



UNIVERSITI BRUNEI DARUSSALAM

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SM-4290 (PROJECT RESEARCH)

RESEARCH PROPOSAL'S TITLE:

STATISTICAL ANALYSIS ON UBD DORMITORY STUDENTS' ACADEMIC
PERFORMANCE

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Abstract

Students are easily influenced by their type of residence and this might affect their academic performance. Thus, this study will investigate whether living in a dormitory and gender and has an impact on grade point average (GPA) of Universiti Brunei Darussalam (UBD) students. Questionnaires will be distributed to the targeted population in the UBD. Shapiro-Wilk test, Chi-square test and linear regression are the methods that will be used in this study with the expected outcome of this study is that dormitory students tend to have better academic performance than non-dormitory. With the outcome, the researchers hope to be able to give improvements and suggestions based on the findings to the institution in providing better dormitory's environment and facilities for the students. ✓

Keywords: GPA, UBD students, dormitory, academic performance, regression.

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1. Introduction

1.1 General Background

Upon entering the tertiary institution, dormitories are already an obligation for some campuses. The dormitory is a residence provided for students who wish to study at the nearest campus. The dormitory had some impact on students both mentally and physically. It has been suggested that living on-campus increases the academic potential and, in turn, reduces the likelihood of being expelled (de Araujo & Murray, 2010). The dormitory will be able to reduce the burden on students who live far away. Living near the campus is a convenient location. It is close to campus as well as several facilities such as libraries, sports complexes and more. Additionally, it has the opportunity to develop relationships with other residents as Langlois (2018) argues that most of the dormitory students gained strong, lasting friendships and better soft skills.

↑ good contrast

However, there are also difficulties living in the dormitory. Living in a dormitory and staying in a family home is a completely different environment, thus the students may struggle to adapt to the new environment. Some students will feel homesickness. Homesickness is distress caused by being separated from home. Hess (2018), stated in his article "How to Deal with Homesickness at College", students will feel bad about leaving their home and staying in a dormitory. Add more, studies show that 1 in 10 students will find it difficult to deal with and may have difficulty in completing their studies for the coming year.

There are also some students who do not want to stay in dormitories because of their narrow spaces, shared toilets, kitchens with unfamiliar students. Although surrounded by people who offer social advantages, conflicts between roommates, friends and others can easily erupt. Positive social opportunities can also interfere with learning, and students often have to balance school work, campus activities and time with friends. López Turley and Wodtke (2010) also stated that increased access to academic resources to students on campus was offset by social aspects that disrupted campus life, resulting in a negative impact on student grades. (For instance, some students have a desire to go to the library when they can hang out with friends.)

— is this correct?

Furthermore, the dormitory might experience noise and lack of privacy. Students who are sensitive to noise tend to have a lower in scholastic ability, feel less secure in social interactions, and have a

higher desire for privacy than those who are less sensitive to noise (Weinstein, 1978). These dorm's environments may have given impact on students' academic performance. Therefore, this study will investigate how dormitory life affects the academic performance of Universiti Brunei Darussalam (UBD) students which will be explored from several aspects of dormitory life.

1.2 Significance of the study

This study will provide information on factors that influence the academic performance of dormitory students in UBD. This study also will assist institutions in their efforts to create a better environment and improving facilities provided in students' dormitories. Furthermore, they can encourage more students to live on-campus even if it just a few semesters because it somehow will result in better academic performances.

1.3 Objectives and research questions

The primary objective of this study is to determine whether there is a correlation between living in a dormitory ~~with~~ ^{for} Universiti Brunei Darussalam (UBD) students in terms of academic performance.

The study will also answer the research questions:

1. Is a students' gender related to his or her grade point average (GPA)? ← better to rephrase
2. What are the factors that motivate dormitory students to study?
3. Is there a relationship between students GPA from different year and faculty?
4. Are dormitory students satisfied with the accommodation, facilities and services provided?
5. On average, do the dormitory students have a higher GPA than non-dormitory students? ✓

1.4 Hypotheses

There are six (6) hypotheses that will be tested in this study:

I think this section is redundant

Hypothesis 1

H_0 : There is a relationship between students' gender and GPA.

H_1 : There is no relationship between students' gender and GPA.

Hypothesis 2

H_0 : Living in a dormitory has the effect of encouraging students to study.

H_1 : Living in dormitory has no effect on encouraging students to study.

Hypothesis 3

H_0 : There is a relation in GPA between on-campus students from different year.

H_1 : There is no relation in GPA between on-campus students from different year.

Hypothesis 4

H_0 : There is a relation in GPA between on-campus students from different faculty.

H_1 : There is no relation in GPA between on-campus students from different faculty.

Hypothesis 5

H_0 : Type of dormitory has affect dormitory students' GPA.

H_1 : Type of dormitory does not affect dormitory students' GPA.

Hypothesis 6

H_0 : There is a correlation between GPA and living in dormitory.

H_1 : There is no correlation between GPA and living in dormitory.

2. Literature Review

Various studies have been carried out by several researchers regarding the impact of dormitory living of students. There are many research outcomes over the different factors of each researcher. Many researchers have found that living on campus will increase the students' academic performance. de Araujo and Murray (2010) found that living on campus increases GPA by between 0.19 to 0.97. Another study by Flowers (2004) after examining the impact of the residential hall experience specifically on improving African student college education. Handling a variety of demographics, institutional characteristics, and academic and non-academic experiences in college, the results show that African American students living on campus report significant increases in personal and social development from non-residential African American students. *relevance?*

In López Turley and Wodtke (2010) study, by using a sample of 1st-year students from the National Postsecondary Student Aid Study (NPSAS) have found that for some students in most institutions, the type of residence during college does not have a significant impact on 1-year academic

significance of ethnic minority?

7

performance. However, among Black students, those living on campus have a significantly higher GPA than the same students at the same institution who live off-campus with their families. Among students attending liberal arts institutions, those living on campus also have a significantly higher GPA than the same students at the same institution who live off-campus with their families.

However, a study by Delucchi (1993), examines that students who are living off-campus and lives near the campus finds no statistically significant difference in academic performance between students living on-campus and off-campus.

✓ good contrast

3. Methodology

3.1 Description of the study area

Universiti Brunei Darussalam is the first university in Brunei Darussalam. It was established in 1985. UBD is ranked 100th in Asia by QS Asia University Rankings ("QS University Rankings: Asia 2019", 2019). UBD is located in Tungku Link. In this University there are ten academic faculties offered in the degree program.

Better to describe geography.

3.2 Target population

In this study, all UBD students enrol in full-time undergraduate study 2019-2020 academic year will be taken as a target population.

from (1st, 2nd, 4th year only?)

3rd year DY

3.3 Sampling design and techniques

The sampling method that will be utilized in this study is a random sampling. Random sampling is where each sample has an equal probability of being selected. It is estimated that the total population of undergraduate students in UBD is 3600 students (N) and 150 students (n) will be taken as a sample size. The probability of inclusion in the sample is $\frac{150}{3600}$, which is equivalent to $\frac{1}{3}$. Furthermore, It is expected that 20-30% will answer the questionnaires (response rate). Hence, in the case of 20% responded to the questionnaire, that would be:

$$\frac{20}{100} \% \times 3600 = 720 \text{ students.}$$

3.4 Data collection

The questionnaire will be distributed by online link, and the link will be distributed among UBD students via UBD emails. The first step taken is to grant permission from the UBD Research Ethics Committee (REC) in order to proceed with the survey. The role of the committees is to keep the respondents confidential as well as preventing the researcher from engaging in unacceptable ethical behaviour with the respondents. Such unethical behaviour might cause problems to the institutions, which may lead to legal action against them or bad publicity. Thus, the committee is responsible to protect the researcher with their ethical guidelines so they are less likely to conduct research that could damage their reputation (Bryman, 2012).

After permission is being granted, the Student Affairs Section (HEP) will help to distribute the questionnaire's link to targeted UBD students' as they are the only party allowed to distribute the survey. Primary data collection will be collected by using a self-completion questionnaire. The questionnaire will be distributed to all random UBD students through email electronics form. This form will enable quick data extraction by providing a downloadable Excel document containing the results. Thus, it is easier to analyse the data.

3.5 Variables identification

Dependent variable: Grade Point Average (GPA)

Explanatory variables:

- UBD students ?
- Gender
- Faculty
- Year
- Type of dormitory
- Studying time

3.6 Method of data analysis

The method that will be used in this study for data analysis are:

1. Shapiro-Wilk test: It is a test for normality which will be used for every factor conduct in this study to check whether the data is normally distributed or not.

2. Pearson's Chi-square (χ^2): It is applied to the contingency tables. It will allow establishing how confident that there is a relationship between the two variables in the population. A contingency table is probably the most efficient of all methods of analyzing relationships where they can be used in relation to any pair of variables, although they are not the most effective method for multiple pairs (Bryman, 2012). This method will be used to find if there is a relationship between the dependent variable GPA with the independent variable such as gender, different year (hypothesis 3) and faculty (hypothesis 4).
3. Linear regression: Linear regression explain the relationship between one dependent variable with one or more explanatory variables. This method will be used to check for relationships of every explanatory variable in this study with the dependent variables (GPA).

ANOVA?



4. Limitation to the study

There are several expected limitations when conducting this study. One of the limitations is time consuming when dealing with REC. In addition, the number of respondents might not reach the targeted expected numbers due to the questionnaire will be enabled to respondents for two (2) weeks only. Some students might not signing-in to their email within given two (2) weeks.

I don't feel this is valid concern...
more concerning is data quality

5. People Involved

This study involved Nurhafizah binti Saufi as a researcher and responsible in designing the questionnaire, research proposal and journal article, under the supervision of Dr Haziq Jamil (Assistant Professor in Statistics) throughout the research process. Also, the REC and HEP who help to distribute the questionnaire form.



6. Possible outcome of the study

The study that will be conducted is expected to prove that dormitory students in UBD tend to have higher GPA compared to the non-dormitory students because of some expected reasons such as the motivation to study in living in a dormitory.

Ⓢ In this section, talk about tangible outputs of the study- NOT predicted results.

7. Timeline

Below summarizes the components of the different stages of study and how they will be divided into an estimated date.

STAGE	TASK	DATE	DURATION (WEEKS)
1	Writing a research proposal	16th September-14th October 2019	4 weeks
2	Distribution of questionnaires	5th-19th January 2020	2 weeks
3	Data analysis	20th January-24th February 2020	5 weeks
4	Writing a journal article	25th February-21th April 2020	8 weeks

a bit more detail would be better.

8. Ethical Considerations

The survey that will be going to distribute will provide the respondents with brief information about the research objectives. Before distributing the survey, respondents should be informed that all information and response provided is anonymous and will be kept confidential. Their name is not needed for privacy reasons. (To conclude, there will be no significant ethical issues throughout the research process.)

doubtful...

9. Summary

In summary, staying in a dormitory has both its pros and cons for some students which may also affect their academic performance. Therefore, this study will be used in the future to help the UBD to improve the dormitories and encourage more students to stay on-campus. The main objective of this study was to find out the correlation between student academic performance and UBD student dorm life. The methods that will be used in this study are the Shapiro-Wilk test, Pearson's Chi-Squared test and linear regression. The possible outcome of this study is that dormitory students tend to have better academic performance than non-dormitory. However, some limitations may occur such as limited time for comprehensive research. The study begins on September 16, 2019 and expected to end in April 2020.

Ⓢ see above.

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cheeky

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