Original Article

AN EXPLORATION OF EMOTIONAL INTELLIGENCE (EI) AMONG TECHNICAL STUDENTS IN RELATION TO THE MALAYSIAN UNIVERSITY ENGLISH TEST (MUET) PERFORMANCE, PROGRAMME AND GENDER

Nor Lailatul Azilah Hamdzah^{1*}, Linda Khoo Mei Sui¹, Noorbaiduri Abdul Halim¹, Zulkifli Hanafi¹, Nurdiyana Suhaimi², Ruslan Hassan³

¹Centre for Language Learning, Universiti Teknikal Malaysia Melaka, Hang Tuah Jaya, 76100 Durian Tunggal, Melaka, Malaysia.

²Department of General Knowledge, Politeknik Seberang Perai, Jalan Permatang Pauh, 13500 Permatang Pauh, Pulau Pinang, Malaysia.

³Center for Arabic studies and Islamic Civilization Faculty of Islamic Studies, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia.

Email: lailatulazilah@utem.edu.my

DOI: 10.47750/pnr.2022.13.S09.696

Abstract

Previous research has established that emotional intelligence (EI), or the capacity to rationalise one's emotions, is critical in higher education, particularly in the teaching and learning of English. The study's objectives are to examine the relationship between EI and MUET performance among undergraduate students at a technical university and ii) the significant difference of EI levels among 240 respondents from engineering and business course based on their gender and programmes. The data collection method used was a cross-sectional survey with 240 respondents. The respondents were given the EQI questionnaire, which was developed to assess the respondents' EI levels. The findings indicate that EI has a significant correlation with the students' Malaysian University English Test (MUET) performance. Additionally, the findings indicate that there is a significant difference between the gender, the students' course and their EI level, implying that EI has a strong influence on education. As EI plays a significant role in determining students' English language performance, this study suggests that EI skills should be integrated into the English course. Additionally, it is recommended that future research examine the relationship between EI traits and other language abilities such as listening, speaking, reading, and writing.

Keywords: Emotional Intelligence (EI); Malaysian University English Test (MUET); Tapia's Emotional Quotient Inventory (EQI).

Introduction

Mayer, Salovey and Caruso (2004) described EI as "the capacity to reason about emotions and of emotions to enhance thought". According to Goleman (1995), the intellectual quotient (IQ) accounts for just 20% of a person's success, with EI accounting for the remainder. In a post in Time Magazine, Gibbs (1995) found a strong link between EI and IQ and how they affect one another and lead to achievement. The "classic emotional failings" have been discovered to be the cause of failure among top executives in the United States and Europe.

5761

There is a paucity of previous research on the importance of EI in assessing academic performance (MacCan, Jiang, Brown, Double, Bucich and Minbaashian (2020); Sanchez-Alvarez, Martos and Extremera (2020) and Abdolrezapour and Ghanbari (2021)). Since the 1970s, when it was first used in second language learning, EI has gained popularity. Furthermore, engineering education believes that undergraduate engineers need to learn a variety of skills to meet the demands of the workplace. EI skills are a group of abilities that include self-control, self-awareness, motivation, social skills, and empathy. EI has aided learners' learning ability, communication skills, and intercultural awareness.

To address these concerns, the study is to examine the relationship between EI and Malaysian University English Test (MUET) performance among technical university undergraduate students, to determine the correlation between EI and MUET performance, and analyses any significant difference in the level of EI among the respondents based on their gender and programmes.

Students with higher IQ scores are thought to be smarter, but recent research has shown that EI can be more efficient than IQ (Shahmohamadi & Hasanzadeh, 2011). Emotions may have a positive or negative impact on learning. However, EI has a positive impact on learning and can encourage good study habits (MacCan et al., 2020). According to studies, students who are self-sufficient and able to express themselves, as well as those who enjoy learning new languages, are more popular (Shahmohamadi & Hasanzadeh, 2011). Students and teachers at schools with high EI perform better on standardised assessments and have a positive classroom climate, thus making learning easier (Nusrah and Chan, 2020). EI skills should be taught to children in order to alleviate anxiety and temperamental issues while also increasing their functions (Abdolrezapour and Ghanbari, 2021).

Alavinia and Mollahossein (2012), stated that learning a language is more important to EI than other subjects like Mathematics. In addition, EI has also been proven to positively contribute to EFL students' readiness for online education (Alenezi, 2020). Although the importance of EI is often overlooked, EFL students must use the language to communicate with their teachers and peers not only in the classroom but also in personal situations. Students with a high EI will gain a lot of knowledge because it provides a conducive learning environment and leads to improve English achievement among students (Sucaromana, 2012). Students learn to identify their feelings and seek adult assistance in order to comprehend the language. EI offers all of the emotional skills that ESL students need in order to succeed in language learning. When it comes to predicting success in life challenges, EI can be more effective than IQ (Goleman, 1995).

The Malaysian Ministry of Education has launched a Malaysian University English Test in order to provide students with the required level of English proficiency, Malaysia Examination Council has been administering MUET, a standardised English test, since 1999. This test includes listening, speaking, reading, and writing component. This test is required of students who want to pursue their studies at public institutions of higher learning. Candidates for this test are divided into six achievement bands, ranging from extremely skilled users (Band 6) to very limited users (Band 1). MUET examinations were previously held twice a year, but due to high demand among applicants, they are now held three times a year.

According to Hamzah (2018), the vice-chancellor of University Putra Malaysia (UPM) Prof Datin Dr. Aini Ideris claimed that despite being the expertise in their field, many undergraduate students fail to get employed after graduation due to the poor command of English Language and that this issue must be addressed immediately. In reality, according to data provided by Bahagian Pengurusan Akademik (BPA) UTeM, more than 500 students at a technical university who do not achieve Band 3 have sat for MUET more than twice. Recently, to address the issue of English language proficiency among tertiary students, former Prime Minister of Malaysia Dato' Seri Najib Tun Abdul Razak announced the new requirement of MUET results among public higher institutions during the presentation of Budget 2015 on October 14, 2014. Since 2015, the current minimum entry requirement for IPTAs has been Band 2 for Arts and Social Science studies (graduation requirement of Band 3); Band 3 for Science, Technology, Engineering, and Mathematics (STEM) studies (graduation condition Band 4); and Band 4 for Law and Medical studies (graduation condition Band 4). Due to this new requirement, Universiti Utara Malaysia (UUM) Vice Chancellor Prof. Datuk Dr. Mohamed Mustafa Ishak argued that local universities would have difficulty selecting students for certain fields of study offered at the university (Bernama, 17 October 2014).



In the Malaysian education system, there is a concern of English language skills among students at tertiary education. Many academic tasks at this level requires students to read, write, speak and listen in the English language irrespective of the courses they are enrolled in. Before the year 2000, the English language grade in Sijil Pelajaran Malaysia (SPM) was used as an indicator of students' level of English proficiency. When the MUET was first established in 2000, the aim was to prepare students from secondary school with the English language skills required for tertiary education (Mahmud, 2018). It has become an important test for students who wish to enter public universities in Malaysia since the result is set as one of the entrance requirements (Chan & Wong, 2004). The Malaysian Examination Council is the authority responsible to develop and administer it where the certification is recognised in Malaysia and Singapore as cited by Othman and Nordin (2013) in Mahmud (2018). Nurhazlini et al. (2015) in their study asserted that the MUET (minimum unit academic thresholds) has then become a well-known test and the result can be used to assess students' proficiency in preparation for tertiary education. Nambiar and Ransirini (2012) in Najihah Mahmud (2018) label the MUET as equivalent to IELTS and TOEFL as it tests criterion-referenced proficiency that covers all four language skills, namely reading, writing, listening and speaking. The importance of the MUET can also be seen when it has also been suggested as a prerequisite for courses. The administrative process of sorting students' ability does the opposite, in some cases (Chan & Wong, 2004).

A widespread view of education is that tests and assessment should be standardised to standardise the students' proficiency level. In line with this, Nurhazlini et al. (2015) mentioned that the MUET was offered to solve the English Class issues for pre-university students as an attempt to have a standardised assessment. At this point, the MUET has been in full effect for several years' levels of education in Malaysia (Chan & Wong, 2004). The MUET syllabus was developed to help students achieve advanced proficiency in the language while raising their level of creative writing. It is also a means to support the English language learning environment in Malaysia since the education system back then was deemed not conducive for English language development (Mahmud, 2018). In sum, the MUET is considered as the national English language assessment that indicates the levels of English language proficiency among ESL learners in Malaysia.

EI, on the other hand, is believed to play a significant role in ESL students' English language proficiency. The ability to reason about emotions is known as EI intelligence. EI abilities and ESL have a reciprocal relationship, according to Ates (2019). Learners with EI skills have a greater understanding of the language, and those who learn to communicate in English develop their EI skills. A descriptive account of the relationship between EI and ESL learning can be found in previous studies. The relationship between EI and academic achievement has been the subject of extensive study. Petrides et al. (2004) have investigated the connection between EI and academic achievement. They discovered that EI is crucial in assisting low-IQ students to cope with the demands and pressures of their studies. They found that students with low IQ who have a high EI trait are better able to cope with stress and have more social contact, which may help them increase their grades.

The current research has tended to concentrate on the relationship of EI with other variables by mainly using quantitative methods that emphasise results and the EI model. Nonetheless, a mixed-method investigation allows for a more in-depth examination of the relationship between each EI construct and each MUET skill. Aside from that, the qualitative research in this mixed method study revealed the challenges of teaching MUET subject for engineering among ESL lecturers. Aside from that, the qualitative research in this mixed from that, the qualitative research in this mixed method study can be used to learn about the challenges of learning MUET and the roles of EI in the learning process of students.

The data from this research is expected to provide adequate and appropriate information about the roles of EI in enhancing MUET performance among undergraduate students by thoroughly scrutinising the relationship between EI and MUET performance, using a mixed-method study, and involving both parties, which are undergraduate students. Exploring the EI definition and MUET skills will assist the university, administration, curriculum creator, and ESL lecturers in structuring and implementing effective teaching and learning methods for students. Since EI can be instilled, taught, and mastered (Bar-On, 2007), it may be included in educational policy, as well as the incorporation of its skills into the curriculum. As a result, the integration of EI and MUET skills could support all undergraduate students.



The findings of this study are intended to provide appropriate information through investigations into the roles of EI in boosting and improving MUET performance among undergraduate students. EI can be instilled, taught, and learned, according to Bar-On (2007), as cited by Nor Lailatul Azilah, Indradevi, Nadiah and Ruslan (2020). As a result, EI skills can be included in educational policy and incorporated into the curriculum, thus, students' English skills will be strengthened and developed. Furthermore, the findings of this study will also assist the university, top management, and curriculum developers in structuring and embedding EI in pedagogical aspects.

The results will provide a thorough understanding of EI's role in improving MUET performance among technical university undergraduate students. The following research questions are used to express these:

(i) Is there a significant difference in the level of EI among students in a technical university based on their gender and programmes?

(ii) Is there a correlation between the level of EI among technical university undergraduate students and their MUET performance?

Methods

Participants and procedure

The quantitative research was used to collect the data from the respondents. In this study, the cross-sectional survey design was used to obtain the data for the research questions. 240 respondents among the Faculty of Business and Technopreneurship and 5 engineering faculties were chosen to represent the data for engineering and business students. The respondents from the engineering field were from the Faculty of Electrical Engineering (FKE), Faculty of Electronic and Computer Engineering (FKEK), Faculty of Mechanical Engineering (FKM), Faculty of Manufacturing Engineering (FKP) and Faculty of Engineering Technology (FTK).

This type of design was used as the data was collected at one time. EI was measured in this study using a crosssectional survey to investigate. Thus, the correlation between EI level among the undergraduate students and the students' MUET achievement could be measured.

Then, the quantitative data was used to investigate variables which are the MUET scores and the programmes and genders. In this study, the emotional domains that had been used in this study were developed after taking into consideration the results of the Goleman – Noriah EI Theory (2004) which include the empathy, social skills, self-regulation, self-awareness and motivation.

The selected respondents are only those who have taken the MUET test. All the participants were from the six different faculties at the technical university. As a result, this research had 240 participants; 96 female students and 144 male students. As this technical university is one of the Malaysian Technical University Network (MTUN) universities, the chosen respondents from the engineering and business faculty are the representative of the niche area of the technical university. 60% of the respondents are male and it is represented by the 60% of the respondents' population while another 40% of the respondents consisted of female students to represent the 40% of the female population in the technical university. A similar number of respondents from each faculty, which were 40 respondents were recorded.

Instrumentation

This research used Tapia's Emotional Quotient Questionnaire (EQI) survey to collect quantitative information. The instrument comprises of 41 items that have been constructed according the context of the technical students. It is created based on the six main domains which are the demographic data, and the five competencies that were based on Goleman's framework on EI in 1990. The five EI competencies that were used were empathy, social skills, self-regulation, self-awareness and motivation.



The study was divided into two sections that were based on the self-report. Open-ended and closed-ended questionnaires were used in this section. Gender, age, faculty, year of study and the students' MUET performance were the items for the demographic data. Thirty items were arranged to investigate the level of EI among the respondents; self-awareness (items no. 1, 2, 3, 4, 5, 6), self-regulation (items no. 7, 8, 9, 10, 11, 12), empathy (items no. 13, 14, 15, 16, 17, 18), social skills (items no. 19, 20, 21, 22, 23, 24) and motivation (items no. 25, 26, 27, 28, 29, 30).

Two modes: One is by self-report, and the other is by quantitative and objective tests. The age, gender, race, and academic level of the faculty were the only demographic data we took into consideration in the research done for this article. Seventy pieces of the second part of the questionnaire have been built. items 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24 (items no. 25, 26, 27, 28, 29, 30). The respondents need to complete the instruments according to a five-point Likert scale from "never like me', 'occasionally like me', 'sometimes like me', 'frequently like me' to 'always like me'.

The questionnaire was transformed to the Google Form and the link was then given to the respondents. The data from the Google Form had been transferred to Statistical Package for Social Science (SPSS) version 26 to be analysed. The Cronbach Alpha from (SPSS) version 26 has been applied to check the instrument reliability. The overall internal consistency value was excellent with an output rating of 0.946 for all 30 items. Therefore, it had been proven that the instruments have high-reliability items.

Data Collection and Analysis

This study has only one tool used to gather data, which was the questionnaire. The questionnaire is the primary instrument used to gather data for the purpose of this study. The survey method is used because the EI instrument is adequate for examining the effect of different types of programmes and genders on the EI levels of undergraduate students at the technical university and the correlation between the level of EI among undergraduate students and their MUET results.

240 respondents have completed the questionnaires. The questionnaire, which is a collection of questions posed to a statistically relevant number of respondents is considered the best method of obtaining data, even more so for a large scale survey.

Findings and discussion

Gender of the Respondents

The gender of respondents is shown in Table 1. Given that gender is one of the variables being investigated in this study, an accurate gender ratio must be defined. Due to the fact that this technical university has a population of 60% male students, this analysis used the same figure to calculate the overall number of male respondents. The remainder of the respondents were female students, accounting for 40% of the respondents. The research enrolled 144 male and 96 female students in 60:40 ratios.

The analysis of the quantitative data presents the following aspects: - i. the significant difference in the level of EI according to the students' programmes and gender in the technical university. ii. the correlation between the level of EI among undergraduate students in the technical university and their MUET performance.

Tuble 1. Ochder of the Respondents

 Gender	Frequency	Valid Percent	Cumulative Percent

Journal of Pharmaceutical Negative Results | Volume 13 | Special Issue 9 | 2022

		(Quantity)		
Valid	Male	144	60.0	60.0
_	Female	96	40.0	40.0
	Total	240	100.0	100.0

Table 2: Descriptive statistics						
Dependent Variable: EI_Level						
Gender	Course	Mean	Std. Deviation	N		
Male	Business	2.4157	.25564	72		
	Engineering	2.3366	.37001	72		
	Total	2.3762	.31937	144		
Female	Business	3.4840	.35424	48		
	Engineering	3.2007	.00481	48		
	Total	3.3424	.28701	96		
Total	Business	2.8431	.60395	120		
	Engineering	2.6822	.51226	120		
	Total	2.7626	.56459	240		

The impact of types of programmes and gender on the levels of EI among the undergraduate students in the technical university

The result of the level of EI according to the programmes and genders are shown in Table 2. According to the findings, male students enrolled in engineering courses earned the lowest mean score, M=2.33 and SD=0.3700, while female students enrolled in business courses earned the highest mean score, M=3.48 and SD=0.354.

To analyse the level of EI scores among the respondents according to programme and genders, an independent sample t-test was run. The analysis was done to answer research question 1 which is: -

RQ (1): Is there any significant difference in the level of EI according to the students' gender and programmes in technical university?

 H_0 : There is no significant difference in the level of EI according to the students' gender and programmes at the technical university

 H_1 . There is a significant difference in the level of EI according to the students' gender and programmes at the technical university.

The findings obtained from the analyses of the data are given in Table 3:



Group Statistics								
	Course	N	Mean	Std. Deviation	Std. Error Mean	t-Value	Sig.	
Emotional	Male	144	2.3762	.31937	.02661	-23.896	0.00	
Intelligence	Female	96	3.3424	.28701	.02929			

Table 3: The level of EI among respondents according to genders

The findings show that there is a significant difference in the level of EI for male and female students, t (240) = -23.896, p-value = 0.00. The level of EI among male students (mean = 2.38, s.d. = 0.32) is significantly different from the level of EI among female students (mean = 3.34, s.d. = 0.29). This finding indicates that female students have higher level of EI as compared to male students. Thus, the null hypothesis is rejected.

This study is supported by Patton (1997), in her book, EQ in the Workplace, that stated that there are several obstacles to building EI in individuals. She then mentioned that men's weaknesses in expressing their feelings could lead them to be low EI. Men feel that "the more threaten they feel the less they talk". As compared with women, they tend to express and project out their own feelings whether they feel happy or vice versa. Thus, it can be concluded that female and male have different levels of EI.

				0 1				
Group Statistics								
	Course	N	Mean	Std. Deviation	Std. Error Mean	t-Value	Sig.	
Emotional	Business	120	2.8431	.60395	.05513	-21.452	0.00	
Intemgence	Engineering	120	2.6822	.51226	.04676			

Table 4: The level of EI among respondents

Next, based on this analysis, there is a significant difference in the level of EI for business and engineering students, t (240) = -21.452, p-value = 0.00. Table 4 shows the level of EI among respondents. The level of EI among business students (mean = 2.84, s.d. = 0.604) is significantly different from the level of EI among engineering students (mean = 2.68, s.d. = 0.52). It can be summed, students from the business programme score lower level of EI from the engineering course. Thus, the null hypothesis is rejected.

Next, the following table summarises the interpretation of the two-way ANNOVA result:

Source	Type III Sum of Squares	df	Mean Square	ί	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	1.654ª	5	.331	2.362	.040	.031	11.812	.754
Intercept	5113.454	1	5113.454	36525.54 7	.000	.990	36525. 547	1.000

Table 5: Tests of between-subjects effects

Gender	.313	1	.313	2.238	.135	.006	2.238	.320
Course	.911	2	.456	3.255	.040	.017	6.509	.618
Gender * Course	.207	2	.103	.738	.479	.004	1.476	.175
Error	51.659	236	.140					
Total	5363.708	240						
Corrected Total	53.312	239						

a. R Squared = .031 (Adjusted R Squared = .018)

b. Computed using alpha = .05

A two-way ANOVA was conducted to explore the impact of gender and types of courses on the levels of EI. Subjects were divided into two groups according to their courses (Group 1: Business Group, 2: Engineering). There was a statistically significant main effect for course [F (2, 236) =3.255, p=0.04], however the effect was small (eta squared = 0.017). Post-hoc comparisons using Scheffe test indicated that the means score for business students (mean = 2.84, s.d = 0.60) was significantly different from engineering students (mean = 2.68, s.d = 0.51). The main effect for gender [F (1, 239) =2.238, p=0.135], and the interaction effect [F (2, 240) =0.738, p=0.479] did reach statistical significant.

The correlation between the level of EI among the undergraduate students and their MUET performance

Next, to determine the correlation between the level of EI among the undergraduate students in the technical university and their MUET performance, a Pearson Correlation was used. The result of the finding is portrayed in Table 6. The Pearson Correlation is conducted to justify the research question 2 which is: -

RQ (2): Is there any significant correlation between the level of EI among the undergraduate students in the technical university and their MUET performance?

H0: There is no significant correlation between the level of EI among the undergraduate students in the technical university and their MUET performance.

H1: There is a significant correlation between the level of EI among the undergraduate students in the technical university and their MUET performance.

		EI Level	MUET Performance
Emotional Intelligence	Pearson Correlation	1	.751**
	Sig. (2-tailed)		.000
	N	240	240
	Pearson Correlation	.751**	1

Fable 6: The relationship	between EI Level	and the students'	' MUET performance
---------------------------	------------------	-------------------	--------------------

	Sig. (2-tailed)	.000	
-	Ν	240	240

******. Correlation is significant at the 0.01 level (2-tailed).

The data in Table 6 shows that there is a very strong positive correlation (r = 0.751, p < 0.05) between the EI level and MUET performance. Thus, the null hypothesis is rejected. This data has described the hypothesis, H₁: There is a significant correlation between the level of EI among the undergraduate students in the technical university and their MUET performance. By squaring the correlation and then multiplying by 100, it indicates that the EI level shares 56.4% of its variability with the students' MUET performance. It can be summed that the EI performance helps to increase the students MUET performance in a large percentage (56.4%).

Discussion

The impact of types of programmes and gender on the levels of EI among the undergraduate students in the technical university

According to this finding, there was a statistically significant key impact for course, but it was very weak. As compared to business students, the engineering students earned the lower mean ranking for EI. According to previous studies conducted by Sanchez-Ruiz, Mayroveli and Poullis, (2013), there is observational proof that students' personality profiles vary according to the major they have in the college. Thus, students enrolled in various programmes can have varying levels of EI, since each programme leads to the development of specific characteristics of EI. Furthermore, as cited by Marquez, Martin and Brackett (2006), business students are introduced to business ethics classes, which aid them in gaining self-awareness, one of the competencies of EI. Apart from that, this study's findings are quite close to those of Sanchez-Ruiz et al. (2013). According to the report, psychology students ranked slightly higher on trait EI than students from other majors. This report corroborates his findings when he discovered that students majoring in business and administration had a higher EQ score than those majoring in electrical engineering, led by those majoring in computer science. Then, some studies asserted that people in vocational and scientific fields rate lower on the trait EI than people in social science fields (Sanchez-Ruiz et al., 2010).

EI research has drawn psychologists, educators, and experts to investigate the relationship between EI and age, physical and psychological health, job performance, social relationships, parental involvement, academic achievement, anxiety level, deviant behaviour, language development, self-efficacy, and gender (as example, Adeyemo, 2007; Downey et al., 2008; Herrera, Al-Lal & Mohamed; Khalil, 2012; Nesari et al., 2011; Nor Lailatul Azilah et al., 2020; and Reza, 2009). According to the results of a study conducted by Hassan et al. (2009), there were substantial variations in EI levels between male and female students. Female students were discovered to record a higher degree of EI than male students, according to this report. This evidence was also proven by Goleman (1998), who claimed in his book "Working with EI" that women use their intrapersonal skills more than men because society encourages women to be more emphatic and voice out their feelings to other individuals. These intrapersonal skills are very crucial in language learning as it helps the learner to build a positive communication circle with others and to reduce the communication barrier.

Surprisingly, Mestre et al. (2006) found that "strategic EI often associated positively with friendship nominations" in their research. Mestre et al. (2006) explained that boys and girls adapt their EI competencies for various justifications and in different ways. He also noted that, based on an interview with some teachers at the school, the teachers suggested that the gender disparities existed because girls are more responsive and concerned about their peers' and teachers' approval of themselves. This shows that EI traits help the learners not only to adapt, but to pursue mutual understanding in communication. As a result, it enhances the learners' confidence level and their language performance. Boys and girls vary psychologically in many respects, and as a result, they have a greater chance of applying EI to various goals and strategies. Nonetheless, these gender disparities represent some important points that we should be concerned about, as the consequences of a lack of EI skills vary significantly for both genders. Male students with poor emotional skills "...demonstrated substantially more participation than



females in potentially risky activities such as using illicit substances... and engaging in deviant behaviour," according to Herrera et. al (2020). To put it another way, male students have a higher propensity to engage in risky habits and social issues than female students when they have low EI skills.

Other than that, female students have been recorded to have higher empathy than male students (Fernandez-Berrocal and Extremera, 2006). They discovered, in their analysis that male students have been recorded to have lower empathy than female students. To back up this argument, Goleman (1998, p.382) claimed in his book that Robert Rosenthal and Judith Hall performed a test called the "Profile of Nonverbal Sensitivity" (PONS). Candidates will be shown hundreds of video clips depicting a wide range of human feelings and gestures during the evaluation. Surprisingly, the researchers concluded that "80% of the time women performed better than men at guessing what emotions the individual was actually feeling". It meant that women are warier of other people's expressions and emotions, and this benefit makes women empathise with those around them. Empathy promotes understanding and acceptance towards others, thus, in ESL context, this trait prepares the learners to accept and improve mistakes. However, Goleman (1995) believed that when it comes to empathy, he disagrees with the previous finding that women are more emphatic than men because "...there was no evidence of a "female intuition" benefit." He also noted that previous research results were discovered because women tried harder than men to guess the human's language because empathy is a part of women's "self-identity" (Goleman, 1998). On the same subject, Goleman (1998) emphasised that men believe that being sensitive and conscious of others' expressions and emotions would make them less macho. This research is contradicting with the result from Ratu, Rai and Savitri (2021) which found that male students use their emotions to retain a default circumstance and achieve academic resilience.

Although this fact is arguable, being sensitive and conscious of others' expression and emotions is a great factor to master the ESL proficiency as it does help the learners to improve their communication skills. Consequently, they put less effort into interpreting the feelings and facial expressions of human feelings. According to all these findings, future studies should be done based on these results to see whether gender gaps have an effect on people's EI levels.

The correlation between the level of EI among the undergraduate students and their MUET performance

Many studies have been conducted to determine the impact of EI abilities on English language learning. According to a study conducted by Sedigheh and Ghasem (2011), there is a reliable and significant relationship between EI and English language proficiency. The study aimed to see if there was a connection between EI skills and English language proficiency among Iranian high school students. Following that, Huseyin et al. (2015) concluded that higher EI can aid ESL learners' language efficiency. They also concluded that people with high EI could comprehend the language better than others. They say that when people learn the English language, their EI skills can also be increased. Saud (2019) discovered that EI is an important factor in assessing a student's success while learning English. EI skills assist the learners to optimize the learning process and acquire the language.

Language learning, according to Abdolrezapour and Ghanbari (2021), entails intrapersonal and interpersonal communication and interaction, which emphasises EI traits. The ESL students are encouraged to engage with other learners during the learning process (Ariffin, 2021), hence the EI skills are useful for this purpose. Learners' engagement is critical for the users as they will develop their self-confidence while having conversation with others. According to Goleman (1998), a well-known psychologist in the area of EI, EI leads to individual achievement. A research of 200 American students in Texas looked at the impact of EI on academic success. Stottlemayer (2002), in this research, has found that the respondents' EI level could predict their academic achievement. EI level reflects the learners' positive emotions and drives the learners' motivation to succeed in mastering English Language. The learners usually apply the EI skills to adapt with any circumstances during the learning process. Individual differences such as intellect, aptitude, personality, motivation, attitude, and anxiety, according to Rossiter (2003), influence the second and foreign language output. EI skills affect students' motivation, decision-making technique, and preparation, according to Downey et al. (2008). As a result, this affect the students' academic performance. Learning language requires the learners to control their anxiety level and increase their motivation. The EI skills enhance the learners' capability to perform well in the English Language.



Moreover, various studies, such as Abdolrezapour and Ghanbari (2021) and Sedigheh and Ghasem (2011), have also examined the relationship between EI and second language performance.

between emotional competence and language acquisition. For instance, as stated by Nesari et al. (2011), no association was found between EI traits and vocabulary acquisition among Iranian intermediate-level EFL learners. Apart from that, Petrides, Frederickson and Furnham (2004) discovered a negative association between EI abilities and foreign language anxiety. Regardless of that, based on research, EI skills are proven to positively associate with the second language performance.

This result is consistent with Khalil's (2012) study, which examined the relationship between the EI of Iranian EFL learners and their TOEFL results. TOEFL is an English placement exam of similar intent to MUET. Khalil (2012) established a significant and positive association between EI and TOEFL scores in this study. The results demonstrate that EI influences on students' success on English proficiency assessments that assess their listening, communicating, reading, and writing abilities. Thomas and Nooreen (2013) established a significant connection between students' MUET achievement and EI through their study. The research was conducted to analyse the relationship between MUET achievement and EI abilities among matriculation students in Universiti Sains Islam Malaysia. In a study done by Nor Lailatul Azilah et al. (2020), it has been discovered that EI skills could predict the students' MUET performance. It can be concluded that English Language performance is indeed influenced by ones' EI competencies.

Seyed et al. (2014) have researched the connection between EI and language accomplishment among undergraduates in Iran. The finding seems to corroborate previous research as there was a huge connection between EI and language accomplishment score among the respondents. Shahmohamadi and Hasanzadeh (2011) accentuated that undergraduate students were more expressive and self-sufficient, have a high propensity to dominate the language effectively. Alavinia and Mollahossein (2012) expressed that EI competencies are significant especially in mastering language learning.

Suggestion for Future Research

Thus, this study indicates that English lecturers may profit from EI training programmes that allow for the development of EI awareness and skills in English Language classes. It is recommended that potential studies examine the association between EI characteristics and language abilities such as listening, communicating, reading, and writing in technical students.

Conclusion

This research has identified a number of important findings concerning both the independent and dependent variables. Additionally, this research offered answers to many of the research objectives. In general, there is no significant difference in the degree of EI among students enrolled in technical university programmes. There is a strong connection between the degree of EI and the academic performance of undergraduates at the technical university. The study's primary implication is about the importance of EI skills in English language learning and student success. The fragments of data from this study indicate that EI is paramount in assessing students' language output.

Additionally, the research found that students' success on the MUET may be increased if they had a higher degree of EI. As suggested by Nor Lailatul Azilah, Syed Najmuddin and Ruslan (2016), due to the fact that EI has an effect on English Language success, EI skills should be included as one of the important elements in building the English course at the technical university. The stakeholders, administrators, faculty, lecturers, and students, need to play roles in incorporating and applying EI skills into the teaching and learning of the English Language. Other than that, Bar-On (2007) suggested that EI can be stimulated, enhanced, and learned. As Hen (2020) asserts, numerous studies have established the critical role of EI in job growth, academic success, and life satisfaction.



Acknowledgements

The authors would like to thank the Centre for Language Learning (CeLL), Universiti Teknikal Malaysia Melaka (UTeM), Research Group C-TeD – RIMA for supporting this research. This research was supported by a Special Grant for Language Teachers from Universiti Teknikal Malaysia Melaka (KHASDG/2019/PBPI/Q00041).

References

- 1. Abdolrezapour, P., & Ghanbari, N. (2021). The effect of teaching emotional intelligence and spiritual intelligence on EFL learners' performance in four language skills. *Journal of Educational Psychology Studies*, *17*(40), 76-97. doi: 10.22111/jeps.2020.5973
- Adeyemo, D. (2007). Moderating influence of emotional intelligence on the link between academic self-efficacy and achievement of university students. *Psychology and Developing Societies*, 19(2). <u>https://doi.org/10.1177/097133360701900204</u>
- 3. Ateş, A. (2019). The effect of the emotional intelligence of learners of Turkish as a foreign language on reading comprehension skills and reading anxiety. *Universal Journal of Educational Research*, 7(2): 571-579, 2019
- 4. Alavinia, P., & Mollahossein, H. (2012). On the correlation between Iranian EFL learners' use of metacognitive listening strategies and their emotional intelligence. *International Education Studies*, *5*. 189-203. <u>https://doi.org/10.5539/ies.v5n6p189</u>
- Alenezi, A. M. (2020) The relationship of students' emotional intelligence and the level of their readiness for online education: A contextual study on the example of university training in Saudi Arabia, *Science and Education*, 22(4), 89-109. https://doi.org/0.17853/1994-5639-2020-4-89-109
- 6. Ariffin, A. (2021). Effects of student collaboration on ESL learners' vocabulary development. *Asian Journal of University Education*, *17*(1), 177-191. doi:10.24191/ajue.v17i1.12627
- Ashairi Suliman, Mohamed Yusoff Mohd Nor, & Melor Md Yunus. (2017). Dual-language programme in Malaysian secondary schools: Are you ready? *Paper presented at the Seminar Serantau*. Malaysia: Universiti Kebangsaan Malaysia, September. <u>https://doi.org/10.17576/gema-2017-1704-09</u>
- 8. Bar-On, R. (2007). Reuven Bar-On organization. <u>http://www.reuvenbaron.org/bar-on-model/essay.php?i=3</u>.
- 9. Chan, S. H., & Wong, B. E. (2004). Assessing oral skills of pre-tertiary students: The nature of the communicative act. Proceedings of the International Conference on English Instruction and Assessment, 33-48, Taiwan: National Chung Cheng University.
- Downey, L. A., Mountstephen, J., Lloyd, J., Hansen, K., & Stough, C. (2008). Emotional intelligence and scholastic achievement in Australian adolescents. *Australian Journal of Psychology*, 60, 10-17.
- 11. Fernandez-Berrocal, P., & Extremera, N. (2006). Emotional intelligence: a theoretical and empirical review of its first 15 years of history". *Psychotema, Vol. 18*, 7-12.
- 12. Gibbs, N. (1995). Emotional Intelligence: The EI Factor. Time Magazine.
- Go, M. B., Golbin Jr, R. A., Velos, S., & Bate, S. (2020). Teachers' compartmentalization ability, emotional intelligence, and teaching performance. *Asian Journal of University Education*, 16(3), 27-42. <u>https://doi.org/10.24191/ajue.v16i3.7912</u>.
- 14. Goleman, D. (1995). Emotional intelligence. New York: Bantam Books.
- 15. Goleman, D. (1998). In D. Goleman, Working with emotional intelligence. New York: Bantam Books.
- 16. Hamzah, F. (2018, October 5). Poor command of English—reason graduates fail at job interviews. UPM School of Graduate Studies. <u>https://sgs.upm.edu.my/news/poor_command_of_englishreason_graduates_fail_at_job_interviews-45281</u>
- 17. Hassan, A., Sulaiman, T., & Ishak, R. (2009). Philosophy underlying emotional intelligence in relation to level of curiosity and academic achievement of rural area students. (U. Faculty of Educational Studies, Ed.). *Journal of Social Science*, *5*(2), 95-103.
- Hen, M. (2020). Teaching emotional intelligence: An academic course for hospital teachers. *Continuity in Education*, 1(1), 22-36. http://doi.org/10.5334/cie.13
- 19. Hen, M., & Sharabi-Nov, A. (2014). Teaching the teachers: Emotional intelligence training for teachers. *Teaching Education*, 25(4), 375-390. <u>https://doi.org/10.1080/10476210.2014.908838</u>
- 20. Herrera L., Al-Lal M., & Mohamed, L. (2020). Academic achievement, self-concept, personality and emotional intelligence in primary education. analysis by gender and cultural group. *Front. Psychol.* 10, 3075. 10.3389/fpsyg.2019.03075
- Huseyin, O., Mehmet, D., & Jafar, P. (2015). Emotional intelligence and attitudes towards foreign language learning: Pursuit of relevance and implications. *Procedia - Social and Behavioral Sciences*, 416-423. <u>https://doi.org/10.1016/j.sbspro.2015.04.118</u>
- 22. Khalil, M. (2012). The relationship between EFL Iranian Learners' emotional intelligence and their performance on TOEFL/PBT. International Journal of Linguistics, 46-54. <u>https://doi.org/10.5296/ijl.v4i1.1382</u>
- MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150–186. <u>https://doi.org/10.1037/bul0000219</u>
- 24. Mahmud, Najihah. (2018). Investigating the washback effect of the MUET as a university entry test on students in Malaysia [Doctoral thesis, University of York]. White Rose eTheses Online. https://etheses.whiterose.ac.uk/23745/
- 25. Marquez, P. G.-O., Martin, R. P., & Brackett, M. A. (2006). Relating emotional intelligence to social competence and academic achievement in high school students. *Psicothema Online Journal*, *18*, 118-123.
- 26. Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings and implications. *Psychological Inquiry*, *15*(3), 197-215.
- 27. Mestre, J. M., Guil, R., Lopes, P. N., Salovey, P., & Gil-Olarte, P. (2006). Emotional intelligence and social and academic adaptation to school. *Psicothema*, *16*, 112–117.
- 28. Mohd Azhar, A. H. (2009). Panduan meningkatkan kecerdasan emosi. Batu Caves. PTS Professional Publishing Sdn. Bhd.
- 29. Moses, E., & Malani, I. (2019). Dual language programme: The perceptions and challenges of teachers and students in Klang, Selangor. *Jurnal Pendidikan Sains Dan Matematik Malaysia*, 9(1), 36-48. <u>http://ojs.upsi.edu.my/index.php/JPSMM/article/view/3039</u>

- Nesari, A. J., Karimi, L., & Nabieh, F. (2011). On the relationship between emotional intelligence and vocabulary learning of Iranian EFL learners at the intermediate level. Procedia - *Social and Behavioral Sciences*. 28. 900-903. https://doi.org/10.1016/j.sbspro.2011.11.165
- Nor Lailatul Azilah, H., Indradevi, S., Nadiah, Z. A., & Ruslan, H. (2020). The relationship between emotional intelligence (EI) and the Malaysian University English Test (MUET) performance among technical students. *International Journal of Learning, Teaching* and Educational Research, 19(7), 280-297. <u>https://doi.org/10.26803/ijlter.19.7.16</u>
- 32. Nor Lailatul Azilah, H., Syed Najmuddin, S. H., & Ruslan, H. (2016). Examining the level of emotional intelligence among semester one students in Universiti Teknologi MARA Pahang. *Journal of Human Capital Development*, 9(1), 1-11.
- Nusrah, A. M., & Chan, Y. F. (2020). The effects of perceived leadership styles and emotional intelligence on attitude towards organizational change among secondary school teachers. *Asian Journal of University Education*, 16(2), 36-45, <u>https://doi.org/10.24191/ajue.v16i2.10295</u>.
- 34. Nurhazlini, R., Lau, S. M., Nur Atiqah, M. S., & Farah Nabillah, M. Y. (2015). English language proficiency tests and academic achievement: A study on the Malaysian University English Test as a predictor of technical programme undergraduates academic achievement. *Advances in Language and Literary Studies*, *6*(1), 114-119.
- 35. Orme, G. (2001). What is emotional intelligence? In G. Orme, Emotionally Intelligent Living (pp. 3-24). Wales: Crown House Publishing.
- 36. Patton, P. (1997). EQ in the Workplace: Bridging the Gap Between what We Know and what We Do. Singapore: Raffles Editions.
- Pendergrass, N., Kowalczyk, R., Dowd, J., & Laoulache, R. (2001). Improving first year engineering education. *Journal of Engineering Education*. http://findarticles.com/p/articles/mi_qa3886/is_200101/ai_n8942238
- Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behaviour at school. *Personality and Individual Differences*, *36*, 277-293.
- Pritchard, M., & Nasr, A. (2004). Improving reading performance among Egyptian engineering students: Principles and practices. English for Specific Purpose, 23, 425-445.
- Ratu, A., Rai, N. G. M., & Savitri, E. D. (2021). Excellent academic achievement: Do intellectual humility and emotional intelligence matter? *Cakrawala Pendidikan*, 40(2), 265–278. https://doi.org/10.21831/cp.v40i2.35588

41. Reza, P. (2009). Emotional and verbal intelligence in language learning. *Iranian Journal of Language Studies*, *3*(1), 43-64.

- 42. Rossiter, M. J. (2003). The effects of affective strategy training in the ESL classroom. TESL-EJ, 7(2), 1-20.
- 43. Sánchez-Álvarez, N., Martos, M. P. B., & Extremera, N. (2020). a meta-analysis of the relationship between emotional intelligence and academic performance in secondary education: A multi-stream comparison. *Frontiers in psychology*, *11*, 15-17.
- 44. Sanchez-Ruiz, M. J., Perez-Gonzales, J. C., & Petrides, K.V. (2010). Trait emotional intelligence profiles of students from different university faculties. *Australian Journal of Psychology*, 62, 51-57.
- 45. Sanchez-Ruiz, M. J, Mavroveli, S., & Poullis, J. (2013). *Trait emotional intelligence and its link to university performance*: An examination.
- Saud, W. I. (2019). Emotional intelligence and its relationship to academic performance among SAUDI EFL undergraduates. International Journal of Higher Education, 8(6). 222-230. https://doi.org/10.5430/ijhe.v8n6p222
- 47. Sedigheh, S., & Ghasem, B. (2011). The relationship between emotional intelligence and language proficiency of Iranian high school students. *Procedia Social and Behavioral Sciences*, 1603-1607. <u>https://doi.org/10.1016/j.sbspro.2011.10.311</u>
- 48. Seyed Jalal, A. R., Hadi, H., & Taghi, G. (2014). Investigating the relationship between emotional intelligence and language achievement: A case of TEFL and Non-TEFL University Students. *International Journal of Language Learning and Applied Linguistic World*, 5(3), 117-127.
- Shahmohamadi, F., & Hasanzadeh, R. (2011). Emotional intelligence and its predictive power in Iranian foreign language learners' language achievement. *International Conference on Social Science and Humanity*, 5, 1-5
- 50. Stottlemayer, B. G. (2002) A conceptual framework for emotional intelligence in education: Factors affecting student achievement. PhD diss., Texas A&M University-Kingsville
- 51. Sucaromana, U. (2012). Contribution to language teaching and learning: A review of emotional intelligence. *English Language Teaching*, 5(9), 54–58. http://dx.doi.org/10.5539/elt.v5n9p54
- 52. Sureeyatanapas, P., Boonma, A., & Thalangkan, S. (2016). English proficiency requirements for engineering graduates at private organizations in Thailand. *KKU Engineering Journal*, *43*(1), 35-39.
- Thomas, N. S., & Nooreen, N. (2013). Relationship between MUET test achievement and trait emotional intelligence among matriculation students. *Graduate Research in Education*, 354-358.
- 54. UUM bimbang kekurangan pelajar ekoran syarat baharu MUET (2014, October 17). *Bernama*. https://www.astroawani.com/beritamalaysia/uum-bimbang-kekurangan-pelajar-ekoran-syarat-baharu-muet-45997
- 55. Venkatraman, G., & Prema, P. (2007).
- Alwi, A., Nordin, M.N.B. (2022). Applying Information Technology-Based Knowledge Management (KM) Simulation in the Airline Industry. *International Journal of Mechanical Engineering*, 2022, 7(1), pp. 1249–1252
- Bin Nordin, M.N., Rajoo, M., Maidin, S.S., Sulaiman, M.S.S., Mosbiran, N.F. (2022). Competencies On Implementations Of 21st Century Technology on Teaching, Learning and Assessment. *Res Militaris*, 2022, 12(2), pp. 7320–7331
- Bin Nordin, M.N., Rajoo, M., Maidin, S.S., Sulaiman, M.S.S., Mosbiran, N.F. (2022). Competencies On Implementations Of 21st Century Technology on Teaching, Learning and Assessment. *Res Militaris*, 2022, 12(2), pp. 7320–7331
- Bin Shafie, A.S., Binti Rubani, S.N.K., Nordin, M.N., Ibrahim, E., Talip, S. (2022). Micro-Pits Effectiveness for Controlling Friction In Planestrain Extrusion. *International Journal of Mechanical Engineering*, 2022, 7(1), pp. 1270–1280
- Jaya, S., Zaharudin, R., Hashim, S.N.A., Mapjabil, J., Nordin, M.N. (2021). Employing Design and Development Research (DDR) Approach in Designing Next Generation Learning Spaces (NGLS) In Teachers' Pedagogy and Technology Tools. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1237–1246



- 61. Mizan, M.Z., Lada, S., Hamzah, A.A., Esam, A., Nordin, M.N. (2021). Movement Control Order (MCO): An Syar'iyyah Political Approach. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1225–1230
- 62. Mosbiran, N, F, B, M.; Mustafa, M, Z, B.; and Nordin, M, N, B. (2021) Special Elements and Values Needed in Leadership for Special Education. *Review of International Geographical Education (RIGEO)*, 11(4), 712-722. doi: 10.33403/rigeo. 8006784
- Mosbiran, N.F., Mustafa, M.Z., Nordin, M.N., Abenoh, N.A., Saimy, I.S. (2021). Analysis of the Study of Individual Education Plans in Special Education. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1231–1236
- Norazmi, N., Zaid, M. & Abdul Rasid, A. R. (2019). The Practice of Headmasters' Leadership and Its Effect on Job Satisfaction of Special Education Integration Program (PPKI) Teachers in Johor, Malaysia. Universal Journal of Educational Research 7.9 (2019): 2008-2014. DOI: 10.13189/ujer.2019.070923.
- 65. Norazmi, N., Zaid, M. & Abdul Rasid, A. R. (2020). Relationship between Headmasters' Leadership, Task Load on Special Education Integration Programme Teachers' Job Satisfaction. *Universal Journal of Educational Research* 8(8):3398-3405
- 66. Nordin, M.N., Alwi, A. (2022). Digital Video Broadcasting Implementation in WSN Environments. International Journal of Mechanical Engineering, 2022, 7(1), pp. 1256–1259
- Nordin, M.N., Alwi, A. (2022). Knowledge Management Model Implementation in Electronic Devices. International Journal of Mechanical Engineering, 2022, 7(1), pp. 1253–1255
- Nordin, M.N.B., Maidin, S.S., Rajoo, M., Magiman, M.M., Mosbiran, N.F. (2022). International Frameworks For 21st Century Competences: Comparative Education. *Res Militaris*, 2022, 12(2), pp. 7332–7344
- 69. Rosnee Ahad, Mohamad Zaid Mustafa, Suhaimi Mohamad, Nur Hanim Saadah Abdullah, Mohd Norazmi Nordin (2021). Work Attitude, Organizational Commitment and Emotional Intelligence of Malaysian Vocational College Teachers. Journal of Technical Education and Training Vol. 13 No. 1 (2021): 15-21.
- S. S.M., Yusoff, M.Y.M., Rahmat, R., Yassin, Y.N.H.M., Nordin, M.N. (2021). Asset Tokenization: A Simulation Study. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1219–1224
- Zaid, M., Norazmi, N. & Abdul Rasid, A. R. (2020). Regression between Headmaster Leadership, Task Load and Job Satisfaction of Special Education Integration Program Teacher. Universal Journal of Educational Research 8.4 (2020) 1356 - 1362. Doi: 10.13189/ujer.2020.080428.
- Zaid, M., Norazmi, N. & Abdul Rasid, A. R. (2020). Structural Equation Modelling Using AMOS: Confirmatory Factor Analysis for Taskload of Special Education Integration Program Teachers. Universal Journal of Educational Research, Vol 8 (Jan, 2020) No 1: 127-133. DOI: 10.13189/ujer.2020.080115.
- 73. English language skills for engineering students: A needs survey. ESP World, 3 (16). http://www.esp-world.info/contents.htm.
- Yusof, R., Muda, T. E. A. T., & Noriah, M. I. (2016). Relationship between emotional intelligence and job satisfaction among school counselling head teachers. *IOSR Journal of Humanities and Social Science*, 21(5) version 3, 61-68.