bears no significant effects on students' academic

performance in their comprehensive examination when considering the jointed effects of all the variables of learned resourcefulness.

On the other hand, the regression analysis also accounts for individual effects. It can be seen from

the data's beta coefficients that reading vocabulary is the best predictor (.739), followed by verbal reasoning (.672), non-verbal reasoning (.638), math application (.66), and reading comprehension (.004).

There are a lot of factors educational institutions must consider especially for graduate school programs. Aside from scholastic abilities, Social integration, school environment, learned resourcefulness and school support and programs are the others factors that affects academic performance of adult (Pelfrey, et.al, 2002).

Implications of Students' Scholastic Ability in the Academic Performance in the major subjects

Graduate school education is entirely different from undergraduate education. Considering the results, it is recommended that the future studies consider creating another correlation study on graduate school students' academic performance to depict the other factors that affects academic performance of graduate school students. The study can also provide suggestions on what graduate school student specifically needs to improve their academic performance and eventually achieved their academic goal. Identifying the barriers to graduate success is also important to help students achieved success and good academic performance.

The following barriers to graduate success might be considered as variable to the correlation study that might gauge a tangible effects on academic performance are the following:

1. Unawareness of graduate support. This represented a lack of congruence between the options that graduate school students were conscious of the support services given by the institution versus that which actually was available or which actually they are aware of. Operationally, services that were offered to students of which they were unaware were functionally equivalent to those not offered.
2. Work or job as a barrier. Graduate school students exhibit the same dedication to their jobs as to their studies, which sometimes led to conflict when attempting to meet their personal high expectations while adding a master's or doctorate program to their professional workload.
3. Time management. The difference in time management requirements between the undergraduate and graduate levels took students by surprise.

Recommendations

In light of the findings of the study, the following recommendations are put forth.

1. Students from the graduate school programs have specific needs which vary from the undergraduate students. Educational institutions must identify the factors that contribute to the academic performance of this students and it must be aligned with the admission and retention policies of the school.
2. Students from graduate school programs must be given the right services and programs aligned to their needs, to help them pursue their graduation goals. Educational institutions must provide unique approaches in delivering their services and programs to the graduate school students.
3. Future researchers can explore more dimensions of students' academic performance of graduate school studies. The current study has generated a general picture of the relationship of scholastic abilities and academic performance, but more studies maybe needed to depict other factors that affect academic performance of graduate school students.

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