CORRELATION OF THE ACADEMIC PERFORMANCE AND GRIT AMONG THE COLLEGE OF ARTS AND SCIENCES BATCH 2014 STUDENTS OF LYCEUM OF THE PHILIPPINES-LAGUNA

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BS in Psychology

Abstract

To graduate from college is one of the greatest accomplishments a person can have. Yet, success does not solely depend on education but also on how passionate and persevering they are (grit). The study sought to determine if there is a significant relationship between the academic performance and grit among the 55 College of Arts and Sciences Students Batch 2014 of Lyceum of the Philippines-Laguna. It aimed to present the demographic profile of the respondents as to gender, program and their overall general weighted average since First Year College, the respondents’ grit level, the relationship between their academic performance and grit through their academic standing, and the significant difference between their grit when grouped by profile. The GWA of the respondents from first year to fourth year college represented as their academic performance, while the 12-Item Grit Scale by Angele Lee Duckworth, et. al. (2007) is used as the standardized test to get the level of grit. Statistical tools such as frequency, percentage, and weighted means were used as well as statistical treatments namely T-Test, Analysis of Variance, and Pearson correlation. The study concluded that the respondents’ overall GWA has the interpretation of Good wherein their level of grit is ‘somewhat gritty’, and that there is a direct relationship between the level of grit and the GWA. This implies that as the level of grit increases, there is a tendency for the respondent grade to increase.

Keywords: grit, academic performance, graduating students, general weighted average (GWA), college.
INTRODUCTION

As a common Filipino saying goes, “Ang edukasyon ay kayamanang hindi mananakaw ng kahit sinuman” (Education is a treasure that cannot be stolen by anyone). Everyone is raised with the belief that if he/she wants to succeed in life, he/she must strive hard to earn college diploma.

Finishing a degree in college with good grades is one of the most fulfilling achievements of a person. But of course, prior to receiving the most-awaited and cherished diploma, years of burning the brow, sweating and hard work are the pre-requisites. Moreover, a student’s level of willingness is a very significant metric of accomplishing all the academic requirements.

As students, the primary goal is to get good grades and to finish college. Usually, they have their own way of attaining it. The students from the College of Arts and Sciences (CAS) in Lyceum of the Philippines - Laguna are no different. It has been observed that some students show high level of intelligence and take it easy to study but there are also those that are not that intelligent and even find it difficult to pass a subject, or may even have a hard time staying in one program. Yet, those who have average intelligence but are very studious and are giving their best for each school requirement are the leading students in class.

But this does not mean that a person who does not perform well in school has no chance of being successful or even those who perform good does not mean that they will surely do well in life. Exceptions are always there. It is not always education that dictates the success of an individual. Sometimes, people just need to have a powerful motivation to achieve a particular goal in life.

The shown perseverance and passion for long term goals which Duckworth (2007) coined as grit is the said reason why most people succeed
in reaching their goals beyond the education they attained.

With that, the researchers are curious to know the relationship that academic performance and grit have. And if there is, then it might be proven that grit is a factor to be considered when talking about academic performance.

In this study, the researchers aimed to find out if students who have high level of grit are academically good or it is the other way around.

**Research Framework**

![Research Framework Diagram](image)

Figure 1. Conceptual framework

Figure 1 shows the flow of the study considering the two variables which are the academic performance represented by Graded Weighted Average (GWA) and grit. GWA was computed by multiplying the unit of each subject to their corresponding grade and dividing the total by the number of subjects, while grit (passion for long term goal) was generated through employing a checklist as the standard survey questionnaire used in this study.

The two variables of CAS students batch 2014 of LPU-L took in considerations with their demographic profile that would have an effect with the variables, which are gender and program.
Objectives of the Study

This study aimed to determine if there is a significant difference between academic performance and grit among the graduates of CAS batch 2014 of Lyceum of the Philippines-Laguna.

Specifically, this study aimed to achieve the following:

1. to determine the demographic profile of the respondents as to:
   a.) gender; and,
   b.) program.

2. to determine the overall Graded Weighted Average (GWA) of the respondents since first year college

3. to determine how gritty the CAS batch 2014 students are

4. to determine if there is a relationship between academic performance and grit of the respondents pertaining their academic standing; and,

5. to determine if there is a significant difference between the respondents’ grit when grouped according to profile.

METHOD

The researchers utilized the descriptive type of research which is used to describe characteristics of a population or phenomenon being studied. Descriptive research is all about describing people who take part in the study. The survey method was employed wherein the respondents were asked to answer a questionnaire that was then became the source of numerical data computed for the result of the study.
In addition, the study was done in Lyceum of the Philippines - Laguna, formerly known as Lyceum Institute of Technology due to its availability and accessibility.

The researchers used the GWA of the respondents, from first year to fourth year college that represented their academic performance while following the LPU-L’s grading system:

**Grade Point System of LPU-Laguna**

<table>
<thead>
<tr>
<th>GRADE POINT</th>
<th>PERCENTAGE</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>99-100%</td>
<td>Excellent</td>
</tr>
<tr>
<td>1.25</td>
<td>96-98</td>
<td>Superior</td>
</tr>
<tr>
<td>1.50</td>
<td>93-95</td>
<td>Exemplary</td>
</tr>
<tr>
<td>1.75</td>
<td>90-92</td>
<td>Very Good</td>
</tr>
<tr>
<td>2.00</td>
<td>87-89</td>
<td>Good</td>
</tr>
<tr>
<td>2.25</td>
<td>84-86</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>2.50</td>
<td>81-83</td>
<td>Fairly Satisfactory</td>
</tr>
<tr>
<td>2.75</td>
<td>78-80</td>
<td>Fair</td>
</tr>
<tr>
<td>3.00</td>
<td>75-77</td>
<td>Passed</td>
</tr>
<tr>
<td>5.00</td>
<td>below 75</td>
<td>Failed</td>
</tr>
</tbody>
</table>

The 12-Item Grit Scale by Duckworth et al. (2007) is used to measure the grit of the respondents in order to determine the correlation of academic performance and grit among the CAS batch 2014. It is a 12-item scale that assigns numbers 1, 4, 6, 9, 10 and 12 with 1 – not like me at all to 5 – as very much like me, while items 2, 3, 5, 7, 8 and 11 have 5 – not like me at all and 1 – very much like me, adding up all the points and divide it by 12. The maximum score on this scale is 5 (extremely gritty) and the lowest
score is 1 (not at all gritty).

Furthermore, the statistical treatments used in the research include frequency and percentage, t-test, Analysis of Variance (ANOVA), Pearson correlation and weighted mean with the following reference scale:

<table>
<thead>
<tr>
<th>Range</th>
<th>Verbal Scale</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.50-5.00</td>
<td>Very much like me</td>
<td>Extremely Gritty (Distinguished by an immense perseverance and passion for long term goals.)</td>
</tr>
<tr>
<td>3.50-4.49</td>
<td>Mostly like me</td>
<td>Most likely gritty (Distinguished by having high passion and perseverance for long term goals but can be discouraged by setbacks.)</td>
</tr>
<tr>
<td>2.50-3.49</td>
<td>Somewhat like me</td>
<td>Somewhat gritty (Distinguished by having an average passion and perseverance for long term goals but can be discouraged by setbacks.)</td>
</tr>
<tr>
<td>1.50-2.49</td>
<td>Not much like me</td>
<td>Not much gritty (Distinguished by having low passion and perseverance for long term goals and they can easily be discouraged by setbacks.)</td>
</tr>
<tr>
<td>1.00-1.49</td>
<td>Not like me at all</td>
<td>Not at all gritty (Distinguished by having no passion and perseverance for long term goals.)</td>
</tr>
</tbody>
</table>

Data Collection Procedure

The researchers first chose a topic of interest for the study then formulated a title that would give direction to the study. They decided to settle on educational psychology, specifically about grit, to be correlated to academic performance. After that, the statement of the problem was developed to have a clear pathway for the achievement of the study’s objectives.
After the title and objectives of the study were approved, the researchers went to different libraries and searched the internet for related studies and literatures that will support or oppose the topics in the current study. Moreover, assistance of the thesis adviser and research professor was considered for the accomplishment of the proposal with the standard test instrument approved its use by the psychometrician/owner. The researchers then went their pre-oral defense and further revisions were suggested by the panel.

The researchers conducted the data gathering in LPU-Laguna for the 55 respondents to get the level of grit on April 8, 2014, the day of their scheduled picture taking for graduation. While the graduating students were waiting for their turn, the researchers asked their permission to participate in the study. The researchers then tallied the responses and calculated the frequency and means as well as other statistical treatments through Statistical Package for the Social Sciences (SPSS) with the guidance of a statistician. The results were then interpreted for as the conclusion and recommendation to be made.

RESULTS AND DISCUSSION

Below are the results the gathered data:

Demographic Profile

1. Gender

Table 1 shows the distribution of respondents when grouped according to gender. From the 55 respondents, twenty (36%) were males while thirty five (64%) of the respondents were females. This entails that female respondents dominate the study while male respondents were the least populated.
2. Program

Table 2 presents the frequency and percentage of respondents when grouped by program. Out of 55 respondents, thirty one (56%) students were enrolled in AB Communication (ABComm), eleven (20%) were from AB Multimedia Arts (ABMMA) and thirteen (24%) were from BS Psychology (BSPsych). This shows that most of the respondents were from the program ABComm and the least respondents were from ABMMA.

Table 2. Program distribution

<table>
<thead>
<tr>
<th>Program</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABComm</td>
<td>31</td>
<td>56</td>
</tr>
<tr>
<td>ABMMA</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>BSPsych</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>
3. GWA of students

Figure 2. GWA of CAS students

Figure 2 illustrates the GWA of respondents from first year first semester to fourth year second semester. The respondents' GWA from first year first semester is 1.996 while when in first year second semester, their GWA is 1.964. As for second year first semester, the GWA is 1.994 and in second year first semester, 1.991. At third year first semester, the respondents garnered 1.866 GWA and 1.930 in third year second semester. During their last year, fourth year first semester, their GWA is 1.854 and 1.643 during their fourth year second semester. Overall, their GWA is 1.916.

The highest GWA is found to be from the respondents' fourth year second semester, having 1.643 GWA with an ‘exemplary’ as interpretation while the lowest GWA of the respondents came from their first year first semester with 1.996 and an interpretation of ‘good’. On the average, the respondents’ GWA from their overall school year is 1.916 with an interpretation of ‘good’.

◆ GWA (4 years) = 1.916
Respondents’ grit level

Table 3 presents the distribution of responses and mean scores for the level of grit of the respondents. The statement that got the highest mean score of 4.16, with a verbal description of ‘mostly like me’, is the statement “I finish whatever I begin.” The statement that has the lowest mean score of 2.45 having a verbal description of ‘not much like me’ is the statement “I become interested in new pursuits every few months.” Overall, the weighted mean is 3.36 with an interpretation of ‘somewhat gritty’. This signifies that respondents have an average passion and perseverance for long term goals but can be discouraged by setbacks.

Forty five percent of the respondents believe that they finish whatever they begin. When an individual always finish what they start, they will find themselves performing at their absolute best.

Meanwhile, with the same weighted mean, respondents see themselves as people who have overcome setbacks to conquer an important challenge and are diligent having 58% and 51% of the respondents, respectively, assessing themselves as so. The former pertains to the capability of the respondents to be resilient, a quality that allows them to be knocked down by life and come back stronger than ever. On the other hand, the latter implicates that as a diligent person, the respondents focus on their growth mindset. People with a growth mindset try harder enough to excel.

However, 36% of the respondents have the same judgment that they don’t become interested in new pursuits every few months. This means that they have a constant interest for months or even years. In reference to Prenzel’s (1992) Theory of Interest Development, people develop long-term interest when they have repeated interaction with the activity they have interest in, thus, promoting new knowledge from it. Moreover, this complex
knowledge is needed to ensure continued conflict that would sustain the interest itself.

Table 3. Respondents’ grit level

<table>
<thead>
<tr>
<th>Statements</th>
<th>WM</th>
<th>Description</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I finish whatever I begin.</td>
<td>4.16</td>
<td>Mostly like me</td>
<td>Most likely gritty</td>
</tr>
<tr>
<td>I am a hard worker.</td>
<td>4.02</td>
<td>Mostly like me</td>
<td>Most likely gritty</td>
</tr>
<tr>
<td>I have overcome setbacks to conquer an important challenge.</td>
<td>3.89</td>
<td>Mostly like me</td>
<td>Most likely gritty</td>
</tr>
<tr>
<td>I am diligent.</td>
<td>3.89</td>
<td>Mostly like me</td>
<td>Most likely gritty</td>
</tr>
<tr>
<td>I have achieved a goal that took years of work.</td>
<td>3.76</td>
<td>Mostly like me</td>
<td>Most likely gritty</td>
</tr>
<tr>
<td>Setbacks don’t discourage me.</td>
<td>3.25</td>
<td>Somewhat like me</td>
<td>Somewhat gritty</td>
</tr>
<tr>
<td>I have difficulty maintaining my focus on projects that take more than a few months to complete.</td>
<td>3.09</td>
<td>Somewhat like me</td>
<td>Somewhat gritty</td>
</tr>
<tr>
<td>I often set a goal but later choose to pursue a different one.</td>
<td>3.07</td>
<td>Somewhat like me</td>
<td>Somewhat gritty</td>
</tr>
<tr>
<td>New ideas and projects sometimes distract me from previous ones.</td>
<td>2.93</td>
<td>Somewhat like me</td>
<td>Somewhat gritty</td>
</tr>
<tr>
<td>I have been obsessed with a certain idea or project for a short time but later lost interest.</td>
<td>2.89</td>
<td>Somewhat like me</td>
<td>Somewhat gritty</td>
</tr>
<tr>
<td>My interests change from year to year.</td>
<td>2.87</td>
<td>Somewhat like me</td>
<td>Somewhat gritty</td>
</tr>
<tr>
<td>I become interested in new pursuits every few months.</td>
<td>2.45</td>
<td>Not much like me</td>
<td>Not much gritty</td>
</tr>
<tr>
<td>Overall</td>
<td>3.36</td>
<td></td>
<td>Somewhat gritty</td>
</tr>
</tbody>
</table>

Table 4 shows that there is a direct relationship between the level of grit and the GWA. This implies that as the level of grit increases, there is a tendency for the respondents’ grade to increase.

Hence, the more the respondents persevere and maintain their passion for their goals, the more they exert effort that leads them to better grades.
Table 4. Mean grit and GWA of the respondents

<table>
<thead>
<tr>
<th>Number of Respondents</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWA</td>
<td>55</td>
<td>1.27</td>
<td>2.45</td>
<td>1.92</td>
</tr>
<tr>
<td>GRIT</td>
<td>55</td>
<td>2.67</td>
<td>4.50</td>
<td>3.36</td>
</tr>
</tbody>
</table>

Table 5 presents the comparative analysis in the level of grit and GWA between the respondents’ gender. It indicates that there is no significant difference in the GWA. Furthermore, it also presents that there is significant difference in the level of grit when respondents are grouped by gender. Females have been shown to have a significantly higher grit than males in this study. It signifies that female respondents have a higher perseverance and passion for long term goals than the male respondents of this study.

Table 5. Comparative analysis in the level of grit and GWA by gender

<table>
<thead>
<tr>
<th>GENDER</th>
<th>Mean</th>
<th>t-value</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.95</td>
<td>0.684</td>
<td>0.497</td>
</tr>
<tr>
<td>Female</td>
<td>1.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRIT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>38.10/3.18</td>
<td>2.511</td>
<td>0.015</td>
</tr>
<tr>
<td>Female</td>
<td>41.54/3.46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows the comparative analysis in the level of grit and GWA between programs of respondents. It shows that there is a significant difference in the respondents’ GWA when grouped by program. The result is supported by table 9 showing that the respondents from the program ABCComm and BSPsych both have a GWA mean score of 1.868 while respondents enrolled in ABMMA have a lower GWA of 2.113.
Table 6. Comparative analysis in the level of grit and GWA by program

<table>
<thead>
<tr>
<th></th>
<th>T-value</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWA</td>
<td>3.34</td>
<td>0.043</td>
</tr>
<tr>
<td>GRIT</td>
<td>1.18</td>
<td>0.316</td>
</tr>
</tbody>
</table>

Table 7 also indicates that there is no significant difference in the level of grit when the respondents are grouped by program. Thus, the level of grit is about the same for all groups of respondents. In essence, regardless of how hard or easy they think their program is, their perseverance and passion for their goals is the same.

Table 7. Mean GWA and respondents by program

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>Number of Respondents</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABComm</td>
<td>31</td>
<td>1.868a</td>
</tr>
<tr>
<td>BSPsych</td>
<td>13</td>
<td>1.868a</td>
</tr>
<tr>
<td>ABMMA</td>
<td>11</td>
<td>2.113b</td>
</tr>
</tbody>
</table>

<sup>ab</sup> - means with different superscripts are significantly different

CONCLUSION AND RECOMMENDATION

Conclusions

The researchers conclude the following based from the findings of the study:

1. The respondents of the study are dominated by female.

2. Among the total number of respondents, majority of the respondents are from the ABComm program while the respondents enrolled in ABMMA had the least numbered.
3. As for the GWA of the respondents, their GWA from their overall school year is 1.916 with an interpretation of ‘Good.’

4. For the level of grit of respondents, they are ‘Somewhat Gritty’ which implies that they have an average passion for long term goals but can be brought down by setbacks.

5. In the relationship of grit and GWA, as the level of grit increases, there is a tendency for the respondents’ grades to increase.

6. For the significant difference between the respondents’ grit and gender, it shows that females have a significantly higher level of grit than males.

7. When knowing the significant difference between respondents’ grit when grouped by program, the level of grit is about the same for all groups of respondents.

In general, this study concludes that there is indeed a significant relationship between academic performance and grit among college students.

Recommendations

The following are the recommendations of the researchers based from the results of this study:

For the Institution. The institution should help those students who have low level of grit by recommending them to attend programs and seminars on how to be grittier so as to enlighten up students to strive for success in their lives.

For the Educators. With the knowledge of what striving for long term
goal could make to a student, may this add awareness of grit as part of the learning process, that good grades are attained not just by how talented or intelligent a person is but also by how persevere they are in achieving it as it is also applicable in attaining personal achievements in life.

For the School Counselors. They may use the grit scale to assess the students’ persistence to their goal especially if the test will be included from freshmen students. They may also implement group counseling sessions per section for college students wherein activities that may stimulate their grit are realized. If such happens that the reason why some students have low level of grit are discovered, they may now encourage students for one-on-one counseling to settle problems that hinder them to be gritty in class.

For Students. Students are recommended to take the grit scale test to determine their grit level. From that, those who have low levels of grit may consult their school counselors to resolve things that hinder them to be gritty in class. Through this, they may realized that they have to focus on their long term personal goals and be open-minded on changes that may occur, not only in their education but also in their real life experiences.

For Future Researchers. First, they are recommended to add the number of respondents. Second, given that in other studies of Duckworth where their studies revealed that as people age so as their grit, addition of other demographic variables such as age is suggested so as to widen the scope of the study which might reveal new results. Third, they may conduct the study in different programs and schools to be able to compare results from one another for more helpful outcomes. Lastly, they may use this study to other locale such as in different industries where grit and job performance could also be used as variables.
REFERENCES


