



The Effect of Attendance and Gender with the Student Performance based on the Learning Management System (WPU) of Western Philippines University

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Abstract

Aim: The significance of attendance on student's academic performance was investigated based on student's final grade and frequency of class attendance of 17 students from one course who were the 4th year students taking Public Administration from the College of Business and Management. Attendances were marked by the instructor at the end of each contact with the students. Gender was also identified and correlated with regards to student's final grade.

Methodology: Data from the selected students were analyzed using regression and correlation statistical tools. Regression models were calculated to investigate the relationship between the combined variables and student grade.

Results: The result of the analysis revealed a negative perfect correlation between class attendance and students' final grade. On the other hand, positive negligible correlation was revealed between gender and students' final grade. The result was perfectly correlated because once the student is absent it means she/he has no activity, quiz, learning, recitation, or any activity that happened during the time of his/her absences. Once the student is absent, his/her final grade will be affected. While the gender has negligible correlation, meaning it has no connection with the student performance as to final grade of the student either male or female.

Conclusion: Faculty may emphasize to students the importance of being present in the class since the number of absences is perfectly correlated to the final grade of the students. Students' performance will be affected once he/she is absent. The more the students failed to come to class, the more the possibility that his grade will become lower. However, the gender of the student has no correlation with respect to his final grade. Either the student is a male or female, there is a tendency that his/her final grade will be passing or not depending on his performance.

Keywords: Attendance, Learning Management System, Gender, Correlation

INTRODUCTION

Over the years, technology has caught the attention of many institutions of higher education, especially through the implementation of online approaches to teaching and learning. More and more studies now support the claim that technology has great potential to provide new kinds of instructional opportunities and to enhance the knowledge and learning experiences of both the teachers and students (O'Connor & Ploin, cited in Fleming-McCormick et al., 1995). Appana (2008) stated that the new advances on the internet have brought opportunities of the field of education through online instruction. Recently, technology aspect as well as pedagogic alternatives had caught up with e-learning that have the potential of revolutionizing not only learning via the internet but learning as a whole.

Learning Management Systems (LMS) are web-based systems allowing instructors and/or students to share materials and interact online (Lonn, et al., 2011). LMS are also more commonly referred as e-learning platforms, used as a medium to put e-learning content to the web. Typically, a learning management system provides an instructor a method to create and deliver content, monitor student participation, and assess student



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performance. The growing use of Learning Management System (LMS) many of which automatically keep logs of student activity, presents an exciting means of narrowing gap. All Learning Management System (LMS) manage the log-in of register users, manage course catalog, record data from learners, and provide reports to management. Students' acquisition of generic skills is key to their incorporation into the job world. However, teachers encounter several difficulties when measuring their students' performance in generic skills. (Balderas, et al., 2018).

The Western Philippines University promotes the best quality education and aims to lead the West Philippines as the leading knowledge center for sustainable development and to be able to achieve that is to provide the students with online learning opportunities as an innovative method for delivering certain instruction and enrichment to students.

Currently, the university has four computer laboratory rooms with 20 computers for each room, 19 computers for students and one for teacher's use for each classroom. This computer laboratory is connected to a network and has an internet connection which is possible for the students to have an interactive learning. There are different applications that are free which can be used by the faculty to enhance the learning of students. By using these different applications, these will be an aid for the faculty to improve his/her instructional materials and class delivery.

METHODS

Research Design

This study used a descriptive, correlational design to determine the relationship between attendance and gender to students' performance based on Learning Management System.

Population and Sampling

This study was conducted using the researcher's class record. The researcher selected 4th year Public Administration Students from the College of Business Management as one of the classes she handled at Western Philippines University Main Campus, Aborlan, Palawan for the purpose of this study. There are seventeen (17) students enrolled in the class, out of seventeen (17) students, twelve (12) were female and five (5) students were male.

Instrument

Survey instrument was used in this study to collect data.

Data Collection

The data were collected and analyzed in consonance to the objective of the study after the end of the semester. The grading system were composed of midterm exam, final exam, assignment/activity, reporting and attendance. Final grade was computed based on the researcher grading system as mentioned. The attendance used in the research was taken in the class held in the course for the whole semester. Students' absences were counted and divided based on the total number of class held for the whole semester. Each student's attendance was considered against the final grade of the student. Their gender was also compared against the student's final grade.

Treatment of Data

For data analysis, the statistical research tools used are Multiple Regression, Regression and Correlation analysis. The goal is to investigate the nature and strength of relationship existing between students' final grade against attendance and gender of the students enrolled in the class. Correlation was used to compare the



significance difference of the number of absences and the gender of the students against her final grade.

Ethical Considerations

The data that was collected was treated confidential. Only the researcher knew the result of her student performance. The Data Privacy Act of 2012 was considered in the conduct of this study.

RESULTS AND DISCUSSION

Based on the regression analysis using the 4th Year Public Administration student data, it shows that gender has no effect on the final grade of the students. Out of seventeen (17) students, twelve (12) were female and five (5) students were male. However, the attendance of the students has effect on the final grade. The more the students have absences the more the grade will become lower.

Table 1 presents the number of students of 4th Year Public Administration including the absences they have incurred for the whole duration of the class, their corresponding gender, and their final grade.

Table 1. Number of students and their corresponding no. of absences, gender, and the final grade

Students	No. of Absences	Gender	Gender	Final Grade
1	4	1	Female	80
2	0	1	Female	83
3	0	1	Female	82
4	3	0	Male	83
5	0	1	Female	86
6	1	0	Male	83
7	8	1	Female	77
8	6	1	Female	83
9	5	1	Female	75
10	3	1	Female	82
11	0	1	Female	82
12	1	1	Female	84
13	1	0	Male	84
14	0	1	Female	95
15	1	0	Male	87
16	1	0	Male	85
17	3	1	Female	89

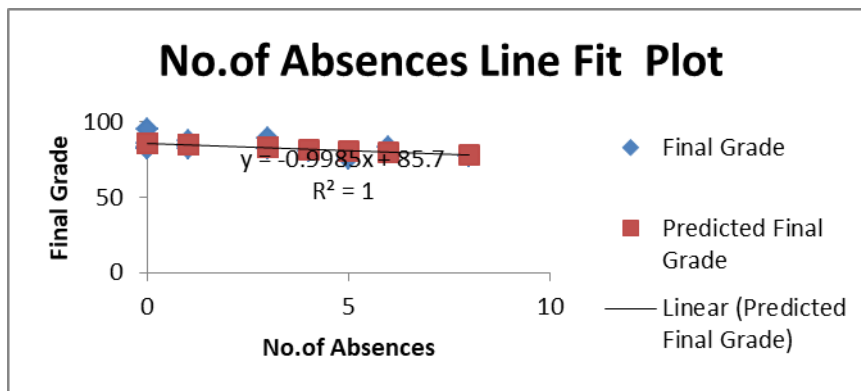


Figure 1. In blue plot are the final grade of the students against the red plot which is the predicted final grade of the student. Number of absences was compared against student’s final grade.

Fadeilmoula (2018) stated that students’ class attendance and engagement play an important role in contemporary higher education. Class attendance got a positive impact on students’ academic performance. Aden, et al. (2013) wrote that there is a moderate positive relationship between student attendance and academic performance. Based on the findings, the researchers suggest that all students, particularly prospective students, and those students who are not as academically strong, to be informed about the importance influence of class attendance on academic performance.

Table 2. Shows the null hypothesis as rejected where HO states that there is no significant difference between the number of absences and the final grades of the students in computer education class.

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	92.18417934	92.18417934	6.673748	0.020775468
Residual	15	207.1943331	13.81295554		
Total	16	299.3785124		HO: rejected	

The table shows that the there is a significant difference between the absences and the final grade of the students in computer education because the f- computed value of 6.67348 exceeds the f- critical value of 0.0208 tested at 0.05 level of significance with the degree of freedom of 1/15 this rejected the null hypothesis. This implies that the academic grades performances of the students were affected of their attendance in classes. This implies the student’s frequent absenteeism results failure or lower grades while students always present in the class will get higher or passing grade.

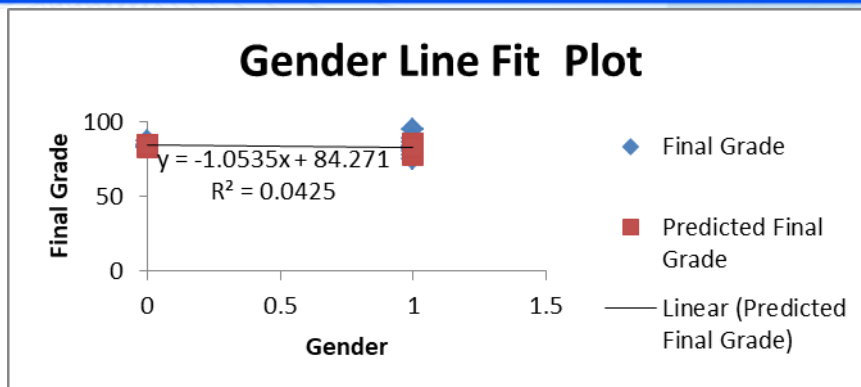


Figure 3. In blue plot is the final grade of the students against the red plot which is the predicted final grade of the student. Gender was compared against students' final grade.

Table 3. Shows the correlation of the number of absences and the gender to the result of his/her final grade.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	85.67150072	1.813472	47.2417	7.68E-17	81.78199	89.56101	81.78199	89.56101
No.of Absences	-1.000422593	0.409622	-2.44231	0.028462	-1.87897	-0.12187	-1.87897	-0.12187
Gender	0.046980004	2.096686	0.022407	0.98244	-4.44997	4.543925	-4.44997	4.543925

This shows that the absences of the students are perfectly correlated to the result of his/her final grade. Perfectly correlated because once the student is absent it means she/he has no activity, quiz, learning, recitation, or any activity that happen during the time of his absences. Once the student is absent his final grade will be affected. While the gender has negligible correlation meaning it has no connection with the final grade of the student either you are male or female.

The results of the study showed that even though the male students had slight better performance compared to the female student, it was not significant, similar with the findings in Adigun, et al. (2015). Positive correlation was found between attendance and final exam performance in all courses together, but the relationship between the variables was not statistically significant. Correlation between attendance and final exam results for each separate course was also examined and found to be positive, but also lacked statistical significance (Fadellmoula, 2018).

Conclusions and Recommendations

Faculty may emphasize to students the importance of being present in the class since the number of absences is perfectly correlated to the final grade of the students. The more the students failed to come to class the more the possibility that his grade will become lower. Students' performance will be affected once he/she is absent. However, the gender of the student has no correlation with respect to his final grade. Either the student is a male or female there is a tendency that his final grade will be passing or not depending on his performance. The teacher may look on other aspect of her grading system the possibility of changing the percentage of his/her grading system as not to affect the academic performance of the student.



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