

# **Admission Test as Predictor of Performance of Students in the English Subject**

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## **ABSTRACT**

Admission testing is an integral part of higher education institutions (HEIs) in maintaining the quality educational standards. Through testing, the HEI's can objectively select applicants that are likely to succeed in their intended course. The study was conducted to determine the predictive validity of the admission Tests of the secondary and college levels to their performance in English subjects using the descriptive-correlational designs. The respondents were the secondary students of the SSC Laboratory High School and First-Year college students from school years 2009-2012. The Pearson Correlation was used to determine the

relationship of the admission test results and the performance of the identified respondents on the English subject. The GPA on English and SSC Admission test results on college level shows a moderate positive relationship. Also, high school level denotes a strong positive relationship. This relationship had been manifested in 40% of the respondents in secondary level, and 13% of the respondents in college level. This significant relationship suggests that admission test determines the potential performance of the students in their English subject in both secondary and tertiary level. Thus, it was concluded that SSC Admission Test is a valid predictor of the students' performance in English subject.

**Keywords** – Education, admission test, performance, predictive validity, descriptive-correlational designs, Philippines

## INTRODUCTION

Global competitiveness is the goal of every educational institution in the swift dynamics of technology. To ensure the achievement of this goal, different programs of the College are subjected to regular accreditation as a requirement to look into the strengths and opportunities for growth and development. In general, the quality of graduates the school produces reflects the essential aspects of education. One of these developments is the changes of the admission test through time to ensure that students will have a better performance in their respective courses. The study of Zwick (2007) strengthens this idea that every college or university considers the admission test as one of the factors that can contribute and evidence that the quality standard of instruction inside the institution is being maintained. In addition, the results of the admission test serves as the basis on who will be accepted in their chosen courses. In the same manner, Shuttleworth (2009) study suggests that the admission test results serve as the predictor as to who will be the brightest and dedicated to the class. Furthermore, not only the high school GPA can be a good predictor of the students' performance in college but also their GPA's earned during their undergraduate course can be valid predictor for the master's degree (Sulaiman & Mohezar, 2006).

On the other hand, another purpose of the admission test is to maintain the quality of graduates that can be considered to have high employability in other parts of the globe. Thus, universities and colleges in the Asian countries make a rigid selection with regards to student admission. Along with this, the University of Malaysia supplement their students' admission test with their

localized version of English Test to measure the proficiency level of the students as well as other academic programs that require job placement in other industry-related institutions (Rethinasamy & Chuah, 2011). The study showed that there is a high correlation between the academic performance or job placement and their scores on localized version of their English Test of their students. English language is not the primary language in the Asian countries, thus, it adds to the difficulty of the students in learning instructions inside their institutions. In this point of view, University of Malaysia requires all students to take the English Test as a part of the admission test in any academic programmes. Rahmat, Min, Sungif and Yusup (2015) study suggests that proficiency level on English and academic performance of the students in the First-Year in college shows weak correlations. This result indicates that other universities and colleges in Malaysia should improve the English proficiency test and be a part of the entry requirement to colleges or universities to help students excel in their respective courses.

The Sorsogon State College is one of the higher education institutions in the country that strives to meet its aims of producing quality graduates who are globally competitive. For the past few years, the College has been achieving its program offerings. The national and regional placers in the board exams for engineering and education gradually made the College its own name in the country. Maintaining such accomplishment is nevertheless, one of the challenges to consider. Meanwhile, the admission test plays a significant role in the achievements of the college in some aspects.

In the past, the Sorsogon State College in the Philippines used admission tests which were constructed by foreign authors to screen applicants for its various programs. Nonetheless, the Director of Admissions together with some faculty of the College developed admission tests for secondary and tertiary applicants in the year 2006, which are cost-effective and appropriate to the needs and levels of the Filipino students. The development of the tests was completed in the year 2009. By virtue of the Board of Trustees Resolution No. 6, series of 2008, the College Admission Test was approved and thus, implemented in the succeeding year. Since then, the College has been using the developed tests in screening First-Year secondary and tertiary applicants.

## **FRAMEWORK**

Admission testing is an integral part of higher education institutions in maintaining the quality educational standards. Through testing, HEI's can

objectively select applicants that are likely to succeed in their intended course. Thus, developing an admission test requires thorough preparations for the achievement of test reliability and validity. Since the college's medium on delivery of instruction relies heavily on English language, thus this paper utilized the admission test results on English subject on their First-Year and their GPA on the same subject for both secondary and tertiary students. Hill (2002) points out that if valid and reliable tests can be developed to assess individuals potential to learn, the education system will be able to effectively nurture students who are better positioned to benefit from the institution. The college admission test serves as the predictor of the performance of the secondary and tertiary students.

As strengthened by Galia (2015), the college's admission test scores on Aptitude, Language, and Sciences were significant related to their GPA based on the 800 students that were selected randomly for five years duration of the study and can be a basis for granting scholarship. In addition, either of the designated admission test for secondary or tertiary students will yield a correlation between the admission test results and their GPA's on the academic performance.

It also found out that this admission test results can be affected by personal factors such as family size, socio-economic status and parental involvement (Uy, Manalo, Cabauatan, 2015). The idea set forth the admission test as the benchmark for the academic performance of the students in their respective courses. Furthermore, it only suggests that the predictive validity where the effect size of the admission test of these respondents had not been emphasized. Thus, this paper considerably determines the extent of predictive validity of the college admission test in terms of academic performance in their First-Year.

## **OBJECTIVES OF THE STUDY**

The study determined the predictive validity of the SSC admission tests of the Laboratory High School and the college levels to their students' performance in English subjects. Specifically, it aims to determine the: 1) Performance of the secondary students in SSC Admission Test and their GPA on English subject; 2) Performance of the tertiary students in the SSC Admission Test and GPA on English Subject; 3) Significant relationship between the admission tests and the academic performance of the secondary students.

## METHODOLOGY

### Research Design

The study made use of descriptive-correlational design using two sets of variables, namely, admission test performance and academic performance of secondary and college students. The descriptive approach was used to provide facts about the admission test ratings and the academic performance of the secondary and tertiary students. Meanwhile, the correlational approach was used to determine the extent to which the variables are related to each other in the population of interest.

### Participants

There were 287 respondents along First-Year secondary students. This sample size considered as the total enumeration since there were only two sections of First-Year in the laboratory high school department. In addition, the tertiary students were represented by 629 respondents. The sample size was chosen randomly from the different departments using the Slovin's formula to represent the three courses of engineering, education, and technology. Meanwhile, the chosen students in the study were enrolled in the School Year 2009-2012.

### Instrumentation

Primary data of the study such as ratings for English subject of the secondary students were requested from the office of the Area Chair of the Laboratory High School. These ratings were based on the grade point average of English subject during their First-Year in the secondary education (i.e. average of the ratings from their first to fourth grading period). The ratings of the college students for their English subject were requested from the Office of the Registrar. These ratings correspond to their grade point average during their first semester in the college. The primary data gathered in the study were inclusive in the period of the specified academic years. The students' personal information associated with the ratings in their English GPA for both secondary and tertiary level were taken an utmost confidentiality to preserve their identity and academic performance.

### Statistical Treatment of Data

The predictive validity of the Sorsogon State College Admission test for secondary and tertiary level had been determined through Pearson Product Moment Coefficient of Correlation ( $r$ ). The data gathered had been all treated with the specified parametric statistical tool using the SPSS v21 software. The

statistical relationship between the two variables in both groups of respondents was tested with 0.05 as the level of significance.

The extent of relationship between these variables has been determined using the percentage of the square of Pearson  $r$  values in both groups of students. The results suggested the percentage of the number of respondents that their positive outcomes of their ratings in the English subjects maybe attributed to the results of the Sorsogon State College admission test.

### RESULTS AND DISCUSSION

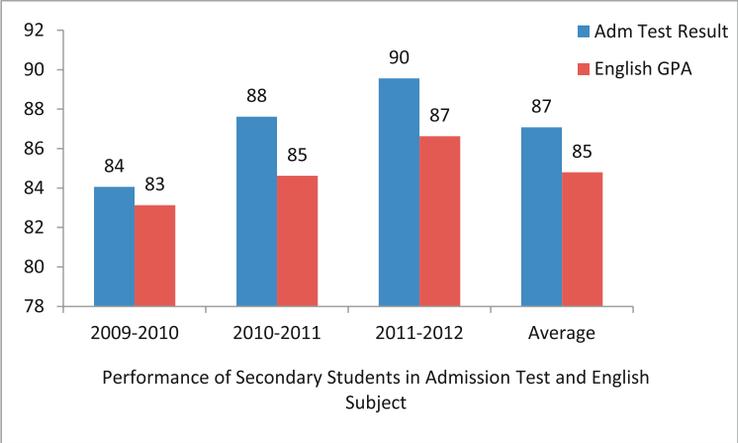


Figure 1. Average grade point average (GPA) of the secondary students in the admission test from school year 2009 to 2012 and their corresponding GPA on English subject during their First-Year in the secondary education at SSC

These results show that admission test results have higher GPA as compared to their English subjects. The purpose of the admission test is to check their basic skills that they learned during their elementary education. In addition, Tesema (2014) stressed that the main purpose of admission test is to ensure the precision of the college’s admission. Secondary education is now a different curriculum and the teaching approach by their mentors maybe different from that in the elementary. Hence, these students are adjusting to their new learning environment. An English subject in the secondary education is a reinforcement of their skills learned in their elementary education. It may be inferred from the results that admission test may statistically predict the academic performance, but it is vulnerable to some factors that affect the behavior or learning style of

students. Possible factors were enumerated by Toker (2014) like selectivity ratio, class size, and type of school where they graduated. Trapmann, Hell, Hirn and Schuler (2007) emphasized that their success in the academic achievements can also be brought by their personality traits such as neuroticism and conscientiousness.

**Performance of Tertiary Students on Admission Test and English Subjects**

The admission test result is represented by the ATR and GPA for the performance of the students in their English subject. The numerical values presented in the figure represent the average of the admission results and English GPA of students in their tertiary curriculum. Admission test results were converted into tertiary grading system for easier comparison between these results.

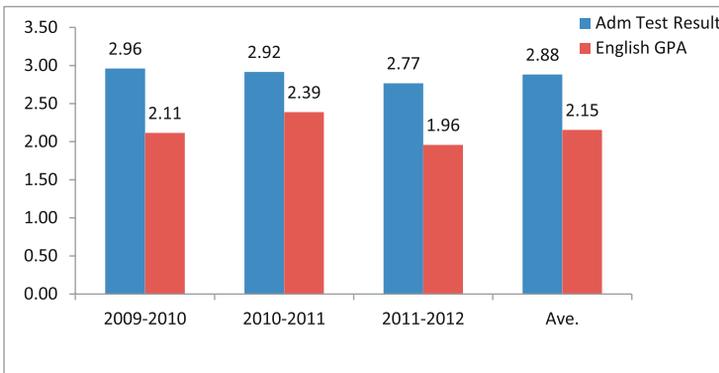


Figure 2. Performance of tertiary students on admission test and English subject

The grading system for tertiary education is being represented from 1 to 5 where the lower the numerical values for their GPA means better performance on the subject or test. The admission test for the tertiary education is being used to determine the extent of students’ accumulated basic skills that they learned from their secondary education which is required for the tertiary education.

The results show that their average English GPA is higher than their admission test result in the three inclusive years that were identified. This result can be attributed to the situation where incoming freshmen students for tertiary education had to immediately adjust their learning curve based on the requirements of the tertiary education curriculum. Hence, mentors on tertiary education expect that these college students already had accumulated and

learned their basic competencies and skills on English subject when they were in secondary and elementary levels of education.

This result may be attributed to additional drive/effort from their instructors/professors who encourage them to learn more than what they usually do during their secondary education. As supported by Shuttleworth (2009) on his basic assumption that a high grade point average during high school will achieve higher grades during university or college.

**Significant relationship between the students’ performance in admission tests and academic performance of the secondary students.**

Table 1. Pearson correlation test statistic results

		Adm. Test	Eng. Grade
Admission Test	Pearson Correlation	1	.638**
	Sig. (1-tailed)		.000
	N	287	287
Eng. Grade	Pearson Correlation	.638**	1
	Sig. (1-tailed)	.000	
	N	287	287

\*\* . Correlation is significant at the 0.01 level (1-tailed).

These variables were tested at 0.01 level of significance using the SPSS 21. The Pearson Correlation shows the computed significant p-value for the two variables is equivalent to 0.000. Since the p-value is lower than the significance level which suggests that the relationship between the two variables was statistically significant. The significant relationship between the two variables implies that the admission test is a good predictor of the performance of the students for the English subjects during their First-Year in the secondary education. According to the study of Kokhan (2013), the strong relationship between the students’ GPA’s and scores on admission test can be attributed to the shorter gaps of the time frame between the two variables. Hence, he added that correlations between variables may dramatically decrease through time and even reaches a negative value when the gaps reach 50 weeks or more.

Table 2. SPSS Correlations on GPA of Admission Test Scores and English Subjects

		Admission	English
Admission	Pearson Correlation	1	.361**
	Sig. (2-tailed)		.000
	N	629	629
English	Pearson Correlation	.361**	1
	Sig. (2-tailed)	.000	
	N	629	629

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result suggests that the relationship between the two variables was statistically significant. This implies that the admission test result is a predictor for the English subject during their First-Year in the tertiary education. It shows that there is a moderate correlation between the scores on admission test and academic performance in English. This result may be attributed to some factors that tertiary students may experience during their First-Year college days. Some of these factors that can be considered were academic transitions and tertiary curriculum. Considering that every student is coming from different types of schools for their secondary level, they possessed different orientation in terms of learning style. In addition, students could be adjusting themselves on how the curriculum on tertiary education is being delivered inside the classroom. They adopt their learning motivation pattern inside the classroom to maintain and facilitate the goals and mastery of their own ability and skill (Ames & Archer, 1988).

**Extent of the Relationship of the GPA on Admission Test Results and English Subjects**

Table 2 suggests that the computed Pearson r test statistics of the college students for two variables is 0.361. This denotes that the two variables have a moderate positive relationship for their extent of correlation. However, only 13% (0.361<sup>2</sup>) of the respondents attributed that their GPA on English subjects has direct relationship with the results of the Admission Test. Hence, the variability of the remaining 87% may be attributed to other factors that might have affected the performance of these students particularly in English subject during their First-Year stay in the college. Possible factors may include their increased level of motivation to study, wider exposure of the use of English language as a medium of instruction in many of their college subjects, more readings of books, magazines

and other materials needed as course requirements and many other factors.

The extent of relationship of Admission Test to academic performance of the students is supported by Zwick (2007) who stated that admission test could be used as a criterion for college success for their First-Year in the college. This means that subjects' GPA or students' academic performance in succeeding years (from second year to fourth year) may be affected by other factors. Thus, admission test will not be an effective predictor of the academic performance of students in their higher years.

Table 1 also shows that the Pearson Correlation between the Admission Test Results on English grade point average is 0.638 for secondary students. This value signifies that there is strong positive relationship between the two variables. Only 40% ( $0.638^2$ ) of the samples agreed that the Admission Test has a direct relationship in the English subject. The variation of the other 60% of the total samples may be attributed to other factors which may directly affect their academic performance in the English subject. The different student learning orientations that passed the college's admission test considerably one of the factors which may contribute to these variations. Their learning style depends on what kind of school they graduated. In addition, as freshmen students must cope with the delivery of curriculum of their respected courses such as methods of instructions, coping mechanisms with the available facilities and social aspect inside the college premise.

These variations on the results can be strengthened with the idea from the study of Kelly et al. (2014) which suggests that despite the good metric of assessments, external factors that will affect the results of the assessment should be moderated. It also noted the metrics of the assessment should comply the standards regardless of the nationality and cultural background.

## CONCLUSION

The secondary students have higher performance in the admission test as compared to their GPA on English subject while the college students have a higher GPA in English subject than their admission test results for the three school years. It is also concluded that the admission test results have a direct relationship with their performance in the English subject. Based on the respondents identified in the study, the extent of validity of the SSC admission test to predict the performance of the students in secondary and college students were 0.638 or 40% and 13% of the respondents, respectively. These rates indicate

that the SSC Admission Test has a valid prediction on the students' performance in their English subject.

It is recommended that the results of SSC admission test be correlated to the GPA of higher English subjects of the secondary students. Also, another study should be done to test the extent of correlation of the admission test to the GPA in English in the tertiary levels covering the results for the next SY 2011-2014. Furthermore, other subjects included in the admission test should also be tested for correlations with the other academic subjects to determine its predictive validity.

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