Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 2, 3443 – 3450

Influence of Students' Motivation on Academic Achievement Among Undergraduate Students in Malaysia

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Abstract

Motivation is essential for students to study and enhance their academic performance. This study aimed to assess the impact of student motivation on academic accomplishment among undergraduate students in the University Sultan Zainal Abidin, Malaysia. How pupils build motivation in themselves may influence how successful they are academically. Pilot research was conducted on 144 participants using exploratory factor analysis to establish the instrument's reliability and validity. However, the study showed no significant difference in accomplishment motivation between high and poor achievers. Similarly, the data found that males and females differed significantly in achievement desire. Using the Statistics Program for Social Science (SPSS) version 20, the data were analysed using correlation analysis and fundamental linear regression analysis. The findings revealed that students' motivation boosted their academic success. Similarly, the regression analysis revealed that motivation was a strong predictor of greater academic accomplishment (GPA).

Keywords: Motivation, academic performance.

Introduction

Motivation is vital in an individual's academic accomplishment since it is defined as the person's attempt to complete a task, committing the necessary effort, and sustaining it (Celikoz, 2009). Learners' motivation is shown in their selection of academic assignments, the amount of time and effort they put into each activity, and their tenacity in academic studies. Students can also overcome problems in the learning process if they are motivated (Peklaj & Levpuscek, 2006).

The activation of goal-oriented behaviour is referred to as motivation. Motivation is classified as either intrinsic or extrinsic. The phrase is typically used to humans, although it may conceivably be applied to the reasons of animal behaviour as well. The topic of this essay is human motivation. According to many interpretations, motivation might be anchored in the basic urge to reduce physical discomfort and increase pleasure. It involves particular demands such as eating and relaxing or be linked to less obvious motives such as altruism, selfishness, and morality or avoiding mortality. Motivation should not be mistaken with either volition or optimism from a conceptual standpoint (Arellano, 1998; Bakar, 2016). Motivation is connected to, but not the same as, emotion.

When someone is overjoyed to fulfil a need or want, the idea of motivation is compelling. The individual will engage in or be drawn to acts that are seen to have the potential to fulfil this need or desire (Tan et al., 2003). Fontana (1981) held that if there is an inadequate incentive to learn, the outcome would be unsatisfying. There are many characteristics of motivation. According

to Denhardt et al. (2008), motivation is "what leads people to behave as they do." Pettinger (1996) on the other hand described motivation as an environmentally dependent variable in which people's actions are influenced by their surroundings.

Meanwhile, Denhardt et al. (2008) state that motivation cannot be directly seen. They stated that motivation is an inner sensation that causes people to act in a certain way to attain a specific goal and purpose. According to Zimmerman (2004), self-motivation happens in the absence of external rewards or incentives and can be a clear indicator that a learner is becoming more independent.

Literature Review

Definition of motivation

Motivation is commonly defined as the drive to attain goals and the act of maintaining that drive. Motivation is critical for all cognitive behaviours, including planning, organising, decision-making, learning, and assessment (Pintrich & Schunk, 1996). Individuals' performances are frequently assessed by comparing them to standards or those of others. Scholars' varied viewpoints result in various conceptions of achievement motivation. Atkinson (1964) defined accomplishment motivation as comparing one's performance with that of others and against some benchmark activities. According to Atkinson and Feather (1966), accomplishment motivation mixed two personality variables: a proclivity to approach success and a proclivity to avoid failure.

Motivation and learning achievement

Abu Bakar et al. (2010) investigated the links between achievement motivation, attitude, and academic performance among Malaysian university students. Their research aimed to determine the connections between achievement motivation, attitude, and academic accomplishment in pupils. A structured questionnaire was distributed to 1484 University students drawn from five faculties using cluster sampling. The data collected was evaluated using correlation and regression analysis. Their findings demonstrated a substantial positive link between students' attitudes toward learning and accomplishment motivation. The study also discovered a beneficial relationship between students' attitudes and academic success. On the other hand, the study suggested that there is a low and negative association between students' achievement motivation and their academic performance.

Mahyuddin et al. (2009) investigated emotional intelligence, achievement motivation, and academic accomplishment among students at public and private higher education institutions in comparative research. Their study demonstrated a statistically insignificant beneficial association between students' success motivation and academic performance. Remali et al. (2013) researched understanding academic performance among university students based on demographic characteristics, motivation factors, and learning styles in a related study. Their research aims to identify the primary factors that promote academic accomplishment among first-year accounting students at University Tenaga Nasional with 170 respondents were given a standardised questionnaire. The obtained data were evaluated using Spearman Correlation. According to the findings of their study, there is a significant association between motivating elements and students' academic achievement. The findings also demonstrated that the usage of learning techniques directly impacted students' academic achievement. Similarly, their data suggested no association between gender and the past academic experience of learners.

Study on high school students' success motivation, academic self-concept, and academic accomplishment was the primary goal of Emmanuel et al. (2014) research investigating high school students' accomplishment motivation and the link between achievement motivation and self-concept and academic achievement. The needed respondents were chosen using a stratified random sampling approach. The research included 120 students in total. The respondent's information was gathered using a structured questionnaire. Data were obtained and evaluated utilising percentages and correlation analysis. Their study found that there was a link between self-concept and academic achievement in students. The studies also revealed a favourable relationship between achievement motivation and academic performance in kids. The association, however, was determined to be statistically negligible.

Veena and Shastri (2013) researched the success motivation of college students. The study's objectives are to examine success motivation in pure and applied science students, investigate accomplishment motivation variations between high and low achievers, and identify achievement motivation based on gender disparities. A questionnaire was given to 656 undergraduate students, 305 of whom were males, and 351 of whom were girls. The study's outcomes demonstrated a significant variation in achievement motivation between pure science and applied science students. However, the study showed no significant difference in accomplishment motivation between high and poor achievers.

Similarly, the data found that males and females differed significantly in achievement desire. Rehma and Haider (2013) explored the influence of motivation on the learning of secondary school pupils in Karachi, Pakistan, in similar research. The study's primary goal was to investigate the impact of motivation on student learning. A closed-ended questionnaire was distributed to 40 pupils and 40 instructors. The data obtained was examined using a basic percentage approach. The study's findings demonstrated that an effective educational technique increased student motivation. The data also showed that rewarding and punishing pupils increased their drive to study. Furthermore, pupils reported that the allure of a prize for completing a particular job drove them to learn.

Methodology

A correlational methodology was employed to investigate the impact of students' motivation on academic accomplishment among Universiti Sultan Zainal Abidin (UniSZA) undergraduate students. The correlational study is considered appropriate because the research focused on finding the relationship between the variables of motivation and the academic achievement of UniSZA's undergraduate students. The study population consists of 7625 students of UniSZA's across the three campuses. The campuses are Gong Badak; Tembila, and Kota campus. The study population has the following features: male and female, belonging to middle socioeconomic status, Malaysian nationals and having a good educational background.

In terms of sampling, a nonprobability sampling technique was employed to select the required respondents' choices for the study. Nonprobability sampling refers to a sampling strategy in which individual individuals of the population do not have an equal or known likelihood of being chosen to be a member of the sample (Sherri, 2006). The researchers use convenience sampling, which involves getting participants wherever you can find them and typically wherever is convenient. The sample size for this study is 364 students of (UniSZA) obtained from Krejcie and Morgan's (1970) table to determine sample size. This number will represent the larger population, and the results obtained using the sampled students will be generalisable to the entire UniSZA undergraduate students.

The researchers employed a questionnaire as a data collecting instrument to get the necessary information on students' motivation on academic accomplishment among (UniSZA) undergraduate students. The researchers developed the questionnaire to address the issue under investigation. A closed-ended questionnaire was developed with a seven-point rating system ranging from 1 strongly disagrees to 7 strongly agrees. A closed-ended questionnaire is helpful since it allows participants to select from a list of options, eliminating the problem of undesired replies. It is also straightforward to score and saves time. The questionnaire consists of demographics (seven items) and motivation (nine items). The questionnaire was translated into Malay to enable different categories of respondents to understand its contents thoroughly. The validity of a measuring instrument is a measure of its accuracy. It denotes whether or not the instrument measures what it purports to measure (Sherri, 2006; Sulaiman et al., 2021).

For this study, the developed questionnaire goes through scrutiny by experts in Educational Psychology to ascertain its content validity, face validity, criterion validity, and construct validity. Therefore, a pilot testing was conducted with 144 volunteering students. The pilot research's goal was to assess the feasibility and suitability of the designed questionnaire and its effectiveness in measuring the study variables (Abu Bakar &Al-Smadi, 2019; Ghaani&Roslin, 2021).

A total of 450 questionnaires were distributed to various respondents to do away with spoiled, damaged, and unreturned questionnaires. The questionnaire was distributed in hostels, libraries, and lecture theatres. The data was taken because it allows easy access to the respondents and, beyond all, easy retrieval of the questionnaires. A female assistant was involved in getting the questionnaire to female respondents and its eventual retrieval in their hostels. To avoid missing questionnaires, the researchers jot down the room numbers of those who accepted participating in the study. The researchers brief the respondents on the study's aim and ensure the confidentiality of any information provided.

Similarly, the researchers assure the responders that what they are about to contribute will not be included in their academic records in any manner. After the completion and the subsequent retrieval of the questionnaire, the experts carefully sorting out the filled questionnaires. Lastly, the coded responses were subjected to a statistical analysis using the statistical package for social sciences. Using the statistical software for social science (SPSS) version 20, the data was examined using correlation analysis and a fundamental linear regression analysis.

Results and Discussion

The study aimed to examine the influence of students' motivation on academic achievement among (UniSZA) undergraduate students. A pilot study was conducted to ascertain the construct and content validity and the reliability of the research instrument.

Demographic information of the samples

Table 1 shows the detail of the respondents' demographic information consisting of gender, age, and faculties of respective students. The mean and standard deviations of the variables in the study were displayed on descriptive statistical tables. Also, analysis methods of correlation, model summary, ANOVA, and coefficient tables with their respective interpretations were presented. Table 1 contains the demographic information of the respondents. The demographics presented are the gender category of the respondents, their age level, and their respective faculties. The data was presented in a tabular form for easy identification and understanding. The research included 364 students in total. Of this total, 162 are men, accounting for 44.5 per cent of the research sample size. In contrast, 202 responders were female, accounting for 55.5 per cent of the research sample total.

Table 1. *Gender of samples*

Gender	Frequency Percentage
Male	162
	45.5%
Female	202
	55.5%
Total	364
	100%

Table 2. *Participants' age*

Age Group	Frequency Percentage
15-20 years	135
	37.1%
20-25 years	214
	58.8%
25 above	15
	4.1%
Total	364
	100%

Table 2 provides a breakdown of the age categories of the study sample. Three age groups were provided namely; 15-20 years that has 135 within that range representing 37.1% of the study sample. Next is the 20-25 years age group with a total number of 214 people representing 58.8%, while the last category was 25 and above with just 15 persons within the range representing only 3.1% of the study sample.

Table 2 shows that the study has more respondents within the 20-25 years category, accounting for 58.8% of the study sample, followed by the 15-20 years category with 135 respondents representing 37.1% of the study sample. Twenty-five years and above have the least representatives, with only 15 persons representing only 4.1% of the study sample. This

shows that the samples did not exceed 25 years of age on average.

Table 3. *Faculties according to the frequencies and percentages of students*

Faculties	Frequency	Percentage
Faculty of Islamic Contemporary Studies	99	27.2%
Faculty of Economic and Business Management	62	17%
Faculty of Applied Social Sciences	57	15.7%
Faculty of Medicine and Health Sciences	36	9.9%
Faculty of Informatics and Computing	32	8.8%
Faculty of Law, Accounting, and International Relations	21	5.8%
Faculty of Languages and Communication	19	5.2%
Faculty of Innovative Design and Technology	19	5.2%
Faculty of Bio-resources Food Technology	19	5.2%
Total	364	100%

The above table shows a breakdown of the study sample by faculty. Students in all the nine faculties of University Sultan Zainal Abidin were involved in the study. The faculty of Islamic contemporary studies have the lion share of 99 respondents representing 27.2% of the study sample, followed by the Faculty of Economics and Business Management, with 62 respondents representing 17% of the study. Faculty of Applied Social Sciences is third with 57 respondents representing 15.7% of the study, while the Faculty of Medicine and Health Sciences is fourth with 36 respondents representing 9.9% of the study sample. Next is the Faculty of Informatics and Computing, with 32 respondents representing 8.8% of the sample size, while the Faculty of Law, Accounting, and International Relations was sixth, with 21 respondents representing 5.8% of the sample size. Lastly, the faculties of Languages and Communication, Bio-resources Food Technology, and Innovative Design Technology had 19 respondents, each representing 5.2% of the sample size.

Table 4. *Descriptive statistics of variables examine in the study*

Variables	Mean
	Standard
Deviation	N
Motivation	5.8327
	.64412
	364
Students' GPA	3.1892
	.51014
	364

Meanwhile, Table 4 provides a descriptive statistic for the variables in the research. Students' motivation is the only independent variable in the table, while their GPA is the only dependent variable. The average level of motivation among students is 5.8327. The dependent variable of the research, student's GPA, had a mean score of 3.1892. The mean scores represent the average points obtained by each of the 364 respondents in the sample.

The relationship between motivation and students' academic achievements

Table 5 shows the correlation between motivation and CGPA of the samples in the study. It showed that correlation value of 0.668 demonstrated a positive association between student motivation and academic achievement. The correlation value of 0.668 is very close to one. The stronger the link, the closer the value is to one. Likewise, the two variables are statistically significant since the significance criterion is 0.000, less than p=0.05, and N indicates the study sample of 364. The correlation coefficient revealed a significant relationship between student motivation and

academic achievement (GPA). In other words, the higher the level of motivation of pupils, the higher their GPA grade; conversely, the lower their level of motivation, the lower their GPA grade.

As a result, the correlation value of 0.668 indicates a strong positive correlation between students' motivation and academic achievement. It also implies that the null hypothesis that there is no significant relationship between motivation in self-regulated learning and academic achievement among UniSZA undergraduate students is rejected.

Table 5. *Correlation between motivation and GPA*

Pearson Correlation	GPA	P
Motivation	.668**	0.000

* p < .05. ** p < .01.

These findings align with Ikhwan et al. (2009) and Remali et al. (2013) stated that successful learners maintain high levels of motivation in learning.

While, Table 6 shows the analysis of variance (ANOVA) used to assess the regression model's fitness. The F-statistic value is 222.169, while the P-value is 0.000, indicating that the regression model matched the data since the P-value (sig.) is 0.000, which is significantly less than 0.05, which is the area of rejection.

Table 6. *Analysis of ANOVA to assess the Regression Model Fitness*

Regression	61.240	3	20.413	222.169
Residual	33.227	360	.092	.000
Total	94.468	363		

Meanwhile, Table 7 displays the independent variable's influence on the dependent variable in relation to the regression coefficient. We have a negative t-statistic value of t= -4.537 with a value of p= 0.000, which is statistically significant despite the negative t statistic value. This is because at this point the P < 0.05. Results indicated that motivation is the second best in predicting students' academic achievement. Motivation has a t statistic value of 5.233 at p=0.000; at this point, the statistic is significant because the value of p is less than 0.05.

Additionally, motivation has an unstandardised B value of 0.180. This shows that motivation alone is predicted to increase students' academic achievement (GPA) by 18%, and for any increase in students' motivation, students' academic achievement (GPA) is expected to increase by 18%, holding all other factors constant.

Therefore, based on the obtained result from the coefficients table, the variable of students' motivation has a considerable effect on UniSZA undergraduate students' academic achievement (GPA). Hence, the null hypothesis is rejected that students' motivation does not affect UniSZA undergraduate students' academic achievement. The findings demonstrated that the factors of students' motivation have a significant impact on students' academic accomplishment (GPA), and hence serve as strong predictors of students' academic achievement (GPA).

Table 7. *Regression coefficient of motivation as a predictor variable in students' academic achievement*

Variable	B	SE	β	t	P
Constant	-.707	.156		-4.537	.000
Motivation	.180	.035	.231	5.233	.000

Conclusion

The study investigates the impact of student motivation on academic accomplishment among undergraduate students at UniSZA. The study investigates the impact of student motivation on academic achievement among UniSZA undergraduate students. At the 0.05 threshold of significance, the hypothesis was tested. The study's main finding is a significant positive association between motivation and academic accomplishment among UniSZA undergraduate students. It indicated a favourable association between motivation and academic achievement. Also, according to the survey findings, UniSZA undergraduate students are motivated to learn. In general, student motivation has a beneficial impact on academic performance, and it was also an excellent predictor of students' academic progress (GPA).

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