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FACTORS INFLUENCING STUDENTS' ACADEMIC PERFORMANCE IN MALAYSIAN HIGHER EDUCATION INSTITUTIONS

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Abstract: The academic performance of students in higher education is influenced by various factors, particularly in Malaysia, where education is a key to socioeconomic advancement. Notable drivers of success include family influence, group discussions, peer interactions, and course assessments. Family influence, encompassing parental involvement and socioeconomic status, plays a crucial role by providing emotional and financial backing. Group discussions and peer interactions enhance collaborative learning and critical thinking, while positive peer influence motivates academic achievement. Course assessments also significantly affect student motivation and learning approaches. This study investigates the impact of these factors on academic performance among 448 students at higher education institutions. This quantitative research collected data through structured questionnaires, employing proportionate stratified random sampling and analysed with Smart PLS 3.2.1. The interplay of these elements in Malaysian higher education underscores the importance of personal, social, and institutional influences, offering insights for educators and policymakers to improve educational outcomes.

Keywords: Academic Performance; Family Support; Group Discussion; Peers; Course Assessment

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1. Introduction

Academic performance in higher education is vital for both individual students and Malaysia's socio-economic landscape. Key factors affecting academic performance include peer support, group discussion, family support, and course assessment. Bakar et al. (2023) emphasize that supporting disadvantaged students can improve overall outcomes. Targeted programs for underperforming groups could enhance outcomes (Hassan et al., 2020). In conclusion, academic performance in Malaysian higher education is influenced by various interrelated factors, and ongoing research is essential to inform policies that promote student success and maintain Malaysia's competitiveness in the global knowledge economy. Future studies should explore the long-term impacts of these determinants and assess educational reforms.

1.1 Problem Statement

Academic performance in Malaysian higher educational institutions is crucial for individual career prospects and national development, yet disparities persist among students from different socio-economic backgrounds and ethnicities. Factors such as self-motivation, family support, and socio-economic conditions significantly influence these outcomes. Bakar et al. (2023) emphasize the connections between self-motivation and family support, alongside the impact of socio-economic status and ethnicity on educational disparities. The shift to e-learning and blended learning during the COVID-19 pandemic has further highlighted the need to understand these dynamics in a diverse educational landscape (Setapa et al., 2024). This study aims to analyse the determinants of academic performance, focusing on the interplay of individual, family, and institutional factors to inform policy interventions that enhance performance and promote equity in the educational system.

2.0 Literature Review

2.1 Academic Performance

In this study, the dependent variable is academic performance, which measures students' achievement through indicators like examination scores, GPAs, and overall outcomes. Recent literature highlights academic performance as a vital measure of educational effectiveness and student success. For example, Raj et al. (2019) identify it as a key factor in analysing how socio-economic status and communication skills affect business students. Similarly, Bakar et al. (2023) show that familial support and socio-economic conditions significantly influence academic performance, linking these independent variables directly to student outcomes (Shahzad et al., 2021; Ali et al., 2013). Studies emphasize the importance of external factors, such as socio-economic background and educational environment, in shaping academic outcomes (Tangaraju et al., 2013). In summary, academic performance is a crucial dependent variable in educational research, offering insights into the effectiveness of educational systems and the factors influencing student success in higher education.

2.2 Family Influence

Family influence is a crucial factor affecting academic performance in Malaysian higher education, with parental involvement, socio-economic status (SES), and emotional support playing key roles. Research by Ahmad et al. (2017) shows that active parental engagement, such as helping with homework and attending events, correlates with better academic success. Higher family income enables more investment in education, leading to improved outcomes (An, 2010), while lower SES can present financial challenges that hinder achievement (Baliyan et al., 2012). Emotional support is equally important; Fitriana et al. (2022) found that parental encouragement enhances students' self-efficacy and performance. Additionally, family influence varies by cultural and ethnic backgrounds, affecting educational values and outcomes (Bakar et al., 2023). Understanding these dynamics is essential for developing effective educational policies and interventions to improve student outcomes in Malaysia.

H1: Family influence is positively significant with academic performance.

2.3 Group Discussion

Group discussions significantly enhance academic performance by promoting active learning and deeper understanding. Bakar et al. (2023) found that students involved in discussions perform better than those in traditional lectures, as these interactive formats encourage the articulation of thoughts and engagement with diverse perspectives. Additionally, Ryan et al. (2015) noted that group discussions foster critical thinking and problem-solving skills, leading to richer subject comprehension. Fitriana et al. (2022) emphasized that a sense of community in discussion groups boosts motivation and participation, while Setapa et al. (2024) demonstrated that structured discussions after lectures improve knowledge retention and assessment scores. Overall, understanding the dynamics of group discussions is crucial for educators in Malaysian higher education to implement effective teaching strategies.

H2: Group discussion is positively significant with academic performance.

2.4 Peers

Research indicates that students who associate with high-achieving peers are more likely to adopt positive behaviours, thereby improving academic outcomes. Kharb and Chahal (2023) noted that supportive peer interactions foster productive discussions and collaborative learning. Conversely, negative peer pressure can lead to prioritizing social activities over academics, resulting in neglect of studies (Reang & Kaipeng, 2022). The composition of peer groups is crucial, as positive friendships promote healthy competition and motivation, while negative associations can cause disengagement (Bankole & Ogunsakin, 2015). Additionally, peers provide essential emotional and social support that enhance self-esteem and reduce stress. Overall, understanding peer influence is vital for improving academic performance, emphasizing the need to foster positive interactions while mitigating negative ones to enhance student outcomes.

H3: Peers are positively significant with academic performance.

2.5 Course Assessment

Course assessment plays a crucial role in academic performance of higher education, with different methods affecting student outcomes. Struyven et al. (2006) found that interactive and formative assessments often yield better results. Students' perceptions of assessments are also important; Bembenuddy (2009) noted that seeing assessments as fair boosts motivation and engagement. Effective assessments provide critical feedback, allowing students to identify strengths and weaknesses, while Ghadiri et al. (2023) highlighted that feedback-focused formative assessments correlate with higher achievement. Additionally, aligning assessments with course learning outcomes is vital, as Bakar et al. (2023) found that this alignment improves performance and fosters meaningful engagement. Understanding these dynamics can help educators design effective assessment strategies to enhance student achievement in Malaysian higher education.

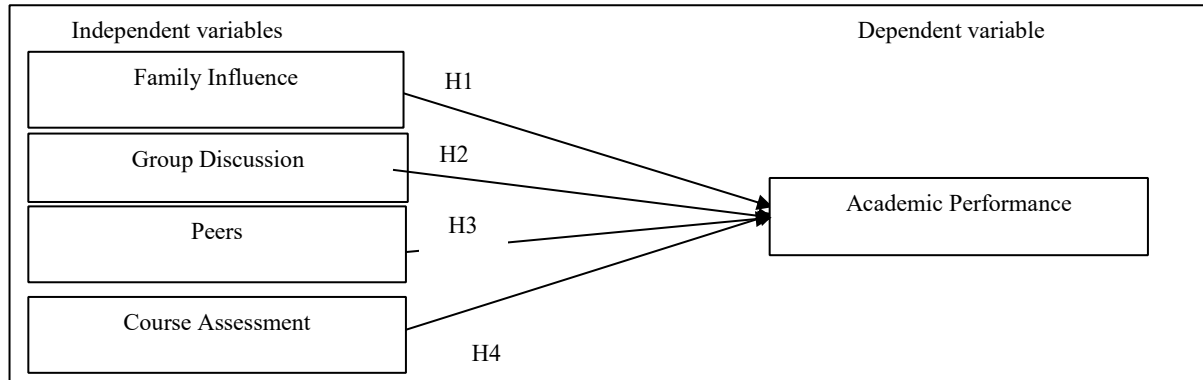
H4: Course assessment is positively significant with academic performance.

2.6 Research Framework

This study employs quantitative research with a descriptive approach, utilizing a survey targeting students, who are the sampling units based on their awareness of their academic success. The sample size comprises 448 students from the Faculty of Business and Management at Universiti Teknologi MARA Kelantan Branch (UiTMCK). A questionnaire with 42 items was distributed via Google Forms, covering demographics, independent and dependent variables, using a five-point Likert scale for responses. The association between these variables and academic performance was

analysed using the Statistical Package for Social Science (SPSS) for demographic data and Structural Equation Modeling-Partial Least Squares (SEM-PLS) with SmartPLS 3.2.1 for structural model evaluation.

Figure 1: A Conceptual Framework with Hypotheses Development between Factors and Academic Performance



4. Findings

4.1 Profile of Respondent

The demographic profile of the study's respondents is classified into five (5) categories based on analysis with SPSS. They are the current semester, CGPA, programme level, programme name, and gender. The analysis reveals that a total of 448 respondents participated in the survey, with 19.2% being male and 80.8% female. The respondents were primarily pursuing degrees (45.3%), while 54.7% were diploma students. Among the various programs, BA111 had the highest representation with 28.6% of respondents, followed by BA119 at 16.7%. BA232 and BA242 each had 17.6%, and the least represented program was BA250, with only 3.8%. In terms of the current semester, the majority of students (35.7%) were in their third semester, and the smallest group was in their second semester (8%). Regarding academic performance measured by CGPA, 34.4% of respondents had a CGPA of 3.51 and above, while a significant portion (40%) had a CGPA ranging from 3.01 to 3.50. Only a small fraction (0.9%) had a CGPA between 1.50 and 2.00. Overall, the data reflect a diverse student body in terms of gender, program enrollment, semester, and academic performance.

4.2 Measurement Model Evaluation of Internal Consistency Reliability

The first criterion to be determined in the measurement model is internal consistency reliability which includes Cronbach's alpha and composite reliability. Specifically, the composite reliability values should be higher than 0.70 (Hair et al., 2014) to show the modest reliability applicable in the research.

Table 1: Internal Consistency Reliability

Construct	Loading range (>0.70)	Composite Reliability (>0.70)	Cronbach's Alpha (α) (>0.60)
Family Influence	0.796– 0.909	0.831	0.807
Group Discussion	0.754– 0.872	0.842	0.830
Peers	0.739– 0.851	0.831	0.817
Course Assessment	0.748– 0.850	0.833	0.817
Academic Performance	0.770– 0.841	0.885	0.827

Table 1 presents the internal consistency reliability for various constructs related to a study. In summary, the constructs of family influence, group discussion, peers, course assessment, and academic performance show strong internal consistency, as indicated by their high loading values,

composite reliability, and Cronbach's Alpha scores. This suggests that the measurement model is reliable for these constructs.

4.3 Structural Model Evaluation

The structural model involves the analysis of the relationship between the latent variables or constructs. This includes the collinearity assessment, path coefficient, coefficient of determination (R^2), effect size (f^2) and predictive relevance (Q^2) and blindfolding (Hair, 2014).

4.3.1 Assessment of Coefficient of Determination (R^2)

Table 2 shows the R^2 value for the endogenous construct that achieves the acceptable value of R^2 . The determination coefficient (R^2) for academic performance was 0.184, indicating that the model explains approximately 18.4% of the variance in academic performance, which is considered weak. Thus, this model is meaningful with strong predictive capacity.

Table 2: Determination Coefficient (R^2)

Endogenous variable	R^2 value	Threshold
Academic Performance	0.184	≥ 0.19 (weak)

4.3.2 Overall Results of Structural Model Analysis

The results of the hypothesis testing are summarized in Table 3. In conclusion, two (2) hypotheses were accepted in this research.

Table 3: Results of the Structural Model Analysis (Hypotheses Testing)

Hypothesis	Relationship	Standard Beta (β)	Standard Error	t-value	f^2	P value	Decision
H1	Family Influence -> Academic Performance	0.023	0.052	0.448	0.000	0.654	Not Supported
H2	Group Discussion -> Academic Performance	0.031	0.070	0.437	0.001	0.662	Not Supported
H3	Peers -> Academic Performance	0.365	0.064	5.717	0.102	0.000	Supported
H4	Course Assessment -> Academic Performance	0.358	0.074	4.808	0.025	0.000	Supported

* 1.645 - 2.32

** 2.33 and above

**p<0.01

5. Discussion

The academic performance of students in Malaysian higher educational institutions is influenced by factors such as family support, peer interactions, group discussions, and course assessments. Family involvement, highlighted by Hill and Tyson (2009), plays a crucial role, as a nurturing environment fosters better performance. Peer interactions enhance critical thinking and problem-solving skills, as noted by Johnson and Johnson (2009), while the Malaysian Education Blueprint (2013-2025) stresses the importance of a collaborative learning ecosystem. Additionally, effective course assessments provide essential feedback that guides learning. Hattie and Timperley (2007) found that timely feedback promotes self-reflection and improved study habits. By fostering supportive environments, encouraging collaboration, and implementing strong assessment strategies, educational stakeholders can significantly enhance student outcomes in this dynamic educational landscape.

6. Conclusion and Recommendations

In conclusion, academic performance in Malaysian higher educational institutions is significantly influenced by a support system comprising family influence, peer interactions, and

effective assessment strategies. Research indicates that active family participation fosters higher academic outcomes and promotes a growth mindset. Furthermore, peer interactions and group discussions enhance critical thinking and problem-solving skills, while formative assessments provide timely feedback that guides learning and encourages self-reflection. By integrating these elements, educational stakeholders can create a robust framework that improves academic performance and prepares students for success in a complex world, effectively addressing their diverse needs.

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