

## English Acquisition through the Lens of Attitude and Emotional Intelligence among Pre-university Learners

Huay Woon You\* and Nor Azman Ahmad Adzrie

*Pusat PERMATA@Pintar Negara, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia*

### ABSTRACT

As technology has advanced, English has emerged as the universal language of communication. Acquiring proficiency in English is essential, and the attitude towards learning English is considered a crucial factor influencing the learning outcomes. Given the importance of education in moulding students' psychological well-being, knowledge of emotions has received increased attention. Hence, the emotional aspects of learners, which impact various areas of daily life, warrant further investigation. This study examines the influence of attitude towards English acquisition and emotional intelligence on academic performance and language proficiency among pre-university learners. Academic performance is assessed based on grade point average (GPA), and language proficiency is assessed by the Malaysian University English Test (MUET) band score. To achieve this, 116 pre-university learners were randomly selected, and data on attitudes, academic performance, language proficiency and emotional intelligence were collected through a questionnaire survey. The results indicate that females scored higher in emotional intelligence compared to males. Additionally, females are more likely to experience fear or unpleasant emotions while learning English than their male counterparts. Attitude towards English acquisition emerged as the only significant predictor that enhanced the model's predictive capability for MUET band scores. The study concludes by emphasising the importance of learners' attitudes in shaping their English language learning process, suggesting that greater awareness in this area could lead to more effective language acquisition and improved educational outcomes. Implications drawn from the current study suggest that integrating

emotional intelligence and attitudes towards English acquisition can help learners develop positive academic performance. Finally, this study is projected to be useful for educators and policymakers.

*Keywords:* Emotional intelligence, English acquisition, grade point average, Malaysian University English Test (MUET), pre-university learners

### ARTICLE INFO

*Article history:*

Received: 13 August 2024

Accepted: 05 August 2025

Published: 28 January 2026

DOI: <https://doi.org/10.47836/pjssh.34.1.01>

*E-mail addresses:*

[hwyoun@ukm.edu.my](mailto:hwyoun@ukm.edu.my) (Huay Woon You)

[adzrieazman@gmail.com](mailto:adzrieazman@gmail.com) (Nor Azman Ahmad Adzrie)

\* Corresponding author

## INTRODUCTION

Education is considered a powerful instrument that improves the socio-cultural life of a country and plays an important role in human development. Education must be planned in a manner that provides learners with the ability to read, write, and perform arithmetic. In the context of education, learning is the process of acquiring new values, abilities and knowledge, enabling learners to realise their greatest potential (You, 2018). It encompasses various techniques, such as note-taking, memorisation and observation (Taheri et al., 2019). A well-structured learning process is required for understanding and mastering a subject matter.

Learning and mastering a language is important, as it is a tool for communication and is essential in the learning process to facilitate the learner's understanding of the subject matter. The rapid advancement of science and technology and globalisation have transformed the English language landscape and its use in Malaysia. Malaysians need to learn the English language because it is widely used in daily activities, including education and administration. In Malaysia, the English language is formally used as a second language and is regarded as an important part of the education system in the country. As such, the English language has been introduced in early education.

The use of the English language has become increasingly important in higher education. One of the crucial parts is the proficiency of the language, which can be described as the learner's ability to

use English meaningfully. The English language performance of the students will be evaluated based on the Malaysian University English Test (MUET) (Nopiah et al., 2011). The MUET's result is one of the criteria being considered during the application to enrol in public universities in Malaysia. The pre-university programme serves as a transitional stage for students' post-high school education, marking the beginning of their higher education journey. The students will take their MUET during the pre-university programme. Moreover, there is a significant difference in learning style between high school and pre-university programmes, including the medium of learning and teaching instruction (Wong & You, 2023). The primary objective of pre-university education is to equip students with the necessary skills and knowledge to excel in university-level studies. During this phase, students adapt to changing environments while managing academic challenges. In addition, pre-university learners experience studying away from home for the first time. They must take charge of their daily activities, such as time management, without parental or guardian supervision, which indirectly affects their learning process and emotional competencies.

Emotional intelligence refers to a set of cognitive abilities that enable individuals to perceive, manage and utilise emotional information (D'Amico et al., 2020). It is more precisely defined as a collection of emotional and cognitive abilities, including the ability to perceive emotions accurately,

manage one's and others' emotions, and utilise emotional knowledge. It is essential for a learner to regulate, control and manage the academic environment successfully. This is particularly important for pre-university learners, as they need to manage their studies and emotions simultaneously when studying away from home and getting along with new classmates. This highlights the importance of emotional intelligence in the learning process. Being emotionally intelligent can enhance life in various ways, such as improving decision-making and stress management (Santhosh & Basha, 2022). This capability is also essential in solving academic problems.

In the evolving field of language teaching theories and practices, the attitude of learners is crucial to optimise the learning outcomes and is increasingly taking centre stage. A learner's attitude can be defined as a set of feelings towards the use of the language, which can either facilitate or hinder learning. It has been known that attitude is one of the main aspects that affect language learning (Sadia et al., 2021). Hence, learners are less likely to acquire a second language if they have a negative attitude towards it. In this context, attitude is considered an important variable, specifically attitude towards English acquisition.

The academic performance of students in educational centres is a key goal in the development of all educational programmes. It is typically used to measure student achievement across various academic

subjects, with learners' academic success being based on their capabilities and task completion. Academic performance has been commonly measured through continuous exams or evaluations, with the most frequently used indicator being the grade point average (GPA). It is also regarded as one of the most important indicators of a student's success, which potentially influences financial aid in the short term and career prospects in the long term.

This study focusses on the interplay between attitude in English acquisition and emotional intelligence in relation to academic performance among pre-university learners. By identifying attitudes towards English and emotional intelligence among learners, educators can take necessary measures to review the instructional design and, thus, prevent future problems to a certain extent. As Bouaziz (2020) suggested in the study, problem-solving and analytical skills are crucial; however, emotional intelligence and a positive attitude towards learning a language are equally important qualities for learners to excel in their academic journey. This study addresses a significant and timely topic in the field of language acquisition. The findings will provide a better understanding of the role of attitudes and emotional intelligence in improving academic performance among pre-university learners.

The present study, which focusses on pre-university students, will address the following research objectives:

1. To describe emotional intelligence dimensions and to compare the differences of emotional intelligence dimensions between gender among pre-university learners.
2. To describe attitudes towards English acquisition and to compare the differences of attitudes towards English acquisition between gender among pre-university learners.
3. To examine the relationship between emotional intelligence with MUET band score and GPA.
4. To examine the relationship between attitude towards English acquisition with MUET band score and GPA.
5. To evaluate the significant predictors of GPA and MUET band scores.

The research hypotheses are as follows:

- H1 : There is a significant difference between gender and emotional intelligence among pre-university learners.
- H2 : There is a significant difference between gender and attitudes towards English acquisition among pre-university learners.
- H3 : There is a significant relationship between emotional intelligence with MUET band score and GPA.
- H4 : There is a significant relationship between attitude towards English acquisition with MUET band score and GPA.
- H5 : Emotional intelligence and attitude towards English acquisition are significant predictors of GPA and MUET band scores.

## LITERATURE REVIEW

### The Importance of English in Higher Education in Malaysia

As a result of globalisation, the importance of the English language, which has been labelled as the global trade language, has become more abundantly clear. This shows that the English language occupies a unique position as the global language of communication. In addition, English has become integral to the educational system and various aspects of life, particularly in business and trade. In today's digital age, knowing English is crucial for achieving international status.

Malaysia is among Asian countries that have adopted a bilingual education system to ensure that national and international needs and challenges are balanced through language education policy (Othman & Chuah, 2021). By offering education programmes in English, students can participate in an international research community where a significant amount of scientific work is published in English (Alias et al., 2018). This reveals that mastery of the English language is important and will be influenced by various elements, such as attitude towards language acquisition and emotional intelligence.

The English language has been taught as a second language in primary and secondary schools in Malaysia. Second language acquisition is commonly defined as the process by which an individual learns a language that is different from their native language or first language. In

general, the acquisition of a second language follows the first language. According to Liando and Tatipang (2022), second language acquisition is much more learned than acquired compared to first language acquisition.

Recent studies have shown that native English speakers and those who speak English as a second or foreign language require advanced proficiency in the English language. Currently, many programmes deliver lessons through English-medium instruction. In Malaysia, MUET is implemented as a standardised test that measures learners' English proficiency to assess their suitability for admission to an undergraduate degree programme. The Malaysian Education Blueprint 2015–2025 (Higher Education) emphasises the importance of English proficiency among undergraduates to enhance their competitiveness. Researchers in various disciplines, such as Ag-Ahmad et al. (2024) and Yee and Periasamy (2019), have increasingly focused on identifying the influence of MUET test scores on students' academic performance.

Academic success relies heavily on a smooth transition from high school to university, particularly during the first year after high school. However, numerous studies have revealed that learners are increasingly less prepared for higher education. According to Okwuduba et al. (2021), a learner's ability to achieve autonomy in the learning process is a critical factor in their academic success. Furthermore, it is emphasised that self-

directed learners tend to achieve greater success than those who struggle to self-monitor their education. Therefore, the pre-university programme plays a crucial role, making it valuable to conduct a cross-sectional study among pre-university learners, as this offers possibilities for early intervention (You et al., 2021)

### **Previous Studies on Attitude to Language Learning and Emotional Intelligence**

Attitude is one of the key success factors in language learning, encompassing students' feelings, beliefs, and behavioural tendencies (Metsärinne & Kallio, 2016). It has a lasting impact on students, as their attitudes play a key role in shaping their perspective on the subject they are learning. Students who develop a positive attitude towards the subject will actively participate in class discussions, ask questions and look for extra resources (Hannula et al., 2016; Svenningsson et al., 2018). Kandati and Tatipang (2021) examined the effect of virtual teaching on attitudes towards English as a second language acquisition. Their results indicated that virtual teaching had a positive impact on students' attitudes, although this impact requires ongoing monitoring. Zulfikar et al. (2019) investigated students' attitudes towards face-to-face English learning using a qualitative method, selecting six English Department students for semi-structured interviews. The results revealed that students exhibited positive attitudes towards English learning. However, the study highlighted potential bias because the respondents were exclusively from the English Department.

Many research studies have highlighted that the attitudes of a learner are crucial throughout the academic journey (You, 2017). Attitudes of learners towards learning are core areas of interest to understanding the psychology of students. Ramzan et al. (2023) studied the relationship between classroom enjoyment and students' attitudes towards learning English. The study found that students' attitudes towards learning English and their enjoyment of the classroom were significantly correlated.

The ability to recognise, control and regulate emotions is known as emotional intelligence (Fredrickson, 2001). This process of management, regulation and adaptation ability allows an individual to grow intellectually, socially and emotionally. Recent research on emotional intelligence has garnered increasing attention. Studies have shown that students with high levels of emotional intelligence are more likely to perform well academically compared to their peers (Mohamed et al., 2022). Educational institutions, including schools and universities, invest significant time and resources in helping students enhance their social and emotional skills, such as emotional intelligence (You et al., 2025). These programmes aim to improve academic performance while also fostering personal growth.

Thao et al. (2023) investigated the impacts of emotional intelligence on English language acquisition among 105 students majoring in English from a university in Vietnam. The results showed that

emotional intelligence has a significant impact on language learning outcomes. Furthermore, Quílez-Robres et al. (2023) conducted a systematic review to examine the relationship between emotional intelligence and academic performance. A comprehensive analysis of the existing literature was undertaken, consisting of 27 articles, 28 samples and 13,909 participants. The findings revealed that emotional intelligence is a valuable predictor of academic performance. These studies indicate that emotional intelligence affects the well-being of a student.

Hashim et al. (2020) studied the role of self-esteem in determining English language proficiency levels. Their study demonstrated how students who have low self-esteem frequently face significant barriers in learning the English language due to academic challenges and psychological issues like speaking anxiety and feelings of inferiority in comparison to their more proficient peers. Furthermore, Haider et al. (2020) highlighted the role of internal motivation and interpersonal interaction in language learning among secondary school students. This reveals that mastery of the English language is important and will be influenced by various elements, such as attitude towards language acquisition and emotional intelligence.

To briefly summarise, previous studies have shown that differences, such as in emotional intelligence and attitude towards the English language, among learners, are also of great relevance in having a positive

impact on language acquisition among university students. Given that English is the primary language of instruction and learning in most educational institutions, attitudes towards English acquisition and emotional intelligence are critical factors to consider when assessing academic achievement. This paper will explore the roles of attitude towards English acquisition and emotional intelligence in academic performance among pre-university students.

While numerous studies have examined the relationship between emotional intelligence and academic performance, there is limited exploration of how this relationship interacts with attitudes towards English acquisition, specifically among pre-university students. Furthermore, prior research often focusses on either emotional intelligence or language attitudes as isolated constructs. Thus, this study aims to investigate and report on the attitudes towards English acquisition and emotional intelligence in relation to academic performance among pre-university learners. This can be expressed in the following research questions: (1) What are the emotional intelligence dimensions, and is there a gender difference among pre-university learners? (2) What are the attitudes towards English acquisition, and is there a gender difference among pre-university learners? (3) What is the relationship between emotional intelligence with MUET band score and GPA? (4) What is the relationship between attitude towards English acquisition with MUET band score and GPA? (5) What are the significant predictors of GPA and MUET band scores?

## **METHODS**

### **Research Design**

To address the research questions, this study adopts a quantitative research design. Research on attitudes aims to uncover individuals' feelings and thoughts about a particular subject, which plays a significant role in the behavioural sciences, where the objective is to discover and understand human behaviour. Meanwhile, research on emotional intelligence refers to a set of cognitive abilities that allow individuals to perceive, understand, express, and manage emotional information. Individuals who can comprehend their emotions are able to maintain a better view of life. A quantitative research design, utilising a face-to-face questionnaire survey, was employed in this context. The questionnaire consisted of questions or statements to which the participants were expected to respond, either by writing their answers or selecting from pre-existing options. This method enabled the participants to provide self-reported data. Additionally, this provides an opportunity for participants to ask any questions about the questionnaire.

### **Population and Sample**

This study was conducted in a pre-university centre. The requirement to enter the pre-university programme is the attainment of at least an A in English in the Sijil Pelajaran Malaysia (SPM), a national examination administered at the end of secondary education in Malaysia. A pre-university programme serves as a bridge between secondary school and higher education,

preparing students with the knowledge and skills needed for university-level studies and ensuring a smooth transition in their learning. A total of 116 pre-university students participated in this study. The students were in their second semester of the 2020/2021 academic year. The pre-university students are required to take the MUET during their studies. The MUET results indicate English proficiency, encompassing four skills: Reading, writing, listening, and speaking (You et al., 2017). All participants were informed about the study, and those who participated were required to provide informed consent prior to the study. Participation was entirely voluntary, and participants had the right to decline at any time without consequence. Moreover, the participation was anonymous.

A simple random sampling method was used to select the participants in this study. Figure 1 illustrates the flowchart explaining the population and sample of 156 students in the pre-university programme. Among them, 30 were selected through a simple random sampling method for the pilot study. A total of 126 questionnaires were distributed for data collection, yielding a response rate of 97.62%, with three students declining to participate. Seven students declined to participate in the informed consent form. Consequently, 116 students are included in this study, with a response rate of 92.06%.

### Data Collection

This study utilised two instruments to address the research aims. The questionnaire comprised three sections: (1) demographic

information about the participants, such as gender, MUET band score and overall GPA from the first semester; (2) emotional intelligence; and (3) attitudes towards English acquisition.

Before data collection, a pilot test was conducted to evaluate the reliability of the questionnaire statements. A sample of 30 students was randomly selected for this purpose. Reliability was measured using Cronbach's Alpha ( $\alpha$ ),  $0.6 \leq \alpha \leq 0.7$ , indicating an acceptable level and  $0.7 \leq \alpha \leq 0.9$ , indicating a good level of reliability (You, 2022). The Cronbach's alpha reliability index for emotional intelligence and attitude towards English acquisition were 0.848 and 0.740, respectively, in a sample of 30 individuals. This indicates that all items demonstrated an acceptable level of reliability.

The Assessing Emotions Scale, also known as the Emotional Intelligence Scale, was constructed by Schutte et al. (2009). A 33-item assessment was used to evaluate emotional intelligence. The scale has four dimensions: (1) perception of emotion (ten items), (2) managing own emotions (nine items), (3) managing others' emotions (eight items) and (4) utilisation of emotion (six items). Participants rated themselves on a five-point scale, from 1 = strongly disagree to 5 = strongly agree. Scores could range from 33 to 165, with higher scores indicating higher levels of emotional intelligence.

An instrument adapted from a study by Ahmed (2015) was used to identify participants' attitudes towards English acquisition. The items were in question

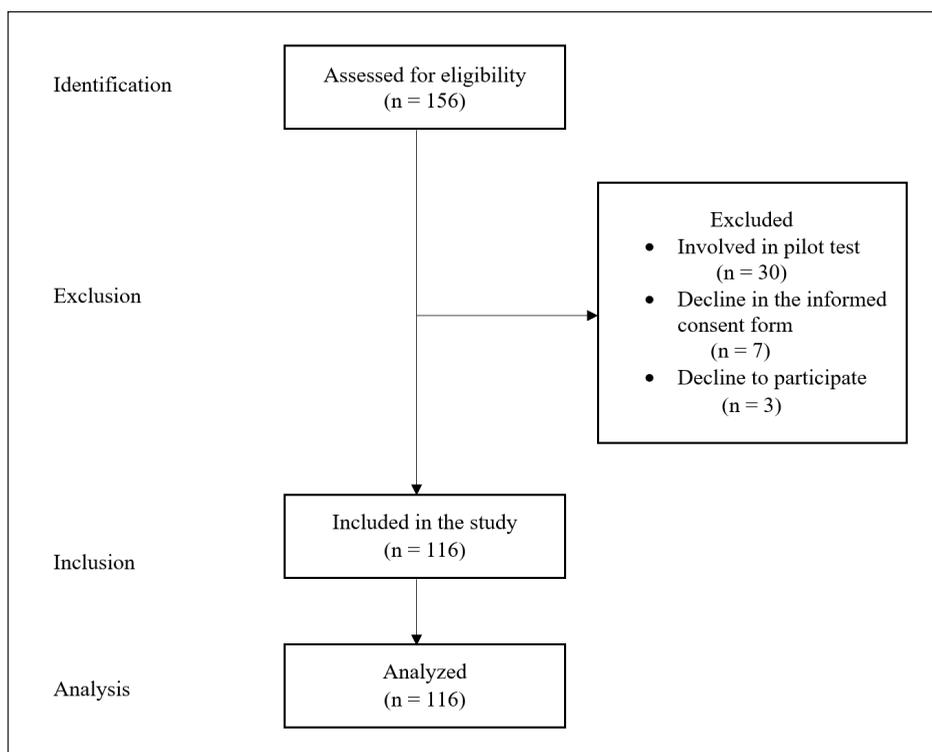


Figure 1. A flowchart explaining the population and sample

form (Ahmed, 2015) and have been adapted into a statement form in this study. For example, “Do you think that learning English will help the growth of your mind” (Ahmed, 2015) has been adapted to “I think that learning English will help the growth of my mind” in this study. The domains (i.e., topics) covered in the instrument questionnaire included: (1) learners’ attitudes towards the use of English (five items), (2) learners’ experience with English language learning (two items), (3) learner’s attitude towards teaching methodology (four items), and (4) learners’ preference for language skills (seven items). Participants could choose one of the options based on a

four-point Likert scale (with 1 = disagree, 2 = somewhat disagree, 3 = somewhat agree and 4 = agree) for Domains 1, 3, and 4. One item from domain 2 offered an open-ended response option, while another was a yes/no question. Here, the items in domain 1 are to evaluate the learners’ attitude, for example, “I think that learning English will help me achieve higher academic achievements”. In addition, the items in Domain 2 can be interpreted as learners’ preference for a particular methodology, for example, “I like to learn English through “grammatical rules” and “vocabulary memorisation.” Meanwhile, the items in Domain 4 can be interpreted as learning preferences, for

instance, “In learning English, I want to focus on ‘listening’ only.” The instrument used in this study to measure emotional intelligence and attitude towards English acquisition is shown in Appendices A and B, respectively.

**Data Analysis**

Different statistical analyses were conducted using IBM SPSS Statistics 24 to address the research objectives. Based on the implemented questionnaire method, the collected data are primary. The study utilised a combination of categorical and numerical data. Different statistical analyses were used according to the type of data. Descriptive statistics, including mean and standard deviation, were used to examine the variables under consideration. Inferential analyses, such as hypothesis tests, were employed to examine the statistical differences between genders in terms of emotional intelligence and attitudes towards English acquisition. Pearson’s correlation analysis was employed to investigate the relationship between the variables examined in this study. Finally,

regression analysis was conducted to estimate the extent to which MUET band scores and overall GPAs could be predicted by emotional intelligence and attitudes towards English acquisition.

**RESULTS**

This study included 66 female participants (56.9%) and 50 male participants (43.1%). Table 1 reveals that among the 116 participants, 17 (14.7%) achieved Band 3 in the Malaysian University English Test (MUET), while 80 (69.0%) were in Band 4, and 19 (16.4%) attained Band 5. Therefore, most participants scored Band 4 in the MUET. Regarding the grade point average (GPA) from the first semester, only three participants (2.6%) had a GPA between 2.50 and 2.99. Most participants fell within the GPA range of 3.00 to 3.66, while 32 participants (27.6%) scored between 3.67 and 4.00. On average, the participants obtained a GPA of 3.50. In general, females dominate in all the MUET band scores and GPAs, except for the students with a GPA of 2.50–2.99.

Table 1  
*Distribution of MUET band score and GPA by gender*

		Male n(%)	Female n(%)	Toal n(%)	Mean (SD*)
<b>MUET Band Score</b>	3	4 (3.4)	13 (11.2)	17 (14.7)	4.02 (0.559)
	4	39 (33.6)	41 (35.3)	80 (69.0)	
	5	7 (6.0)	12 (10.3)	19 (16.4)	
<b>GPA</b>	2.50–2.99	2 (1.7)	1 (0.9)	3 (2.6)	3.50 (0.261)
	3.00–3.66	34 (29.3)	47 (40.5)	81 (69.8)	
	3.67–4.00	14 (12.1)	18 (15.5)	32 (27.6)	

Note: SD = standard deviation

### Analysis of Emotional Intelligence Dimensions and Gender Differences

Table 2 presents the descriptive data (in means and standard deviations) and test statistics using the t-test for gender differences in the dimensions of emotional intelligence, which addresses the first research question in this study. The results indicate that females scored higher than males across all measures of emotional intelligence, including total emotional intelligence. Furthermore, a statistically significant difference was observed between genders in the dimension of managing others' emotions, as well as in overall emotional intelligence.

Table 3 displays the total score distribution for the four dimensions of emotional intelligence of males and females. The first and second entries of each cell in Table 3 in columns 2 to 5 represent the number of male and female learners, respectively, who obtained the total score indicated in column 1. For example, there are two males and one female with a total score of 18 for the utilisation of emotion (Row

5 and Column 5). According to Table 3, the highest total score obtained is 48 for the perception of emotions. On the contrary, the utilisation of emotion has the lowest total score, which is 14.

### Analysis of Attitudes towards English Acquisition and Gender Differences

To answer the research question about learners' attitudes towards acquiring the English language, Table 4 presents a comparative analysis of the data on attitudes towards English acquisition among male and female participants. The results show that females scored higher in the first three domains. For Domains 1, 3, and 4, a higher mean value signifies a more positive attitude. In contrast, for Domain 2, a higher mean value indicates that learners have experienced fear or unpleasant feelings when learning English. No significant difference was found between genders in their attitudes towards English acquisition.

Table 5 outlines the source of fear or unpleasant feelings in learning English

Table 2

*Mean, standard deviation, and significance difference among genders for the assessing emotions scale*

Dimensions of Emotional Intelligence	Males Mean (SD*)	Females Mean (SD*)	Test Statistics on Gender Differences
Perception of emotion	3.7040 (0.43937)	3.8303 (0.32721)	-1.706
Managing one's own emotions	3.6600 (0.48010)	3.8081 (0.52751)	-1.556
Managing others' emotions	3.6225 (0.59947)	3.8826 (0.41306)	-2.631**
Utilisation of emotion	3.9267 (0.57059)	3.9470 (0.48407)	-0.207
Total	3.7127 (0.40449)	3.8581 (0.33017)	-2.131**

Note: SD = standard deviation

\*\*  $p < 0.05$

Table 3  
 Total score for dimensions of emotional intelligence by gender

Total Score	Perception of Emotion	Managing One's Own Emotions	Managing Others' Emotions	Utilisation of Emotion
14				(1, 0)
15				(0, 1)
16			(1, 0)	
17				(1, 0)
18		(0, 1)		(2, 1)
19			(1, 0)	(4, 3)
20			(1, 0)	(2, 3)
21		(1, 0)		(3, 7)
22				(2, 8)
23			(1, 0)	(6, 7)
24		(1, 0)	(6, 1)	(10, 8)
25		(1, 1)	(3, 4)	(4, 11)
26		(1, 3)	(1, 2)	(4, 8)
27		(2, 1)	(1, 1)	(5, 2)
28	(1, 0)	(1, 4)	(8, 7)	(4, 5)
29	(1, 0)	(2, 0)	(4, 7)	(1, 0)
30	(2, 0)	(4, 2)	(5, 7)	(1, 2)
31	(1, 1)	(1, 3)	(3, 7)	
32	(4, 0)	(7, 3)	(3, 8)	
33	(2, 3)	(5, 10)	(5, 3)	
34	(4, 4)	(9, 6)	(0, 8)	
35	(5, 6)	(3, 4)	(2, 4)	
36	(1, 4)	(3, 3)	(2, 5)	
37	(5, 9)	(1, 6)	(2, 2)	
38	(5, 10)	(3, 4)		
39	(2, 6)	(1, 9)	(1, 0)	
40	(6, 10)	(2, 4)		
41	(5, 3)	(2, 0)		
42	(1, 1)	(0, 1)		
43	(2, 5)			
44	(1, 2)	(0, 1)		
45	(1, 1)			
46				
47				
48	(1, 1)			

Table 4

*Mean, standard deviation, and significance difference among genders for the attitude towards English acquisition*

<b>Domain in Acquiring English</b>	<b>Males Mean (SD*)</b>	<b>Females Mean (SD*)</b>	<b>Test Statistics on Gender Differences</b>
Learners' attitudes towards the use of English	3.5280 (0.41357)	3.6333 (0.39626)	-1.391
Learners' experience with English language learning	0.24 (0.431)	0.32 (0.469)	-0.920
Learners' attitudes towards teaching methodology	3.0750 (0.42633)	3.1364 (0.45822)	-0.736
Learners' preferences for language skills	2.6000 (0.57434)	2.5433 (0.61800)	0.504

*Note:* SD = standard deviation

based on experiences. Among the 116 students surveyed, 83 (71.6%) reported no such negative experiences. However, the most common source for those who did was a lack of confidence (17.2%). This was followed by a fear of being judged by others (5.2%) and a fear of making mistakes (3.4%) during the English learning process.

### **Correlation Analysis between Emotional Intelligence with MUET Band Score and GPA**

Pearson's correlation test was used to examine the relationships between emotional intelligence and MUET band score, as well

as GPA, among the 116 participants. The results are displayed in Figure 2.

Figure 2 reveals a significant positive correlation between the dimensions of emotional intelligence and overall emotional intelligence. This indicates that an increase in one dimension of emotional intelligence is associated with an increase in another. Furthermore, the significant relationship suggests that a positive correlation exists within the broader population. A significant positive relationship is also observed between MUET band score and GPA. Conversely, a non-significant correlation is found between emotional intelligence and MUET band score and GPA. Meanwhile, there is a weak

Table 5

*Source of the fear or unpleasant feelings in learning the English language from experience among learners*

<b>Source</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Learning grammar	1	0.9
Fear of making mistakes	4	3.4
Lack of confidence	20	17.2
Fear of being judged by others	6	5.2
Teaching method by instructors	2	1.7

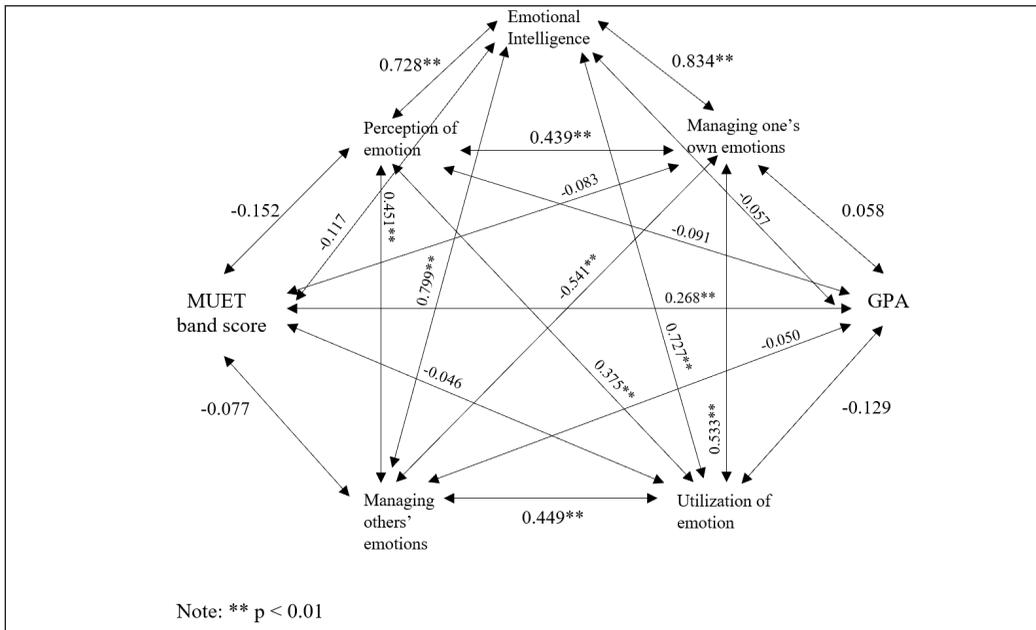


Figure 2. Pearson correlation between emotional intelligence, MUET band score, and GPA

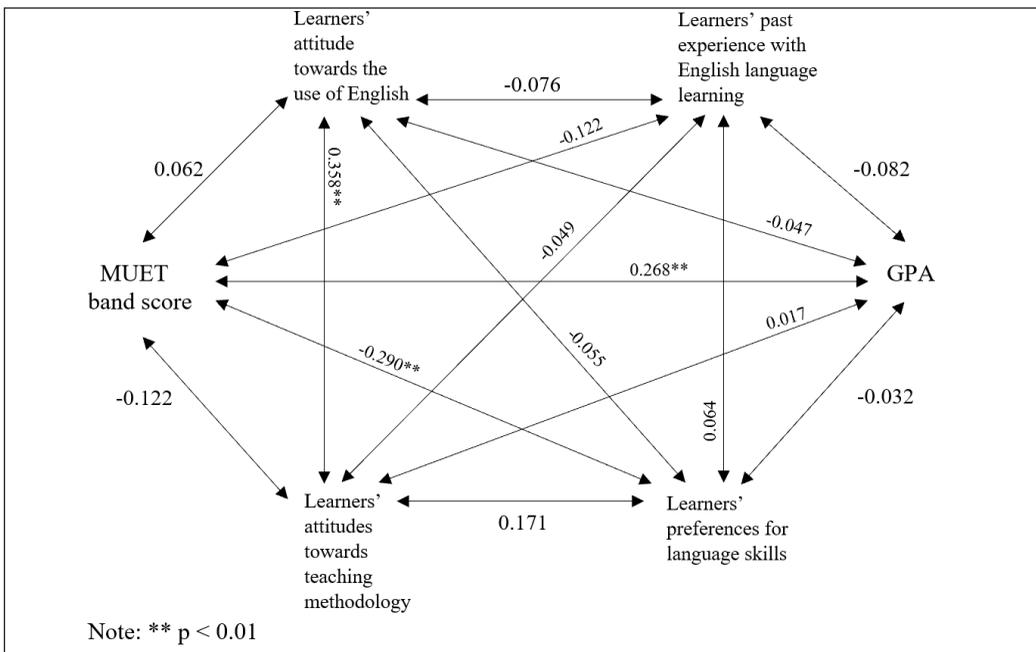


Figure 3. Pearson correlation between attitude towards English acquisition, MUET band score and, GPA

negative correlation between MUET band score and emotional intelligence. A similar trend is observed between the dimensions of emotional intelligence and overall emotional intelligence with GPA, except for a weak positive correlation between GPA and managing one's emotions.

### Correlation Analysis between Attitude towards English Acquisition with MUET Band Score and GPA

Here, the relationship between attitude towards English acquisition and MUET band score, as well as GPA, was investigated to answer the fourth research question in this study. Figure 3 indicates weak to moderate negative or positive correlations between attitude towards English acquisition, MUET band score, and GPA. A significant positive correlation is observed between learners' attitudes towards English and their attitudes towards teaching methodology. In contrast, a significant negative correlation is observed between the MUET band score and learners' attitudes towards language skills preferences. This may be due to learners having different preferences for the strategies used in the English language learning process.

### Significant Predictors of GPA and MUET Band Scores

To estimate the proportion of variance in GPA that can be accounted for by emotional intelligence and attitude towards English acquisition, a standard multiple regression analysis (MRA) was conducted. The results indicated that emotional intelligence and attitude towards English acquisition collectively explained a non-significant 0.04% of the variability in GPA,  $F(2, 113) = 0.224, p = 0.800$ . Table 6 presents the unstandardised (B) and standardised ( $\beta$ ) regression coefficients, as well as the squared semi-partial (or "part") correlations ( $sr^2$ ) for each predictor in the regression model.

To estimate the probability of MUET band scores among pre-university learners, a multinomial logistic regression was performed. The analysis utilised questionnaire data on emotional intelligence and attitudes towards English acquisition to estimate the probability of learners' MUET band scores. The coefficients for the model's predictors are detailed in Table 7. As shown, attitude towards English acquisition was the only predictor that significantly enhanced the model's predictive capability. In

Table 6

*Unstandardised (B) and standardised ( $\beta$ ) regression coefficients and squared semi-partial correlations ( $sr^2$ ) for each predictor in a regression model predicting GPA*

Variable	B [95% CI]	$\beta$	$sr^2$
Emotional intelligence	-0.036 [-0.170, 0.097]	-0.051	0.00
Attitude towards English acquisition	-0.021 [-0.168, 0.126]	-0.028	0.00

Table 7  
*Predictor coefficients for the model predicting MUET band score*

MUET Band Score <sup>a</sup>		b	SE(b)	Exp(b)	95% CI
Band 4	Emotional Intelligence	-0.630	0.765	0.533	0.119, 2.388
	Attitude towards English acquisition	1.526	0.808	0.217	0.045, 1.060
Band 5	Emotional Intelligence	-0.806	0.965	0.447	0.067, 2.963
	Attitude towards English acquisition	2.592	1.100	0.075*	0.009, 0.647

<sup>a</sup>The reference category is Band 3

\*p < 0.05

addition, the findings allow us to determine that attitude towards English acquisition significantly predicts whether a learner falls into Band 5 versus Band 3.

## DISCUSSION

The subjects involved in this study are pre-university learners from a public university. Most learners achieved Band 4 in the Malaysian University English Test (MUET) and a GPA in the range of 3.00–3.66 (Table 1). This suggests that most learners are achieving satisfactory academic performance. Notably, no candidates attained Band 6, which signifies an excellent level of English proficiency. This suggests that achieving Band 6 is challenging, as it denotes a very high level of English competence (Hasni, 2023). Although the learners obtained at least an A in English during high school, this does not guarantee good performance in MUET. According to the data provided by the Department of Academic Management (2016), over

500 students have taken the MUET more than twice. This suggests that, in addition to learning strategies, other dimensions, such as emotional intelligence and attitude towards English acquisition, should be monitored periodically. Additionally, students should be required to continue learning English to achieve good performance in the MUET.<sup>1</sup>

### Research Question 1. What are the emotional intelligence dimensions, and is there a gender difference among pre-university learners?

The Assessing Emotions Scale is a 33-item self-report survey designed to measure four dimensions of emotional intelligence, with higher scores reflecting greater emotional intelligence. The four dimensions are as

<sup>1</sup> In the United States education system, all college students are required to enrol in College English or Freshman English courses to prepare them for academic writing unless they have already taken equivalent courses in high school and scored well *High School Classes Required for College Admission*. National Association for College Admission Counselling.

follows: “Perception of Emotion” focusses on interpreting emotions through non-verbal cues such as body language or facial expressions; “Managing One’s Emotions” explores the ability to regulate and appropriately respond to one’s own emotions; “Managing Others’ Emotions” addresses how one responds to the emotions of others; and “Utilisation of Emotions” examines how effectively one can leverage emotions to identify opportunities or generate innovative ideas. Table 2 shows that females scored higher in all four dimensions and total emotional intelligence than males. Our findings are consistent with the study of Bibi et al. (2016), who found that females are more emotionally responsive than males. One possible reason females score high on emotional intelligence is that they are socialised not to express their emotions directly and handle all problems with a calm attitude. According to Ullah et al. (2023), emotional intelligence is negatively related to perceived academic stress, which indirectly enhances academic performance. Similar results are also observed in this study. Meanwhile, females dominate in the MUET band score and GPA, except for the student with a GPA of 2.50–2.99.<sup>2</sup> The hypothesis t-test for gender differences in the four dimensions and total emotional intelligence reveals significant differences between males and females in managing others’ emotions and total emotional intelligence.

<sup>2</sup> There are two males and one female who scored a GPA of 2.50–2.99 (Table 1).

## **Research Question 2. What are the attitudes towards English acquisition, and is there a gender difference among pre-university learners?**

Table 4 presents data on attitudes towards English acquisition. Females reported more negative past experiences, such as fear or unpleasant feelings related to learning English, compared to males. This suggests that males view learning English as an enjoyable challenge, have more confidence in their abilities and experience less worry than females. The findings align with those of Reilly and Sánchez-Rosas (2021), which indicate that the average positive experience was significantly higher for males than for females.

This study also includes three other domains in the participants’ acquisition of English. Higher mean scores for these three variables indicate a more positive attitude towards English acquisition. Firstly, as shown in Table 4, females exhibit a more positive attitude towards the use of English than males. Similar findings are observed in the domain of attitudes towards teaching methodology, where females tend to prefer certain methodologies over males. Here, the methodologies mentioned in the questionnaire were included, such as learning through grammatical rules and vocabulary memorisation, as well as learning English in an “All English” environment, to name a few. Conversely, male learners tend to have a more positive attitude towards language skills than females, suggesting the need to include a greater focus on language skills in the

teaching curriculum for males. Nonetheless, there is no significant difference between genders regarding attitudes towards English acquisition. This result is consistent with the study by Aziz and Barjesteh (2020), who found that gender does not significantly affect students' attitudes toward learning English.

Among the 116 learners, 33 (28.4%) reported experiencing fear or unpleasant feelings when learning English. The primary source of these feelings was a lack of confidence in learning English, followed by fear of being judged by others and fear of making mistakes during the English learning process (Table 5). These results are supported by Adamson (2024), who noted that when the language of instruction is unfamiliar to learners, students tend to be reluctant to speak or remain passive in class. For students learning English as a second or foreign language, speaking and interacting in the language can be distressing, often leading them to remain silent observers in many situations. The findings of this study offer educators new insights into addressing these fears by incorporating strategies into the curriculum to alleviate such concerns.

### **Research Question 3. What is the relationship between emotional intelligence with MUET band score and GPA?**

Figure 2 presents a correlation analysis between emotional intelligence with MUET band score and GPA. There is a significant positive correlation between each dimension of emotional intelligence and

overall emotional intelligence. Similarly, a significant positive correlation exists between MUET band score and GPA, suggesting a general positive correlation in the population. Meanwhile, Hamdzah et al. (2020) have elucidated a significant and positive relationship between the dimensions of emotional intelligence. On the contrary, a non-significant and weak negative correlation was found between emotional intelligence and MUET band score, as well as GPA. However, a weak positive correlation was found between GPA and managing one's emotions. This suggests that learners with a high level of emotional self-management will score a higher GPA compared to those with a low level of emotional self-management.

### **Research Question 4. What is the relationship between attitude towards English acquisition with MUET band score and GPA?**

Figure 3 illustrates the relationship between attitude towards English acquisition and MUET band score, as well as GPA. Figure 3 indicates a significant positive correlation between learners' attitudes and their attitudes towards teaching methodology. Conversely, a significant negative correlation was found between the MUET band score and learners' attitudes towards preferences for language skills. This suggests that learners who score higher on the MUET show a weaker preference for specific language skills, while those with lower scores have a stronger preference for certain aspects of language learning. Higher MUET scorers

may feel more confident in their overall English proficiency, leading them to focus less on specific language skills. In contrast, lower scorers may prioritise certain skills they struggle with. Incorporating skills such as listening or speaking requires additional resources, including textbooks and specially trained teachers. The findings in this research are consistent with those of Sukri et al. (2023), who investigated students' attitudes towards MUET in terms of their preferred language skills. Although the MUET provides equal weightage to the four language skills, i.e., listening, reading, speaking, and writing, students placed speaking as their highest preference. One reason may be that speaking skills are a vital communication tool for interacting with others, which involves many aspects, and it is more than just pronouncing words.

#### **Research Question 5. What are the significant predictors of GPA and MUET band scores?**

Table 6 shows that emotional intelligence and attitude towards English acquisition together do not account for any additional variance in GPA beyond what would be expected by chance. The unstandardised regression coefficient for emotional intelligence is -0.036, indicating that after controlling for attitude towards English acquisition, a 1-unit increase in emotional intelligence results in a predicted 0.036-unit decrease in GPA. The standardised regression coefficient for emotional intelligence is -0.051, suggesting that a one standard deviation increase in emotional intelligence results in a 0.051

standard deviation decrease in GPA. These findings imply that emotional intelligence does not account for variance in GPA beyond that explained by attitude towards English acquisition, which is also non-significant.

Table 7 assesses which independent variables significantly predict whether a student obtains Band 4 or Band 5 (i.e., the comparison group) versus Band 3 (i.e., baseline). The predictor of attitude towards English acquisition is significant and negative ( $b = 2.592$ ,  $SE(b) = 1.100$ ,  $p < 0.05$ ). This indicates that for each 1-unit increase in this variable, the log odds of a learner achieving Band 5 (relative to Band 3) are predicted to increase by 2.592 units. The odds ratio is 0.075, showing that as scores on this predictor increase, the odds of achieving Band 5 change by a factor of 0.075. Overall, these results suggest that learners with a positive attitude towards English acquisition are less likely to obtain Band 3 and more likely to achieve Band 5 compared to learners with a less positive attitude towards English acquisition.

#### **Summary and Recommendations**

The primary objective of this study was to investigate the significance of emotional intelligence and attitude towards English acquisition on GPA and MUET band scores. Our study provides empirical evidence that the attitude towards English acquisition emerged as a significant predictor, enhancing the model's predictive capability for MUET band scores. This suggests that it is crucial

to nurture a positive and good attitude in learners, providing the essential support and emotional training to enhance the learning experience. Apart from delivering the syllabus for the course, educators need to integrate and prepare appropriate methods which can be used to enhance the teaching process. Meanwhile, learners need to have a positive attitude toward learning and should discuss any problems they encounter with their educators. Here, English language proficiency is measured by MUET band score, and GPA measures academic performance. According to the correlation analysis, a significant positive correlation exists between the MUET band score and GPA. This illuminates the fact that proficiency in the English language has an impact on students' academic performance. Hence, English language skills must be integrated into the design of the syllabus for the course, depending on the type of the course and programme.

It should be noted that the number and distribution of the responses were the primary limitations of this study. As a result, the findings are more reflective of the learners in this study and do not represent the entire population of learners in pre-university programmes. In addition, due to time constraints, this study was limited to a particular pre-university centre and age group. Upcoming studies may include various age groups to have a better understanding of the effects (if any) of emotional intelligence and attitude towards English acquisition on GPA and MUET band score. In addition, the correlation between

English performance in secondary school and MUET band scores in pre-university can be examined to assess transition readiness from secondary to tertiary education. Meanwhile, the interaction between learners' emotional intelligence and teaching styles is worth further exploration. Examining the long-term effects of positive attitudes on language acquisition is also a worthwhile area for future study.

### **Theoretical Contribution**

This study contributes to the theoretical understanding of affective factors in second-language acquisition by empirically linking emotional intelligence and attitudes toward English learning to academic performance and language proficiency indicators, which are MUET band scores and GPA, respectively. Drawing on the Socio-Emotional Learning (SEL) Theory, the findings underscore the importance of emotional competence, particularly in managing self and others' emotions, as a foundational skill that supports not only interpersonal interactions but also academic success. The gender differences observed, with females scoring higher in emotional intelligence and GPA, suggest socialisation patterns and emotional regulation strategies that are consistent with SEL's emphasis on emotional scaffolding. These insights highlight the necessity of affective-focussed pedagogical strategies in language education, where emotional readiness and positive learning dispositions play a central role in performance outcomes. By emphasising emotional and attitudinal dimensions, this study encourages a shift

from traditional cognition-centric models to a more holistic framework for understanding learner success in multilingual academic environments.

Moreover, the results lend empirical support to Ajzen's Theory of Planned Behaviour (TPB), with particular emphasis on the component of "attitude toward the behaviour". In this context, learners' positive attitudes toward English acquisition are shown to significantly impact their academic performance, suggesting that behavioural intentions, shaped by emotional readiness and belief systems, play a vital role in educational success. The integration of emotional intelligence and attitude variables into the regression model provides a robust framework for predicting outcomes, positioning this research at the intersection of emotion, cognition, and behaviour. Although emotional intelligence was not a significant predictor of GPA when attitude variables were accounted for, subtle associations between GPA and particular dimensions, most notably, emotional regulation, suggest the possibility of a partial mediation model. This provides future research to investigate how emotional self-regulation interrelates with academic resilience and performance outcomes.

## CONCLUSION

The current study investigated the impact of emotional intelligence and attitudes towards English acquisition on the GPA and MUET band scores among pre-university learners. Here, the academic performance and English language proficiency were represented by

GPA and MUET band scores, respectively. Gender differences have always been a key field of research. Significant differences were found between genders concerning the management of others' emotions and total emotional intelligence. This provides a useful lens for looking at the way males and females express their emotions. However, no significant gender differences were observed in attitudes towards English acquisition.

A substantial proportion of learners (17.2%) reported experiencing fear or unpleasant feelings due to a lack of confidence in learning English. The study's results indicated a significant positive correlation between the dimensions of emotional intelligence and overall emotional intelligence. Additionally, a significant positive correlation was found between learners' attitudes towards teaching methodology and their attitudes towards the use of English. Similarly, a significant positive correlation was observed between GPA and MUET band scores, suggesting that the MUET band score tends to increase as GPA increases and vice versa. This implies that English proficiency is important for academic performance.

In contrast, a significant negative correlation was found between learners' preferences for language skills and MUET band scores. Attitude towards English acquisition emerged as the only significant predictor of MUET band scores, underscoring the necessity of fostering positive attitudes among learners. Educators should, therefore, recognise and address learners' attitudes towards English

acquisition, providing the necessary support and emotional training to enhance their learning experience. This approach can raise learners' awareness of the importance of a positive attitude in learning English. The findings from this study are useful for educators and policymakers in designing the syllabus.

It is important to note that this study focussed solely on attitudes and emotional intelligence among pre-university learners. Future research should explore new perspectives, such as the interaction between learners' and educators' emotional intelligence. Additionally, including learners from other degree programmes, such as bachelor's and master's degree programmes, may provide further insights.

## REFERENCES

- Adamson, L. (2024). Fear and shame: Students' experiences in English-medium secondary classrooms in Tanzania. *Journal of Multilingual and Multicultural Development*, 45(8), 3275-3290. <https://doi.org/10.1080/01434632.2022.2093357>
- Ag-Ahmad, N., Syed Mohamed, A. T. F., & Bakar, E. W. (2024). The jewels in English language teaching: Attributes of quality English language teachers in second language settings. *Pertanika Journal of Social Sciences & Humanities*, 32(1), 17-36. <https://doi.org/10.47836/pjssh.32.1.02>
- Ahmed, S. (2015). Attitudes towards English language learning among EFL learners at UMSKAL. *Journal of Education and Practice*, 6(18), 6-16.
- Alias, M., Lashari, T. A., Akasah, Z. A., & Kesot, M. J. (2018). Self-efficacy, attitude, and student engagement: Emphasising the role of affective learning attributes among engineering students. *International Journal of Engineering Education*, 34(1), 226-235.
- Aziz, F. M., & Barjesteh, H. (2020). On the relationship between EFL learners' grammar learning strategy use and their grammar performance: Learners' gender in focus. *Journal of Language Teaching and Research*, 11(4), 583-592. <https://doi.org/10.17507/jltr.1104.08>
- Bibi, S., Saqlain, S., & Mussawar, B. (2016). Relationship between emotional intelligence and self-esteem among Pakistani university students. *Journal of Psychology & Psychotherapy*, 6(4), 1-6. <https://doi.org/10.4172/2161-0487.1000279>
- Bouaziz, M. (2020). *Investigating the correlation between emotional intelligence and willingness to communicate among English as a foreign language learners* [Master's thesis, Université de Biskra]. University of Biskra Repository. <http://archives.univ-biskra.dz/handle/123456789/18396>
- D'Amico, A., Geraci, A., & Tarantino, C. (2020). The relationship between perceived emotional intelligence, work engagement, job satisfaction, and burnout in Italian school teachers: An exploratory study. *Psihologijske Teme*, 29(1), 63-84. <https://doi.org/10.31820/pt.29.1.4>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226. <https://doi.org/10.1037/0003-066X.56.3.218>
- Haider, K., Sharjeel, M. Y., & Iqbal, S. (2020). Analysis of self-esteem in oral English language proficiency among secondary school students: Issues and challenges. *Pakistan Social Sciences Review*, 4, 1176-1189. [https://doi.org/10.35484/pssr.2020\(4-III\)85](https://doi.org/10.35484/pssr.2020(4-III)85)
- Hamdzah, N. L. A., Subramaniam, I. D., Abidin, N. Z., & Hassan, R. (2020). The relationship between emotional intelligence (EI) and Malaysian University English Test (MUET) performance among technical students. *International Journal of Learning, Teaching, and Educational Research*, 19(7), 280-297. <https://doi.org/10.26803/ijlter.19.7.16>
- Hannula, M. S., Di Martino, P., Pantziara, M., Zhang, Q., Morselli, F., Heyd-Metzuyanin, E., Lutovac,

- S., Kaasila, R., Middleton, J. A., & Jansen, A. (2016). *Attitudes, beliefs, motivation, and identity in mathematics education: An overview of the field and future directions*. Springer Nature. <https://doi.org/10.1007/978-3-319-32811-9>
- Hashim, H. U., Yunus, M. M., & Hashim, H. (2020). Lack of proficiency in English language: Understanding the circumstances among military cadets. In *Proceedings of the Third Workshop on Multidisciplinary and Its Applications (WMA-3 2019)* (pp. 11-14). <https://doi.org/10.4108/eai.11-12-2019.2290883>
- Hasni, B. (2023, September). Analysis of students' performance in the MUET test 2022: Identifying patterns and areas of improvement. *LIS International Conference*, 9, 145-150.
- Kandati, S. P., & Tatipang, D. P. (2021). The effect of virtual teaching on attitudes towards second language acquisition during COVID-19 conditions among Indonesian students. *Journal of English Culture, Language, Literature, and Education*, 9(2), 117-127. <https://doi.org/10.53682/eclue.v9i2.2217>
- Liando, N. V. F., & Tatipang, D. P. (2022). English or Indonesian language? Parents' perceptions towards children's second language learning context. *Jurnal Lingua Idea*, 13(1), 61-75. <https://doi.org/10.20884/1.jli.2022.13.1.5749>
- Metsärinne, M., & Kallio, M. (2016). How are students' attitudes related to learning outcomes? *International Journal of Technology and Design Education*, 26, 353-371. <https://doi.org/10.1007/s10798-015-9317-0>
- Mohamed, N. F., Govindasamy, P., Rahmatullah, B., & Purnama, S. (2022). Emotional intelligence, online learning, and its impact on university students' mental health: A quasi-experimental investigation. *Pertanika Journal of Social Sciences & Humanities*, 30(2), 665-680. <https://doi.org/10.47836/pjssh.30.2.13>
- Nopiah, Z. M., Ismail, N. A., Khatimin, N., Abdullah, S., & Mustafa, M. M. (2011). MUET score and loading hours: An analysis of the relationship with academic performance. *Procedia - Social and Behavioral Sciences*, 18, 103-109. <https://doi.org/10.1016/j.sbspro.2011.05.015>
- Okwuduba, E. N., Nwosu, K. C., Okigbo, E. C., Samuel, N. N., & Achugbu, C. (2021). Impact of intrapersonal and interpersonal emotional intelligence and self-directed learning on academic performance among pre-university science students. *Heliyon*, 7(3), Article e06611. <https://doi.org/10.1016/j.heliyon.2021.e06611>
- Othman, N. R., & Chuah, K.-M. (2021). The relationship between English language fluency and learning engagement: A case study among first-year undergraduates. *Journal of Academic Research in Progressive Education and Development*, 10(2), 150-162. <https://doi.org/10.6007/IJARPED/v10-i2/9670>
- Quílez-Robres, A., Usán, P., Lozano-Blasco, R., & Salavera, C. (2023). Emotional intelligence and academic performance: A systematic review and meta-analysis. *Thinking Skills and Creativity*, 49, Article 101355. <https://doi.org/10.1016/j.tsc.2023.101355>
- Ramzan, M., Javaid, Z. K., Kareem, A., & Mobeen, S. (2023). Amplifying classroom enjoyment and cultivating positive learning attitudes among ESL learners. *Pakistan Journal of Humanities and Social Sciences*, 11(2), 2236-2246. <https://doi.org/10.52131/pjhs.2023.1102.0522>
- Reilly, P., & Sánchez-Rosas, J. (2021). Achievement emotions and gender differences associated with second language testing. *International Journal of Instruction*, 14(4), 825-840. <https://doi.org/10.29333/iji.2021.14447a>
- Sadia, B., Memon, S., & Pathan, H. (2021). Investigating the relationship between English language proficiency and academic performance of engineering students at Mehran University Jamshoro, Pakistan. *Pakistan Journal of Humanities and Social Sciences*, 9(3), 515-525. <https://doi.org/10.52131/pjhs.2021.0903.0156>
- Santhosh, V. K., & Basha, S. M. (2022). A study of emotional intelligence and quality of life among doctors during the COVID-19 pandemic. *International Journal of Early Childhood*, 14(2), 2080-2090.

- Schutte, N. S., Malouff, J. M., & Bhullar, N. (2009). The assessing emotions scale. In C. Stough, D. H. Saklofske, & J. D. A. Parker (Eds.) *Assessing emotional intelligence: Theory, research, and applications* (pp. 119-134). Springer. [https://doi.org/10.1007/978-0-387-88370-0\\_7](https://doi.org/10.1007/978-0-387-88370-0_7)
- Sukri, H. I. M., Norazizan, M. H., Mustapha, L., & Bahtiar, S. F. (2023). Students' perception of the Malaysian University English Test (MUET): Reflections and external factors. *Journal of Creative Practices in Language Learning and Teaching (CPLT)*, 11(2), 185-202. <https://doi.org/10.24191/cplt.v11i2.23182>
- Svenningsson, J., Hultén, M., & Hallström, J. (2018). Understanding attitude measurement: Exploring meaning and use of the PATT short questionnaire. *International Journal of Technology and Design Education*, 28, 67-83. <https://doi.org/10.1007/s10798-016-9392-x>
- Taheri, H., Sadighi, F., Bagheri, M. S., & Bavali, M. (2019). EFL learners' L2 achievement and its relationship with cognitive intelligence, emotional intelligence, learning styles, and language learning strategies. *Cogent Education*, 6(1), Article 1655882. <https://doi.org/10.1080/2331186X.2019.1655882>
- Thao, L. T., Thuy, P. T., Thi, N. A., Yen, P. H., Thu, H. T. A., & Tra, N. H. (2023). Impacts of emotional intelligence on second language acquisition: English-major students' perspectives. *SAGE Open*, 13(4), Article 21582440231212065. <https://doi.org/10.1177/21582440231212065>
- Ullah, M. S., Akhter, S., Aziz, M. A., & Islam, M. (2023). Social support: Mediating the emotional intelligence-academic stress link. *Frontiers in Psychology*, 14, Article 1218636. <https://doi.org/10.3389/fpsyg.2023.1218636>
- Wong, P. W., & You, H. W. (2023). Quality control of nomophobia and dependency on technological gadgets. *International Journal of Mental Health Promotion*, 25(8), Article 891. <https://doi.org/10.32604/ijmhp.2023.028205>
- Yee, B. C., & Periasamy, V. (2019). English language teachers' perceptions of the Malaysian University English Test (MUET) as a measure of teachers' language proficiency. *Malaysian International Journal of Research in Teacher Education*, 2, 94-103.
- You, H., Khoo, M. B., Lee, M., Castagliola, P., & Saha, S. (2017). Optimal design of exponentially weighted moving average chart for the mean with estimated process parameters. *Communications in Statistics—Theory and Methods*, 46(22), 11077-11090. <https://doi.org/10.1080/03610926.2016.1257716>
- You, H. W. (2017). Run length distribution of synthetic double sampling chart. *International Journal of Applied Engineering Research*, 12(24), 14268-14272.
- You, H. W. (2018). Performance of synthetic double sampling chart with estimated parameters based on expected average run length. *Journal of Probability and Statistics*, 2018(1), Article 7583610. <https://doi.org/10.1155/2018/7583610>
- You, H. W. (2022). Modelling analysis of dietary patterns and oral health status among adolescents. *International Journal of Environmental Research and Public Health*, 19(22), Article 15255. <https://doi.org/10.3390/ijerph192215255>
- You, H. W., Daud, N., & Razak, N. F. (2021). An assessment of internet addiction among pre-university students. *Pertanika Journal of Social Sciences and Humanities*, 29(1), 221-228. <https://doi.org/10.47836/pjssh.29.1.13>
- You, H. W., Mahyuddin, A., Ahmad, N. S., & Zakaria, A. S. I. (2025). New insights on dietary assessment recommender systems for pre-university adolescents. *IIUM Medical Journal Malaysia*, 24(1). <https://doi.org/10.31436/imjm.v24i01.2509>
- Zulfikar, T., Dahliana, S., & Sari, R. A. (2019). An exploration of English students' attitudes towards English learning. *English Language Teaching Educational Journal*, 2(1), 1-12. <https://doi.org/10.12928/eltej.v2i1.947>