# ACADEMIC ACHIEVEMENT AND SCHOOL ABILITY: IMPLICATIONS TO GUIDANCE AND COUNSELING PROGRAMS

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#### ABSTRACT

Guidance and counseling programs, being integral parts of educational systems, are designed to assist students develop and have thorough understanding of themselves. Assessments especially those that are multi-dimensional in nature are one of the major services offered by fullyfunctioning guidance and counseling programs. Multi-dimensional assessment services are important since they can lead to better admissions, placements, and counseling of students. Two commonly used measures in assessment services especially on incoming college freshmen are academic achievement and school ability. In this study, academic achievement refer to general weighted averages (GWAs) as reflected in high school report cards of college freshmen applicants and school ability refer to Otis-Lennon School Ability (OLSAT) percentile ranks. To prove the values in assessment services of GWAs and OLSAT percentile ranks, GWAs of 986 college freshmen applicants were correlated with their OLSAT percentile ranks. This was done to see if relationship exists between the two. GWA is the average of grades in all subjects taken, whether passed or failed and serves as an indicator of students' academic achievement in a given school year. On the other hand the concept of school ability that underlies OLSAT is that of general intellective ability. Specifically, it concentrates on assessing verbal-educational factor. The test measures the verbal-educational factor through a variety of tasks that call for the application of several processes to verbal, quantitative, and pictorial content. Statistical analyses showed that there were significant relationships between GWAs and OLSAT percentile ranks and were significant at the 0.01 levels.

**Keywords:** assessment, college freshmen applicants, general weighted averages, guidance and counseling programs, school ability

#### INTRODUCTION:

The world is rapidly changing and the "modern society expects everyone to be a high achiever" (Daulta, 2008, p. 75). However, "success in any meaningful endeavor is marked by a history of high expectations that provide the challenge and inspiration necessary to press the individual to his/her highest level of performance" (Ozturk & Debelak, 2005, p. 1) and no matter what the obstacles are, everyone is encouraged to succeed because those who succeed are valued and considered important by society members.

In schools, students are constantly expected to do their best because of the belief that success in school is correlated with success in life. With the world becoming more and more competitive, the quality of performance has become a primary factor (Nuthanap, 2007) and is not only important to students but also to those around him/her (Singh & Thukral, 2010). It is safe to assume though that students in order to succeed needs some form of guidance and counseling services. Providing the necessary guidance and counseling services in schools as may be given by guidance counselors and other allied professionals are important undertakings, but these undertakings will only be beneficial if information about students are sufficient.

Sources of information regarding students can be derived through the assessment services included in guidance and counseling programs. Assessment services are designed to "collect, analyze, use a variety of objective and subjective personal, psychological, and social data" (Lunenberg, 2010, p. 4) about students. In the college level, one potential source of valuable information about would-be college students from assessment services are their academic performance in high school as reflected in their General Weighted Averages (GWAs) and their School Ability as reflected in their Otis-Lennon School Ability Test (OLSAT) percentile ranks if OLSAT is used as a standardized assessment.

"Counselors assist students in making appropriate choices of courses of study and in making transitions from one school level to another, one school to another, and from school to employment" (Lunenburg, 2010, p. 4). Information from GWAs and OLSAT percentile ranks can be used to better understand students when deciding not only on issues about admissions but also on extending placements, and counseling services because aside from assessment services, placement and counseling are also services included in guidance and counseling programs.

Placement service includes the assessment of students, proving of necessary information and counseling (Lunenberg, 2010). On the other hand, "the counseling service is designed to facilitate self-understanding and development through dyadic or small-group relationships. The aim of such relationships tends to be on personal development and decision making that is based on self-understanding and knowledge of the environment" (Lunenberg, 2010, p. 4). Admissions, placements, and counseling services will only be successful when valuable information are derived first and foremost from multi-dimensional assessments of students.

In the end, it must be remembered that guidance and counseling services are an integral part of education and Burnett (2008) acknowledges that education is "one of the principal means available to foster a deeper and more harmonious form of human development and thereby reduce poverty, exclusion, ignorance, oppression and war" (p. 181).By having all the necessary information from the assessments of students, better admissions, placement decisions, and counseling services can be given thus aiding them in their education. With fully-functioning guidance and counseling services, students are guaranteed to reach their full potentials and be successful members of the society.

# **REVIEW OF RELATED LITERATURE:**

#### ACADEMIC ACHIEVEMENT:

Academic achievement is one of the determinants of success in life. Students who achieve well academically have some advantages. Academic achievement serves as a key criterion in order to judge students' true potentials and capabilities (Daulta, 2008, Nuthanap, 2007). Identifying these potentials and capabilities are necessary to better hone them and find remedies where there are lacking.

Also, "academic achievement has been one of the most important goals of the educational process" (Nuthanap, 2007, p. 6). It plays a significant role in assuring quality (Ali, Jusoff, Ali, Mokhtar & Salamat, 2009) because without some sort of measure, what will be produced are mediocre graduates. That is why, it is but necessary to put a special emphasis on academic achievement.

Many available definitions of academic achievement rely on quantitative data and calculation like that of test scores and grades (Velasco, 2007) and one measure of academic achievement is students' GWAs. GWA is the average of grades in all subjects taken, whether passed or failed and serves as an indicator of students' academic achievement in a given school year. GWA is reflected in report cards of high school students. "Most studies have found that high school grades (GWAs) are the best predictors of college GPAs" (www.tamu-commerce.edu., n.d., para. 5). Relatively, Isbell (n.d.) conclude that academic backgrounds which can be

measured by cumulative grade point average are determinants of classroom performance.

# **SCHOOL ABILITY:**

Aside from academic achievement as reflected in GWAs, another measure that is worth looking into is students' school ability. School ability is also referred to as scholastic aptitude. Aptitude is "related to the ability to do well in school" (Lock, 2005, p. 243). "Assessment of scholastic aptitude is particularly important because it is significantly related to achievement in various educational programs in high school, colleges, and professional schools" (www.tamu-commerce.edu., 2011., para. 2).

"Over the past decade, standardized admission tests have become an increasingly important factor in undergraduate admission" (NACAC, 2008, p.7). One example of a standardized test that measures scholastic aptitude is the OLSAT. "The concept of ability that underlies the OLSAT is that of general intellective ability" (Otis & Lennon, 1979, p.4). It "concentrates on assessing the verbal factor, to the exclusion of practical-mechanical abilities. The test measures this verbal educational factor through a variety of tasks that call for the application of several processes to verbal, quantitative, and pictorial content" (Otis & Lennon, 1979, p. 4).

# USES OF ACADEMIC ACHIEVEMENT AND SCHOOL ABILITY:

"Information concerning school ability or scholastic aptitude is helpful to teachers, counselors, school administrators, and others in several ways" (Otis & Lennon, 1979, p.4). Otis and Lennon (1979) upheld that "instruction is most effective when is appropriate in level, pace and style for the learner; thus, classification and grouping of learners and individualization of instruction and guidance should give weight to school ability" (p.4). With the assumption that GWAs are accurate measures of achievement and OLSAT is an accurate measure of aptitude, these can serve as important bases for sound decision-making. They can provide valuable insights like in college admissions, placements, and counseling. Valuable insights are necessary because "college admissions can be a high-stakes gamble" (de Simone, 2008, p. 12). And to be able to decide on college admissions, placements, and counseling based on solid bases, Atkinson (2001) believes that students must be assessed in their full complexity. Therefore, information regarding academic achievement and aptitude are important.

#### THE IMPORTANCE OF GUIDANCE AND COUNSELING SERVICES:

Guidance and Counseling services are an important component of the education process and it is impossible for schools to operate without having such services. For one, "guidance and counseling is the bedrock for achieving self-actualization" (Egbochuku, 2008, p. 44). Guidance and counseling is usually referred to as "a process of helping individuals to understand themselves by discovering their own needs, interests and capabilities in order to formulate their own goals and make plans for realizing those goals" (Egbochuku, 2008, p. 44).

Specifically, "the aims of guidance and counseling programs in schools are to assist individuals to develop the ability to understand themselves, to solve their own problems, and to make appropriate adjustments to their environment" (Lunenberg, 2010, p. 8). Assessments, placements, and counseling are some of the major services of a guidance and counseling program.

Assessment services are designed "to collect, analyze, and use a variety of objective and subjective personal, psychological, and social data" (Lunenburg, 2010, p. 4). These collected data can be used to better understand students and better guide them in decision-making especially in providing admissions, placements, and counseling services. The use of both grades and examination to identify students with a high potential for future success are an example of multi-dimensional screening (Armstrong and Rochet, 1999). "Outcomes based solely on one predictor (e.g., test score or grades) have consistently been proven to be inferior to prediction models that employ multiple predictors" (Camara, Wiley & Wyatt, 2010, p. 6).

On the other hand, generally speaking, "placement is ensuring that people are in the right place at the right time. It has to do with helping people find a place that will contribute to their physical, mental, emotional, and spiritual health and well-being (Villar, 2007, p. 150). Specifically, placement services are designed to include "assessment, informational services, and counseling assistance appropriate to the pupil's choices of school subjects, co-curricular activities, and employment" (Lunenburg, 2010, p. 4).

"The counseling service is designed to facilitate self-understanding and development through dyadic or small-group relationships. The aim of such relationships tends to be on personal development and decision making that is based on self-understanding and knowledge of the environment" (Lunenburg, 2010, p. 4). "Counseling is the heart of the guidance program. It is the counseling that integrates all the data gathered about the individual and his environment, in order for them to make sense" (Villar, 2007, p. 86).

It must ultimately be remembered that all services included in guidance and counseling programs will only be

successful if they are based on relevant information. The information gathered via students' GWAs and OLSAT percentile ranks can be important bases in better designing guidance and counseling services that can truly serve students.

# STATEMENT OF THE PROBLEM:

This study sought to determine the relationship between GWA and OLSAT percentile ranks because of the belief that these two measures equally provide valuable information that can be used for admissions, placements, and counseling services. Specifically, this study sought to answer the following questions:

- 1. Is there a significant relationship between the GWAs and OLSAT percentile ranks of female college freshmen applicants?
- 2. Is there a significant relationship between the GWAs and OLSAT percentile ranks of male college freshmen applicants?
- 3. Is there are significant relationship between the GWAs and OLSAT percentile ranks of college freshmen applicants in general?
- 4. What implications do these relationships, if ever there are, to school guidance and counseling programs?

# **HYPOTHESES OF THE STUDY:**

This study tested these hypotheses:

- 1. There is a significant relationship between the GWAs and OLSAT percentile ranks of female college freshmen applicants.
- 2. There is a significant relationship between the GWAs and OLSAT percentile ranks of male college freshmen applicants.
- 3. There is a significant relationship between the GWAs and OLSAT percentile ranks college freshmen applicants in general.

#### **METHOD:**

#### MODEL OF THE STUDY:

This study followed the quantitative research design. The study was guided by the problems stated and the confirmation of hypotheses identified. The data gathered were primarily numbers, in the forms of GWAs and OLSAT percentile ranks.

### **PARTICIPANTS:**

The participants of this study were 986 college freshmen applicants seeking admission in a state college in Pampanga, Philippines. There were 650 females and 336 males. Their mean age was 16.68 with a standard deviation of 1.64.

#### **MEASURES:**

Two measures were the main source of data in this study, GWAs and OLSAT percentile ranks. GWAs are the average of grades in all subjects taken, whether passed or failed and serves as an indicator of students' academic achievement in a given school year. On the other hand, the OLSAT is a standardized test that measures general intellective ability. It "concentrates on assessing the verbal factor, to the exclusion of practical-mechanical abilities" (Otis & Lennon, p. 4). "Item content samples verbal, figural, quantitative reasoning and verbal comprehension ability" (Otis & Lennon, 1979, p. 5).

# PROCEDURE:

The GWAs of the college freshmen applicants as reflected in high school report cards were correlated with their OLSAT percentile ranks and to test the relationship between the two among female college freshmen applicants, among male college freshmen applicants, and college freshmen applicants in general; the Pearson product-moment correlation coefficient was used. The Pearson Product-Moment Correlation Coefficient, which

is sometimes referred to as the PMCC and typically denoted by "r," is a measure of the correlation (linear dependence) between two variables (Rodgers & Nicewander, 1988).

# **RESULTS:**

The result of the correlation using Pearson r between the GWAs of the female college freshmen applicants, male college freshmen applicants, and college freshmen applicants in general are presented in Tables 1 to 3. The strengths of relationships are reflected in the r-values while the significances of relationships are reflected in the p-values. The strengths of relationships are interpreted using the following guidelines given by Subong (2006): 0.00 to +0.10 (no relationship), +0.11to +0.25 (negligible relationship), +0.26 to +0.50 (moderate relationship), +0.51 to +0.75 (high relationship), +0.76 to +1.00 (very high/perfect relationship).

TABLE 1.RELATIONSHIP BETWEEN GWAS AND OLSAT PERCENTILE RANKS OF FEMALE COLLEGE FRESHMEN APPLICANTS

	N	M	SD	r-value	p-value	Interpretation
GWA	650	83.63	4.01	0.50	0.00	Significant High Relationship
OLSAT Percentile Rank	650	18.17	14.76			

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

As seen in Table 1, the GWAs of female college freshmen applicants had significant relationship with their OLSAT percentile ranks. It must be further noted that all relationship was positive. A significant positive relationship meant that there was a strong relationship between the two variables. This meant that as the GWAs of the female college applicants increase, their OLSAT percentile ranks also increases and vice-versa.

TABLE 2. RELATIONSHIP BETWEEN GWAS AND OLSAT PERCENTILE RANKS OF MALE **COLLEGE FRESHMEN APPLICANTS** 

	N	M	SD	r-value	p-value	Interpretation
GWA	336	81.77	4.07	0.50	0.00	Significant High
OLSAT Percentile Rank	336	20.99	17.59			Relationship

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

As seen in Table 2, the GWAs of male college freshmen applicants had significant relationship with their OLSAT percentile ranks. It must be further noted that all relationship was positive. A significant positive relationship meant that there was a strong relationship between the two variables. This meant that as the GWAs of the male college applicants increase, their OLSAT percentile ranks also increases and vice-versa.

TABLE 3.RELATIONSHIP BETWEEN GWAS AND OLSAT PERCENTILE RANKS OF COLLEGE FRESHMEN APPLICANTS IN GENERAL

	N	M	SD	r-value	p-value	Interpretation
GWA	986	82.99	4.12	0.46	0.00	Significant Moderate
OLSAT Percentile Rank	986	19.14	15.83			Relationship

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

As seen in Table 3, the GWAs of the college freshmen applicants in had significant relationship with their OLSAT percentile ranks. It must be further noted that all relationship was positive. A significant positive relationship meant that there was a strong relationship between the two variables. This meant that as the GWAs of the college applicants increase, their OLSAT percentile ranks also increases and vice-versa.

# **DISCUSSION:**

It is important to assist students for them to become productive members of the society. In the school setting, guidance counselors and other allied professionals can provide necessary assistance to students, Generally speaking, "the aims of guidance and counseling programs in schools are to assist individuals to develop the ability to understand themselves to solve their own problems and to make appropriate adjustments to their environment" (Lunenburg, 2010, p. 8). The proper implementation of guidance and counseling programs will only be possible if enough information on students is available. Information can be derived for assessment services. Such information can then be used to admission-related decisions, placements, and counseling services. The consistent significant relationships between GWAs and OLSAT (of female college freshmen applicants, of male college freshmen applicants, and of college freshmen applicants in general) proved only that both GWAs and OLSAT percentile ranks provide valuable insights about the college freshmen applicants even though GWA is a reflection of students' achievement while the OLSAT is more on students' aptitude. Thus, are equally important in admissions, placements, and counseling services of guidance and counseling programs.

The idea of using aptitude tests to supplement the achievement-based criteria of high school grades and quality of school courses was upheld by Stickler (2007). Additionally, Harbaugh (2001) upholds that "colleges are interested in underlying aptitude and in achievement since both are correlated with academic and career success" (p.1).

The use of both grades and examination to identify students with a high potential for future success are an example of multi-dimensional screening (Armstrong and Rochet, 1999). "Outcomes based solely on one predictor (e.g., test score or grades) have consistently been proven to be inferior to prediction models that employ multiple predictors" (Camara, Wiley & Wyatt, 2010, p. 6). The use of multiple predictors is always beneficial especially in college admissions, placement, and counseling since a clearer picture is presented.

In the end, there is a dilemma in assessing potential because it is difficult to separate it from actual test performance. Tests that measures potential actually measure achievement at one point (West & Gibbs, 2004). So instead of being in a dilemma, the consideration of information from two measures is always better. The use of both GWAs and OLSAT percentile rank in making important decisions is but logical. The more information gathered about students, the better.

# LIMITATIONS OF THE STUDY:

This study was only limited to 986 college freshmen applicants in a state college in Pampanga, Philippines for the School Year 2010-2011 and the main focus was only on their GWAs and OLSAT percentile ranks. Therefore it is not guaranteed that the results of this study also hold true to college freshmen applicants of other colleges and universities whether in the Philippines or abroad.

#### **CONCLUSION:**

The significant relationships established between GWAs and OLSAT percentile ranks only proved the importance of both in assessing students' capabilities for admissions, placements, and counseling purposes. The use of both grades and examination to identify students with a high potential for future success are an example of multi-dimensional screening (Armstrong and Rochet, 1999). Multi-dimensional screening are important because "outcomes based solely on one predictor (e.g., test score or grades) have consistently been proven to be inferior to prediction models that employ multiple predictors" (Camara, Wiley & Wyatt, 2010, p. 6). It should be remembered that "the ultimate goal of student assessment, however, should be to use the results of the assessment to readjust the existing mission and goals, and thus provide a better institutional environment for student learning and growth" (Cheng, 2001, p. 7). With enough information on hand, sound actions can be carried out especially in shaping guidance and counseling programs.

#### **RECOMMENDATION:**

Guidance and counseling offices/centers are great sources of information about students. Similar studies especially on the evaluation of other sources of information about students gathered from assessment and other related services are encouraged to be conducted in order to provide better guidance and counseling programs. The gathering of necessary information is always necessary because the more information available, the better services there will be.

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