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## Emotional Intelligence and Life Satisfaction in Forensic Science Students: A Cross-Sectional, Correlational, Comparison Study

(Kecerdasan Emosi dan Kepuasan Hidup dalam Kalangan Pelajar Sains Forensik: Kajian Keratan Rentas, Korelasi, Perbandingan)

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#### Abstract

Emotional intelligence has been related to life satisfaction and academic achievement. These two aspects are identified in some studies with college students, but none with students of Forensic Science. This knowledge is crucial since they are expected to work as forensic scientists, investigators, expert witnesses, or in other forensic science-related roles that need to interact effectively with people. For that, students need to have excellent academic achievement and positive emotions. This study aims to identify (1) the relationship between emotional intelligence and life satisfaction, and (2) the differences between students' academic achievement in emotional intelligence and life satisfaction. A total of 92 students from the Forensic Science Program at Universiti Sains Malaysia participated in a cross-sectional online survey. The online survey (Google Form) contained some demographic information and standardized psychological questionnaires: the Self-Rated Emotional Malaysian Intelligence Scale (SRMEIS) for measuring emotional intelligence, and the Malay version of the Satisfaction with Life Scale (SWLS) for life satisfaction assessment. The result shows a significant relationship between emotional intelligence and life satisfaction. Three domains of emotional intelligence, i.e., emotional perception and expression, emotional facilitation of thought, and emotional management show a significant relationship with life satisfaction. No significant differences were found between the two academic achievement groups (i.e., excellent and good academic achievements) on emotional intelligence and life satisfaction. Looking at the result, educators can form a comprehensive plan to assist the students in increasing their subjective well-being by implementing ways to improve their emotional intelligence and life satisfaction levels. The study's findings also help Forensic Science students be more prepared for learning and adapting to the tertiary environment.

Keywords: Emotional intelligence; life satisfaction; students; CGPA

#### Abstrak

Kecerdasan emosi telah dikaitkan dengan kepuasan hidup dan pencapaian akademik. Kedua-dua aspek ini dikenal pasti dalam beberapa kajian dengan pelajar kolej, tetapi tidak dengan pelajar Sains Forensik. Pengetahuan ini penting kerana mereka dijangka bekerja sebagai saintis forensik, penviasat, saksi pakar atau lain-lain peranan berkaitan sains forensik yang perlu berinteraksi secara berkesan dengan orang ramai. Untuk itu, pelajar perlu mempunyai pencapaian akademik yang cemerlang dan emosi yang positif. Kajian ini bertujuan untuk mengenalpasti (1) hubungan antara kecerdasan emosi dan kepuasan hidup, dan (2) perbezaan antara pencapaian akademik pelajar dalam kecerdasan emosi dan kepuasan hidup. Seramai 92 orang pelajar Program Sains Forensik di Universiti Sains Malaysia telah menyertai kajian keratan rentas dalam talian. Tinjauan dalam talian (Borang Google) mengandungi beberapa maklumat demografi dan soal selidik psikologi piawai: the Self-Rated Emotional Malaysian Intelligence Scale (SRMEIS) untuk mengukur kecerdasan emosi, dan the Self-Rated Emotional Malaysian Intelligence Scale (SRMEIS) untuk penilaian kepuasan hidup. Keputusan kajian menunjukkan hubungan yang signifikan antara kecerdasan emosi dan kepuasan hidup. Tiga domain kecerdasan emosi, iaitu persepsi dan ekspresi emosi, pemudah cara pemikiran emosi, dan pengurusan emosi menunjukkan hubungan yang signifikan dengan kepuasan hidup. Tiada perbezaan signifikan ditemui antara dua kumpulan pencapaian akademik (iaitu, pencapaian akademik cemerlang dan baik) pada kecerdasan emosi dan kepuasan hidup. Melihat kepada hasil kajian ini, para pendidik boleh membentuk pelan yang komprehensif untuk membantu pelajar meningkatkan kesejahteraan subjektif mereka dengan melaksanakan kaedah yang boleh menambah baik kecerdasan emosi dan tahap kepuasan hidup mereka. Dapatan kajian juga membantu pelajar Sains Forensik lebih bersedia untuk belajar dan menyesuaikan diri dengan persekitaran pengajian tinggi.

Kata kunci: Kecerdasan emosi; kepuasan hidup; pelajar; CGPA

## INTRODUCTION

Attending a tertiary institution with a strong emotional intelligence can lead to better mental, social, and physical health. Likewise, higher education is an ideal setting for educating and instilling emotional intelligence in students (Jahan et al. 2022). According to Salovey and Mayer (1990), emotional intelligence is a person's capability to comprehend, regulate, utilize, and assess their feelings and those of others they engage with. It is construed as a protective shield against adverse elements in life (Sarrionandia et al. 2018), which helps maintain the psycho-emotional balance and assists individuals in overcoming various distressing obstacles. Thus, students should develop these skills to ensure their success in the future, both in academic performance and the workplace. Emotional intelligence and self-awareness are intertwined. Self-awareness predisposes individuals to several positive effects on their self-confidence, self-control, and positive affectivity (Kalinin & Edguer 2023). At this point, individuals with high emotional intelligence can assess tenseness compared to those with low emotional intelligence, who have a high chance of being vulnerable to traumatic situations and incapable of managing perplexing and complicated feelings (Hunt & Evans 2004). Studies also show that students with high emotional intelligence can overcome negative emotions in their lives that may be caused by stress (Mikolajczak et al. 2007), burnout (Alam et al. 2021), and psychological strain (Cazan & Năstasă 2015). In brief, having steady emotional intelligence makes individuals optimistic about many things (Sarrionandia & Mikolajczak 2020).

Emotional intelligence is also correlated with life satisfaction (Plamer et al. 2002). Life satisfaction was defined as a person's cognitive and affective evaluations of his or her life (Diener et al. 2002). It refers to individual contentment with one's past or current life conditions and attaining what one requires and desires (Margolis et al. 2019). Individuals who are satisfied with life will appraise their life, indicate their overall quality (Lewis et al. 2011), and relate it to many positive outcomes. Several studies have reported a significant relationship between emotional intelligence and life satisfaction among university students, showing the importance of these components in nurturing their skills to enhance their academic accomplishment and develop necessary skills for future career prospects. The positive correlation between emotional intelligence and life satisfaction (Haddadi et al. 2021) exists due to the essence of emotional intelligence, which depicts a person's capabilities to perceive, comprehend, harness, and handle the nuances of one's feelings and others (Brackett & Salovey 2006). Moreover, greater life satisfaction is related to better stress endurance, optimistic academic goals, and improved self-efficacy (Antaramian 2017).

Furthermore, emotional intelligence is a significant predictor of subjective well-being (Andrei et al. 2016), social support (Goldenberg et al. 2006), IQ (Webb et al. 2013), and health (Mikolajczak et al. 2015) which is related to students' life. Students with high emotional intelligence are likelier to possess subjective wellbeing and maintain relationships with others. Considerably, subjective well-being has become a major concern for university students, in which higher life satisfaction facilitates their academic involvement and accomplishments (Antaramian 2017). However, succeeding both in academic and social life in university can be exhausting for students as their learning and life schedules must be well-adjusted and balanced. The capability to cope with these challenging conditions is correlated with emotional intelligence, the skills to control one's negative emotions (such as wrath, poor self-esteem, and anxiousness) and substitute them with positive ones (such as positive relationships, compassion, and confidence) (Goleman 2001).

Individuals with emotional intelligence skills have a higher tendency to achieve life satisfaction, as that intelligence could assist the individual in pushing themselves amid horrific events, limiting impulsive behaviour, and protecting reasonable thinking (Goleman 1995). Based on research (e.g., Gilman & Huebner 2006; Valois et al. 2001), low life satisfaction in students is associated with school dropout, aggressiveness, and misconduct. It is also linked to interpersonal and intrapersonal problems and reduced positivity in academic life (Gilman & Huebner 2006). According to Shek and Chai (2020), students with higher life satisfaction are likelier to accomplish excellent academic achievement. Meanwhile, students with emotional intelligence are better accustomed to the environment of their learning settings, lowering the likelihood of unsuccessful attainment of academic goals, dropout, and illicit drug abuse (Somoray et al. 2017). Conclusively, life satisfaction is a cognitive component of subjective well-being, whereas emotional intelligence may affect subjective wellbeing (Kjell et al. 2016).

A population of interest in this study is undergraduate students from the Forensic Science Program. In Malaysia, five universities, i.e., Universiti Sains Malaysia (USM), Universiti Teknologi Mara (UiTM), Universiti Kebangsaan Malaysia (UKM), Management and Science University (MSU), and University College Sedaya International (UCSI) offer the undergraduate study for this course. Although the number of universities that market this course is limited, the demand for this course is high. In USM, every year, the number of persons enrolled in this undergraduate course is 30 students on average. As for this study, the participants are students from USM. Besides providing theoretical knowledge and laboratory skills through core, university, and elective courses (School of Health Sciences USM 2023), the Forensic Science program integrates various branches of science, arts, commerce, and law with the application of justice principles for crime scene investigation (Shukla 2021). The learning curricula also include forensic laboratory disciplines in which students may learn forensic molecular biology, fingerprint comparison, and questioned document examination. Outside the laboratory, they may learn forensic pathology. The courses are challenging as forensic science students must rule out errors in judgment caused by extraneous knowledge or by the nature of the comparison techniques they applied.

Forensic science students, generally, are expected to be future forensic scientists, correctional officers, investigators, expert witnesses, or other forensic science-related work upon completing their education in the forensic science program. Hans and Parrotta (2021) reported that students in this program are intrigued to pursue careers in crime scene investigation but are concerned with their physical and emotional capabilities of managing cases relating to perished bodies or sexual violence. In addition, Bank and Packer (2007) stated that emotional intelligence is vital for such training, particularly for expert witnesses. Emotional intelligence may help individuals manage stressful situations, reduce the risk of being afflicted with ethical issues, prevent a wrongful conviction, and help the forensic officer or expert witness from overstating or falsifying the results of the investigation obtained, reducing forensic science credibility (Bank & Packer 2007). To the best of the researcher's knowledge, research that collectively studies emotional intelligence and life satisfaction among forensic science students has not been carried out. Thus, this study aims to provide insights into forensic science students' emotional intelligence and life satisfaction. The study will examine (1) the relationship between emotional intelligence and life satisfaction and (2) the difference in emotional intelligence and life satisfaction based on students' academic achievement. The findings of this study can act as a reference in providing better alternatives for enhancing students' lives, especially in the Malaysian context of the Forensic Science program.

Emotional Intelligence and Life Satisfaction among Undergraduate Students

A study by Holinka (2015) reported a significant relationship between emotional intelligence and life

satisfaction among undergraduate students enrolled in an Introduction to Psychology course. These findings coincide with those obtained in several similar studies with varying respondents, including Spanish undergraduate students (Extremera & Rey 2016), Turkish students (Özer et al. 2016), and Malaysian university students (Ramachandran et al. 2018). Manzi et al. (2006) and Cazan and Năstasă (2015) studies discovered that students who understand and articulate their feelings well often have greater life satisfaction. The studies also suggest that emotional intelligence can assist students in coping with and overcoming emotional distress, thereby increasing their life satisfaction.

Life satisfaction, a key part of subjective well-being, has an impact on students' academic success. Rode et al. (2005) study indicates overall life satisfaction was a significant predictor of student's grade point average (GPA), in which students' optimistic attitudes affect their academic performance. The finding aligns with Quinn and Duckworth's (2007) study, representing high levels of subjective well-being correlate with academic success. This claim is warranted because the students' contentment with their university's matters, organizations, services, education, approaches to learning, and academic achievements all play a role in their satisfaction with their university. Furthermore, one's sense of academic competence also influences how fulfilled one feels. Suldo et al. (2006) discovered moderate correlations between academic competence and self-efficacy among young individuals. Compared to students with low life satisfaction, those with high academic selfefficacy are reported to possess much higher life satisfaction levels. In brief, academic success and life satisfaction are interdependent.

University students' satisfaction with family life also correlates with their life satisfaction. According to Schimmack et al. (2002), family bonds are university students' most prominent source of life satisfaction. A healthy family network can aid young people in overcoming adversity and increasing their overall sense of well-being (Grevenstein et al. 2019). In addition, Xiao et al. (2009) state that students' financial behaviours contribute to their overall life satisfaction. Students who engage in financially healthy behaviours would indirectly boost their financial well-being, leading to high student life satisfaction.

Emotional Intelligence and Life Satisfaction on Academic Achievement

Emotional intelligence can predict relational participation, cognitive output, and achievements (Iqbal et al. 2021), as well as contribute to positive professional growth (Di Fabio & Kenny 2015)

and good academic achievement (MacCann et al. 2020). Studies (e.g., Shek & Chai 2020; Crede et al. 2015; Rode et al. 2005) also reported that students with good academic achievement demonstrated greater life satisfaction in the educational context. According to Shek and Chai (2020), students with stronger life satisfaction are more inclined to obtain outstanding academic achievement, establish closer relationships with their friends and teachers, and are more committed to their learning than those with low life satisfaction.

intelligence Emotional and emotional competency have a universal benefit (Fernandez-Perez & Martin-Rojas 2022). Students with high emotional competency have higher self-discipline, motivation, tension management, work system, study more, and obtain better grades (Duckworth & Seligman 2005; Elliot & Dweck 2005) due to the notion that emotional competence in emotional intelligence improves academic engagement and achievement (Sánchez Expósito et al. 2018). The students are more academically and psychologically engaged and accustomed to the classes as emotional competence acts on their mental adaptation, wellbeing, academic achievement, and professional growth (Brackett et al. 2011). In brief, the findings prove that students with high emotional intelligence possess more confidence, contentment, and conviviality (Stevens et al. 2019).

Emotional abilities are essential to good social communication (Lopes et al. 2011). The social and emotional demands that students must fulfil, the group work dynamics, or the learning assessments can be handled effectively by students through their emotional ability to cope with stressors. Moreover, coping variables, particularly problem-focused, are proven to mediate the connection between emotional intelligence and students' GPA (MacCann et al. 2011). To sum up, students' academics are fertile ground to incorporate the seeds of emotional intelligence, given the considerable number of effects that emotional intelligence can have in education.

# MATERIALS AND METHODS

#### Procedure

A cross-sectional study was carried out among students from the Forensic Science Program in the School of Health Sciences, USM Health Campus in the academic session of 2022/2023. All participants are Malaysian students. Students who retake a course or take an extended semester will not be included in the study to prevent bias in the student's academic achievement. The data collection process began after obtaining official approval from the Human Research Ethics Committee USM. The required permission was also received from the SRMEIS and SWLS authors. The online questionnaires, using Google Forms, were distributed to the participants through the *WhatsApp* application. The time for completion of the questionnaires was about 15 minutes.

#### Research Instrument

The self-rated Malaysian Emotional Intelligence Scale (SRMEIS) (Tharbe & Mun 2017) and the Malay version of the Satisfaction with Life Scale (SWLS) (Swami & Chamorro-Premuzic 2009) were used as they were culturally and socially compatible. The SRMEIS aims to assess and determine the individual rate of emotional intelligence. The questionnaire consists of 39 items, divided into four domains: emotional perception and expression, emotional facilitation of thinking, emotional understanding, and emotional management. All items were rated on a 5-point Likert scale (1=strongly disagree to 5=strongly agree) with three grading scales: low (39-90), Moderate (91-143), and high (144-195). A high score indicates a high emotional intelligence level, whereas a low score signifies a low emotional intelligence. In this study, Cronbach's alpha value for the SRMEIS is .92, similar to Tharbe and Mun (2017), regarded as a powerful Cronbach's alpha value indicating a high level of internal consistency (Table 1)

Next, students' life satisfaction was investigated using the SWLS. In the current study, Cronbach's alpha value of SWLS is .84, while it was .83 in Swami and Chamorro-Premuzic (2009). This shows that the questionnaire has high internal consistency and is a reliable measure of life satisfaction for Malay-speaking samples. The result is displayed in Table 1. The SWLS comprises five items and is rated on a seven-point Likert scale (1=strongly disagree to 7=strongly agree). The high life satisfaction score is determined by high-scoring data with a maximum score of 35 and a minimum score of 5.

Table 1 The Cronbach's Alpha values for the Self-Rated Malaysian Emotional Intelligence Scale (SRMEIS) and Satisfaction with Life Scale (SWLS)

Questionnaire	Cronbach's Alpha Value		
SRMEIS	.92		
SWLS	.84		

# RESULTS

The data was analysed using the IBM Statistical Package for the Social Science (SPSS) version 27. As the data were normally distributed, Pearson's correlation test was used to examine the correlation between emotional intelligence (including the four domains) and life satisfaction. The independentsample t-test was utilized to determine the difference between the two academic achievement groups on emotional intelligence and life satisfaction, respectively.

#### Demographic Profile of Respondents

A total of 92 undergraduate students enrolled in the Forensic Science Program participated in the study through an online survey site: 22 (23.9%) males and 70 (76.1%) females. Among them, 35 (38%) second-year students, 32 (34.8%) third-year students, and 25 (27.2%) fourth-year students. The first-year students were not involved in this study as they do not have Cumulative Grade Point Average (CGPA) yet. In the present study, the CGPA is pivotal in examining the differences between the academic achievement groups on emotional intelligence and life satisfaction.

Most of the participants are Malay (50.0%), followed by 21 Chinese (22.8%), 16 Indian (17.4%), and nine students from other races (9.8%). Of the nine students from other races, two are of Kadazan Dusun, a Javanese, a Melanau, a Murut, an Orang Asli, and a Sinokadazan. Regarding primary sources for student financing, 59 (61.4%) students receive financial assistance from national educational loans such as Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN) and Majlis Amanah Rakyat (MARA). A total of 17 students (18.5%) are selffunded by their guardians, and 16 students (20.1%) receive a scholarship as their primary source of financing.

 Table 2 Demographic profiles of the students

Academic achievement is rated based on the student's CGPA, categorised as excellent, good, and average. CGPA under the category of excellent consists of students with a current CGPA in the range of 3.67 to 4.00. Students with good CGPA have a current CGPA between 3.00 and 3.66, whereas an average CGPA is a CGPA of 2.99 and below. Of 92 students, 72 (78.3%) hold excellent academic achievement and 21 (22.8%) have good academic achievement. None of the participants scored academic achievement under the average category. Table 2 tabulates the demographic data of the participants.

# Level of Emotional Intelligence and Life Satisfaction

The levels of emotional intelligence and life satisfaction were analysed. As for the level of emotional intelligence, the mean is 140.33 (SD = 17.45). For the level of life satisfaction, the mean is 22.28 (SD = 5.96). As shown in Table 3, of 92 students, 48 have a moderate level of emotional intelligence, while 44 students are at a high level of emotional intelligence, and none are at a low level. Looking at the result of life satisfaction, whereas 34 students possess a high level of life satisfaction level. In brief, the result indicates that most respondents scored a moderate level of emotional intelligence and life satisfaction.

Demographics	2 <sup>nd</sup> year n (%)	3 <sup>rd</sup> year n (%)	4 <sup>th</sup> year n (%)	Total n (%)
Gender				
Male	9 (25.7)	5 (15.6)	9 (36)	23 (25)
Female	26 (74.3)	27 (84.4)	16 (64)	69 (75)
Ethnicity				
Malay	16 (45.7)	14 (43.8)	16 (64)	46 (50)
Chinese	12 (34.3	7 (21.9)	2 (8)	21 (22.8)
Indian	-	10 (31.2)	6 (24)	16 (17.4)
Others	7 (20)	1 (3.1)	1 (4)	9 (9.8)
Financial support				
Student loan	23 (65.8)	19 (59.4)	17 (68)	35 (38)
Scholarship	6 (17.1)	3 (9.3)	6 (24)	32 (34.8)
Personal	6 (17.1)	10 (31.3)	2 (8)	25 (27.2)
Academic achievement based on CGPA Excellent				
Good	26 (74.3)	27 (15.6)	19 (64)	72 (78.3)
	9 (25.7)	5 (84.4)	6 (36)	20 (21.7)

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Variables	Level n (%)				
	Low	Moderate	High	Mean	SD
Emotional intelligence	-	48 (52.2)	44 (47.8)	140.33	17.45
Life satisfaction	9.8 (9)	49 (53.3)	34 (36.9)	22.28	5.96

Table 3. Forensic science students' emotional intelligence and life satisfaction level

Correlations between Emotional Intelligence and Life Satisfaction

A Pearson product-moment correlation was conducted to assess the relationship between emotional intelligence and life satisfaction. The result showed a significant positive correlation between the two variables, r(90) = .457, p = .000, indicating that increases in students' emotional intelligence were correlated with increases in their life satisfaction. Further analysis was done for each domain. Of four domains, three domains of emotional intelligence (i.e., emotional perception and expression, emotional facilitation of thinking, and emotional management) were significantly correlated with life satisfaction. The analysis showed no significant relationship between emotional understanding and life satisfaction (r(90)=.154, p=.142). The result is displayed in Figure 1.





The independent-sample t-test was used to analyse the differences between the two academic achievement groups (i.e., excellent and good academic achievements) on emotional intelligence and life satisfaction. The first analysis focuses on emotional intelligence. The result indicates no significant difference in emotional intelligence between excellent academic achievement (M = 139.07, SD = 16.98) and good academic achievement (M = 144.85, SD = 18.81) groups, t(90) = -1.316, p = .192. Further analysis of each domain of emotional intelligence also shows no significant differences between excellent and good academic achievement. These results suggest that academic achievement does not affect emotional intelligence and life satisfaction. A detailed description of the results is tabulated in Table 4.

Variables	Academic Achievement					
	Excellent		Good		— t	Sig
	Mean	SD	Mean	SD		
Emotional Intelligence	139.07	16.98	144.85	18.81	-1.316	.192
Emotional perception and expression	37.44	5.26	38.60	5.84	849	.398
Emotional facilitation of thinking	46.51	7.70	48.75	6.50	-1.186	.239
Emotional understanding	13.49	2.50	12.55	3.05	1.412	.161
Emotional management	41.63	7.36	44.95	8.29	-1.739	.085
Life Satisfaction	22.25	5.92	22.40	6.26	099	.942

Table 4 T-test analysis on emotional intelligence and life satisfaction based on academic achievement

## DISCUSSION

Emotional Intelligence and Life Satisfaction among Forensic Science Students

Most Forensic Science students in the present study possess a moderate level of emotional intelligence, followed by a high level of emotional intelligence. The findings inferred that the students are optimistic, adaptable, possess a considerably good sense of selfcontrol, and know their responsibilities as students. In addition, most students display moderate life satisfaction levels, followed by high life satisfaction. The finding also shows a significant correlation between emotional intelligence and life satisfaction, which is similar to other studies (e.g., Ain et al. 2021; Haddadi et al. 2021; Sánchez-Álvarez et al. 2016). However, the result contradicts Holinka (2015), who indicated no association between emotional intelligence and life satisfaction. Such discrepancies may be due to the difference in measures used.

This study suggests that Forensic Science possess students who adequate emotional intelligence may better perceive, understand, and utilise their emotions, hence having greater control over their surroundings and being satisfied with their lives. Consequently, they can overcome various emotional issues related to their daily lives or academic matters as they are adept at regulating their emotions, assisting them in improving their attitude toward life. Moreover, they can detect, utilise, comprehend, and implement strategies to ensure healthy overall emotion regulation that leads to feeling satisfied in life. The finding aligns with a study by Urquijo et al. (2016), who highlighted that students with emotional intelligence have good well-being and low perceived stress. The current findings, concisely, support the viewpoint that one's emotional regulation directly predicts life satisfaction (Kong et al. 2012). However, emotion regulation could also indirectly predict life satisfaction through resilience (Sarrionandia et al. 2018). In this regard, a high level of emotion regulation combined with resilience capacity will assist individuals in dealing with physically or mentally demanding situations. All these positive aspects may have been supported through the Academic Advisory System implemented at USM. The academic advisory system aims to ensure good communication between academic advisors and students in all aspects of student's life while studying at USM. Each student is allocated an academic staff who will serve as the student's academic advisor, monitor the student's academic progress, and assist students in overcoming personal problems for the entire duration of their studies at USM. This service could have made Forensic Science students feel safe and at ease when facing obstacles throughout their studies, which indirectly enhances their emotional intelligence and sense of life satisfaction.

The present study conducted a correlational analysis of each domain of emotional intelligence against life satisfaction. The findings indicated that Forensic Science students' emotional perception and expression positively affect life satisfaction, which aligns with Lee and Kim (2021). Emotion perception and expression can be described as the capability to recognize one's own emotions and other people's emotions, express emotions precisely, and discern between honest and dishonest feelings (Mayer et al. 2004). The finding suggests that students who can perceive their and others' emotions and accurately express their feelings are more satisfied. This viewpoint appears to corroborate Extremera and Rey's (2016) finding that individuals incapable of effectively perceiving their emotions are inept at dealing with stressful events, leading to a lower degree of life satisfaction. In terms of emotional expression, Forensic Science students who can express themselves accurately can achieve greater life satisfaction. The reason for this is that when they express their emotions, they learn to identify and comprehend them, which prevents repressed feelings from taking control of them. To put it briefly, good emotional expressiveness leads to a better sense of well-being.

In this study, emotional facilitation of thinking positively correlates with life satisfaction. Facilitation of thought refers to generating and utilizing emotions to facilitate judgment for problem-solving (Mayer et al. 2004). High emotional facilitation of thought indicates that one can generate and compare emotions to sensory modalities. The present finding suggested that Forensic Science students with emotional facilitation of thought are more satisfied with life as they can recognize the importance of emotions to their performance and utilize the emotions accordingly to enhance their productivity and performance, leading to greater life satisfaction (Crede et al. 2015). In addition, students with emotional facilitation of thought will demonstrate better problem-solving skills. They tend to implement an insightful strategy (Arefnasab et al. 2012) and positive problem orientation when solving problems (Gál et al. 2022). In brief, positive problem orientation indicates better life satisfaction and increases problem-solving ability.

Emotional understanding, however, has no significant relationship with life satisfaction. This domain encompasses the capacity to classify emotions, interpret their meanings, comprehend complicated emotions, identify emotion patterns through time (Salovey & Sluyter 1997), understand a wide range of emotions, and affect individual behaviour (Tharbe et al. 2020). The present finding implies that Forensic Science students' life satisfaction is not influenced by their level of understanding of their own and other people's emotions. The finding differs from Nicolet-dit-Félix et al. (2023) which claim that individuals with emotional understanding possess hypersensitivity, making them respond more actively to emotional cues. In our opinion, the discrepancies in the findings between this study and the present study may be due to the cultural differences of the participants. According to Shao et al. (2015), emotional understanding is a culturespecific domain compared to emotion perception and expression. Emotion understanding correlates with cognitive capability and tends to be subject to cultural influence (Matsumoto & Hwang 2012). Therefore, individuals from varying cultures may interpret their emotions differently, leading to different emotional reactions. As suggested by Shao et al. (2015), individuals with high emotional intelligence in one culture are not necessarily emotionally intelligent in a different culture.

The fourth domain of emotional intelligence is emotional management, which is construed as the capability of managing emotions in oneself and others, opening to both positive and negative emotions, and reflecting on all associated emotions (Mayer et al. 2004). This domain is the highest branch of emotional intelligence as it involves the interconnection of motivational, emotional, and cognitive factors that need to be controlled and stabilized to cope with emotions effectively. In line with the expectations, these Forensic Science students' emotional management positively correlates with life satisfaction. From the author's point of view, the student's emotional well-being might be influenced by the conducive environment and good infrastructure provided by the university at the USM Health Campus. All students on this campus are allowed to stay in university accommodation, provided with wired and wireless network services, health facilities, and sports and recreation facilities on campus. These supportive amenities give them the areas to socialize, study, and exercise hence promoting good moods, positive emotions, and being satisfied with learning and living life on campus. The correlation implies that emotional intelligence can reflect on individual emotions effectively by engaging, prolonging, or detaching from various emotional states, creating a balance of interface in the aspects of motivation, emotion, and cognition aspects of their lives. Moreover, good emotional management is particularly imperative for students who often experience academic stress. As those with emotional management are less likely to have psychological distress, it can be concluded that emotional management is a constructive tool to improve students' life satisfaction (Mestre et al. 2017).

Emotional Intelligence, Life Satisfaction, and Academic Achievement

In this study, the majority (78.3%) of the forensic science students scored excellent academic achievement (CGPA of 3.67 to 4.00), followed by 21.7% who scored good academic achievement (CGPA of 3.00 to 3.66). The analysis shows no significant difference between excellent and good academic achievements in emotional intelligence and life satisfaction. Concerning emotional intelligence, the present finding corresponds to Malik and Shujja (2013) study, where emotional intelligence scores are similar for all students (high to low achiever group). As for life satisfaction, a similar result was found in Jabeen and Khan's (2013) study; the high and low achievers do not significantly differ in academic motivation. In this regard, it seems that academic achievement among Forensic Science students in USM is not a decisive factor in academic satisfaction and, thus, cannot determine overall life satisfaction.

There are several limitations that should be considered when reflecting on the outcomes of this study and looking ahead to future research. One of the limitations acknowledged in the current study is the limited availability of prior research studies among Forensic Science students, especially on the aspect of psychological well-being, in Malaysia as well as in other countries. Besides, the current study was conducted with a small number of undergraduate students and was limited to the area of the Forensic Science Program at USM. Therefore, the results of the current study are not representative of the overall population of Forensic Science students' emotional intelligence and life satisfaction in Malaysia. A larger sample size that involves different universities may reflect a more holistic view of the experiences of Forensic Science students with psychological issues. Next, this study only revealed emotional intelligence and life satisfaction based on the student's academic achievement. Future research is recommended for a longitudinal study to observe changes, if there are any, in the level of emotional intelligence and life satisfaction, from the first to the final year period of study. As students are familiarised with more exposure to various potentially triggering course materials, it becomes imperative to study whether exposure improves or negatively affects their emotional intelligence level. Furthermore, it is also recommended that other variables, such as resilience and intrinsic motivation, be added to extend the mechanisms between emotional intelligence and life satisfaction among Forensic Science students.

## CONCLUSION

The study contributes to knowledge regarding emotional intelligence and life satisfaction among students of the Forensic Science program. The finding reveals a significant relationship between the two variables in positive psychology: emotional intelligence and life satisfaction. Moreover, three domains of emotional intelligence (i.e., emotional perception and expression, emotion facilitation of thought, and emotion management) are associated with life satisfaction. The study presents essential insight into each of the primary constructs among forensic science students in Malaysia. The study's findings improve the understanding of emotional intelligence in indicating life satisfaction, especially in managing and utilizing emotion among students. The result indicates that by managing emotions well, students can face challenges and move towards life satisfaction. In particular, the finding helps forensic science students be more prepared for learning and adapting to the tertiary environment. Concisely, this study approved that students who are better at dealing with their negative emotions are more able to be satisfied in life. It is also noted that emotional intelligence leads the good psychological adjustment and increases students' wellbeing. Educators and university administrators can also benefit from this study's findings, as they can form a comprehensive plan to assist the students in strengthening their subjective well-being by implementing ways to increase their emotional intelligence and life satisfaction on campus.

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#### REFERENCES

- Ain, N.U., Munir, M. & Suneel, I. 2021. Role of emotional intelligence and grit in life satisfaction. Heliyon 7(4): e06829. DOI: 10.1016/j.heliyon.2021.206829
- Alam, F., Yang, Q., Bhutto, M.Y. & Akhtar, N. 2021. The influence of e-learning and emotional intelligence on psychological intentions: Study of stranded Pakistani students. Frontiers in Psychology 12: 1-11. DOI: 10.3389/fpsyg.2021.715700
- Andrei, F., Siegling, A.B., Aloe, A.M., Baldaro, B. & Petrides, K.V. 2016. The incremental validity of the Trait Emotional Intelligence Questionnaire (TEIQue): A systematic review of evidence and meta-analysis. Journal of Personality Assessment 98(3): 261-276. DOI: 10.1080/00223891.2015.1084630
- Antaramian, S. 2017. The importance of very high life satisfaction for students' academic success. Cogent Education 4(1). DOI:10.1080 /2331186X.2017.1307622
- Arefnasab, Z., Zare, H. & Babamahmoodi, A. 2012. Emotional intelligence and problem solving strategy: Comparative study based on 'Tower of Hanoi' test. Iranian Journal of Psychiatry and Behavioral Sciences 6(2): 62-68.
- Bank, S.C. & Packer, I.K. 2007. Expert witness testimony: Law, ethics, and practice. In A.M. Goldstein (Ed.), Forensic psychology: Emerging topics and expanding roles (pp.421-445). John Wiley & Sons, Inc.
- Brackett, M.A. & Salovey, P. 2006. Measuring emotional intelligence with the Mayer-Salovery-Caruso Emotional Intelligence Test (MSCEIT). Psicothema 18: 34-41.
- Brackett, M.A., Rivers, S.E. & Salovey, P. 2011. Emotional intelligence: Implications for personal, social, academic, and workplace success. Social and Personality Psychology Compass 5(1): 88-103. DOI:10.1111/j.1751-9004.2010.00334.x
- Cazan, A.-M. & Năstasă, L.E. 2015. Emotional intelligence, satisfaction with life and burnout among university students. Procedia - Social and Behavioral Sciences 180: 1574-1578. DOI:10.1016/j.sbspro.2015.02.309
- Crede, J., Wirthwein, L., McElvany, N. & Steinmayr, R. 2015. Adolescents' academic achievement and life satisfaction: The role of parents' education. Frontiers in Psychology 6. DOI:10.3389/fpsyg.2015.00052
- DOI:10.3389/fpsyg.2015.00052
  Di Fabio, A. & Kenny, M.E. 2015. The contributions of emotional intelligence and social support for adaptive career progress among Italian youth. Journal of Career Development 42(1): 48–59. DOI:10.1177/0894845314533420

- Diener E., Lucas R.E. & Oishi S. 2002. Subjective well-being: The science of happiness and life satisfaction. In C.R. Snyder & S.J. Lopez (Eds.), Handbook of positive psychology (pp. 463-473). Oxford University Press.
- Duckworth, A.L. & Seligman, M.E.P. 2005. Selfdiscipline outdoes IQ in predicting academic performance of adolescents. Psychological Science 16(12): 939-944. DOI:10.1111/ j.1467-9280.2005.01641.x
- j.1467-9280.2005.01641.x Elliot, A.J. & Dweck, C.S. 2005. Competence and motivation: Competence as the core of achievement motivation. In A.J. Elliot & C.S. Dweck (Eds.), Handbook of competence and motivation (pp. 3-12). Guilford Publications.
- motivation (pp. 3-12). Guilford Publications. Extremera, N. & Rey, L. 2016. Ability emotional intelligence and life satisfaction: Positive and negative affect as mediators. Personality and Individual Differences 102: 98-101. DOI:10.1016/j.paid.2016.06.051 Fernandez-Perez, V. & Martin-Rojas, R. 2022.
- Fernandez-Perez, V. & Martin-Rojas, R. 2022. Emotional competencies as drivers of management students' academic performance: The moderating effects of cooperative learning. The International Journal of Management Education 20(1). DOI:10.1016/j.ijme.2022.100600
- Gál, Z., Kasik, L., Jámbori, S., Fejes, J B. & Nagy, K. 2022. Social problem-solving, life satisfaction and well-being among high school and university students. International Journal of School & Educational Psychology 10(1): 170-180. DOI:10.1080/21683603.2020 .1856249
- Gilman, R. & Huebner, E.S. 2006. Characteristics of adolescents who report very high life satisfaction. Journal of Youth and Adolescence 35(3): 311-319. DOI: 10.1007/ s10964-006-9036-7
- Goleman, D. 1995. Emotional Intelligence. New York: Bantam Books.
- Goleman, D. 2001. Emotional Intelligence: Issues in Paradigm Building. In D. Goleman & C. Cherniss (Eds.), The Emotionally Intelligent Workplace: How to Select for, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations (pp. 13-26). San Francisco, CA: Jossey-Bass.
- Goldenberg, I., Matheson, K. & Mantler, J. 2006. The assessment of emotional intelligence: A comparison of performance-based and selfreport methodologies. Journal of Personality Assessment 86(1): 33-45. DOI: 10.1207/ s15327752jpa8601-05
- Grevenstein, D., Bluemke, M., Schweitzer, J. & Aguilar-Raab, C. 2019. Better family relationships - higher well-being: The connection between relationship quality and health related resources. Mental Health and Prevention 14. DOI:10.1016/j. mph.2019.200160
- Haddadi, M.H., Abolghasemi, S. & Tizdast, T. 2021. The relationship between emotional intelligence, successful intelligence, moral intelligence, cultural intelligence, and life satisfaction mediated by mental health. Community Health 8(4): 1-16.
- Hans, K. & Parrotta, K. 2021. "The errors are egregious": Assessing the CSI effect and

undergraduate students' perceptions of forensic science through a pre- and posttest investigation. In J.B. Wiest (Ed.), Mass Mediated Representations of Crime and Criminality (Studies in Media and Communications (pp. 149-172). Emerald Publishing Limited, Bingley. DOI:10.1108/ S2050- 206020210000021014

- Holinka, C. 2015. Stress, emotional intelligence, and life satisfaction in college students. College Student Journal 49(2): 300-311.
- Hunt, N. & Evans, D. 2004. Predicting traumatic stress using emotional intelligence. Behaviour Research and Therapy 42(7): 791-798. DOI:10.1016/j.brat.2003.07.009
- Iqbal, J., Ashraf, M.A., Perveen, S., Qureshi, N., Imran, Z. & Jin, N. 2021. How emotional intelligence influences cognitive outcomes among university students: The mediating role of relational engagement during the Covid-19 pandemic. Frontiers in Psychology 12. DOI: 10.3389/fpsyg.2021.711439
- Jabeen, S. & Khan, M.A. 2013. A study on need achievement of high and low achievers. Journal of Education and Practice 4(4): 225– 235.
- Jahan, S.S., Nerali, J.T., Parsa, A.D. & Kabir, R. 2022. Exploring the association between emotional intelligence and academic performance and stress factors among dental students: A scoping review. Dentistry Journal 10(4): 67. DOI:10.3390/dj10040067
- Kalinin, V. & Edguer, N. 2023. The effects of selfcontrol and self-awareness on social media usage, self- esteem, and affect. Eureka. DOI:10.29173/eureka28781
- Kjell, O.N.E., Daukantaitė, D., Hefferon, K. & Sikström, S. 2016. The harmony in life scale complements the satisfaction with life scale: Expanding the conceptualization of the cognitive component of subjective wellbeing. Social Indicators Research 126(2): 893-919. DOI: 10.1007/s11205-015—903-z
- Kong, F., Zhao, J. & You, X. 2012. Emotional intelligence and life satisfaction in Chinese university students: The mediating role of self-esteem and social support. Personality and Individual Differences 53(8): 1039-1043. DOI: 10.1016/j.paid.2012.07.032
- Lee, S. & Kim, B. 2021. Cognitive and emotional processes and life satisfaction adults of Korean with childhood experience abuse according to the emotional expressiveness. level of Psychological Reports 125(4): 1957-1976. DOI:10.1177/00332941211012622
- Lewis, A.D., Huebner, E.S., Malone, P.S. & Valois, R.F. 2011. Life satisfaction and student engagement in adolescents. Journal of Youth and Adolescence 40: 249-262. DOI:10.1007/ s10964-010-9517-6
- Lopes, P.N., Nezlek, J.B., Extremera, N., Hertel, J., Fernández-Berrocal, P., Schütz, A. & Salovey, P. 2011. Emotion regulation and the quality of social interaction: Does the ability to evaluate emotional situations and identify effective responses matter? Journal of Personality 79(2): 429–467. DOI: 10.1111/j.1467-6494.2010.00689.x

#### Jurnal Sains Kesihatan Malaysia 23 (1) 2025: 69-80 DOI : http://dx.doi.org/10.17576/JSKM-2025-2301-01

- MacCann, C., Fogarty, G.J., Zeidner, M. & Roberts, R.D. 2011. Coping mediates the relationship between emotional intelligence (EI) and academic achievement. Contemporary Educational Psychology 36(1): 60-70. DOI: 10.1016/j.cedpsych.2010.11.002
- 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. DOI:10.1037/ bul0000219
- Malik, F. & Shujja, S. 2013. Emotional intelligence and academic achievement: Implications for children's performance in schools. Journal of the Indian Academy of Applied Psychology 39(1): 65-73.
- Manzi, C., Vignoles, V.L., Regalia, C. & Scabini, E. 2006. Cohesion and enmeshment revisited: Differentiation, identity, and well-being in two European cultures. Journal of Marriage and Family 68(3): 673-689. DOI:10.1111/ j.1741-3737.2006.00282.x
- Margolis, S., Schwitzgebel, E., Ozer, D.J. & Lyubomirsky, S. 2019. A new measure of life satisfaction: The Riverside Life Satisfaction Scale. Journal of Personality Assessment 101(6): 621-630. DOI:10.1080/00223891.20 18.1464457
- Matsumoto, D. & Hwang, H.S. 2012. Culture and emotion: The integration of biological and cultural contributions. Journal of Cross-Cultural Psychology 43(1): 91-118. DOI:10.1177/0022022111420147
- Mayer, J.D., Salovey, P. & Caruso, D.R. 2004. Emotional intelligence: Theory, findings, and implications. Psychological Inquiry 15(3): 197-215. DOI: 10.1207/ s15327965pli1503\_02
- Mestre, J. M., Núñez-Lozano, J. M., Gómez-Molinero, R., Zayas, A. & Guil, R. 2017. Emotion regulation ability and resilience in a sample of adolescents from a suburban area. Frontiers in Psychology 8. DOI:10.3389/ fpsyg.2017.01980
- Mikolajczak, M., Ayalosse, H., Vancorenland, S., Verniest, R., Callens, M., van Broeck, N., et al. 2015. A nationally representative study of emotional competence and health. Emotion 15(5): 653-667. DOI: 10.1037/emo0000034
- Mikolajczak, M., Menil, C. & Luminet, O. 2007. Explaining the protective effect of trait emotional intelligence regarding occupational stress: Exploration of emotional labour processes. Journal of Research in Personality 41(5): 1107–1117. DOI: 10.1016/j. jrp.2007.01.003
- Nicolet-dit-Félix, M., Gillioz, C., Mortillaro, M., Sander, D., & Fiori, M. 2023. Emotional intelligence and attentional bias to emotional faces: Evidence of hypersensitivity towards emotion information. Personality and Individual Differences 201: 111917. DOI:10.1016/j.paid.2022.111917
- DOI:10.1016/j.paid.2022.111917
  Özer, E., Hamarta, E. & Deniz, M.E. 2016. Emotional intelligence, core-self evaluation, and life satisfaction. Psychology 7: 145-153. DOI:10.4236/psych.2016.72017
- Plamer, B., Donaldson, C. & Stough, C. 2002.

Emotional intelligence and life satisfaction. Personality and Individual Differences 33(7): 1091-1100. DOI: 10.1016/S0191-8869(01)00215-X

- Quinn, P.D. & Duckworth, A.L. 2007, May. Happiness and academic achievement: Evidence for reciprocal causality. Poster presented at the annual meeting of the American Psychological Society, Washington, D.C.
- Ramachandran, K., Hamsan, H.H. & Khir, A.M. 2018. Emotional intelligence and life satisfaction among students in Klang Valley Malaysia. International Journal of Moderns Trends in Social Sciences 1(4): 28-37.
- Rode, J.C., Arthaud-Day, M.L., Mooney, C.H., Near, J.P., Baldwin, T.T., Bommer, W.H. & Rubin, R.S. 2005. Life satisfaction and student performance. Academy of Management Learning & Education 4(4): 421-433. DOI:10.5465/ AMLE.2005.19086784
- Salovey, P. & Sluyter, D.J. (Eds.). 1997. Emotional Development and Emotional Intelligence: Educational Implications. Basic Books.
- Salovey, P. & Mayer, J.D. 1990. Emotional intelligence. Imagination, Cognition, and Personality 9: 185-211.
- Sánchez Expósito, J., Leal Costa, C., Díaz Agea, J.L., Carrillo Izquierdo, M.D. & Jiménez Rodríguez, D. 2018. Socio-emotional competencies as predictors of performance of nursing students in simulated clinical practice. Nurse Education in Practice 32: 122-128. doi:10.1016/j.nepr.2018.07.009
- Sánchez-Álvarez, N., Éxtremera, N. & Fernández-Berrocal, P. 2016. The relation between emotional intelligence and subjective wellbeing: A meta-analytic investigation. The Journal of Positive Psychology 11(3): 276-285. doi:10.1080/17439760.2015.1058968
- Sarrionandia, A. & Mikolajczak, M. 2020. A metaanalysis of the possible behavioural and biological variables linking trait emotional intelligence to health. Health Psychology Review 14(2): 220-244. DOI:10.1080/174371 99.2019.1641423
- Sarrionandia, A., Ramos-Díaz, E. & Fernández-Lasarte, O. 2018. Resilience as a mediator of emotional intelligence and perceived stress: A cross-country study. Frontiers in Psychology 9. DOI:10.3389/fpsyg.2018.02653
- Schimmack, U., Radhakrishnan, P., Oishi, S., Dzokoto, V. & Ahadi, S. 2002. Culture, personality, and subjective well-being: Integrating process models of life satisfaction. Journal of Personality Social Psychology 82(4), 582-593. DOI:10.1037/0022-3514.82.4.582
- School of Health Sciences USM. 2023. Transforming Higher Education for a Sustainable Tomorrow. https://www.usm.my > pdf > Blackbook (1 October 2023)
- Shao, B., Doucet, L. & Caruso, D.R. (2015). Universality versus cultural specificity of three emotion domains: Some evidence based on the cascading model of emotional intelligence. Journal of Cross-Cultural Psychology 46(2), 229-251.

- DOI:10.1177/0022022114557479 Shek, D.T.L. & Chai, W. 2020. The impact of positive youth development attributes and life satisfaction on academic wellbeing: A longitudinal mediation study. Frontiers in Psychology 11. DOI:10.3389/ fpsyg.2020.02126
- Shukla, R.K. 2021. A new systematic approach of teaching and learning of forensic science for interdisciplinary students: A step towards renovating the forensic education system. Forensic Science International: Synergy 3. DOI:10.1016/j.fsisyn.2021.100146
- Somoray, K., Shakespeare-Finch, J. & Armstrong, D. 2017. The impact of personality and workplace belongingness on mental health workers' professional quality of life. Australian Psychologist 52(1), 52-60. DOI:10.1111/ap.12182
- Stevens, C., Schneider, E., Bederman-Miller, P. & Arcangelo, K. 2019. Exploring the relationship between emotional intelligence and academic stress among students at a small, private college. Contemporary Issues in Education Research (CIER) 12(4): 93-102. DOI:10.19030/cier.v12i4.10322
- Suldo, S.M., Riley, K.N. & Shaffer, E.J. 2006. Academic correlates of children and adolescents' life satisfaction. School life satisfaction. Psychology International 27(5): 567-582. DOI:10.1177/0143034306073411
- Swami, V. & Chamorro-Premuzic, T. 2009. Psychometric evaluation of the Malay Satisfaction with Life Scale. Social Indicators Research 92(1): 25-33. doi:10.1007/s11205-008-9295-7
- Tharbe, I.H.A., Sumari, M., Ng, K.M., Razak, N.A.A. & Amat, S. 2020. Emotional intelligence from perspectives of Malaysian helping professionals: A qualitative study. Pertanika Journal of Social Sciences 28(40): 2529-2548. and Humanities DOI:10.47836/pjssh.28.4.03
- Tharbe, I.H.A. & Mun, N.K. 2017. Development of A Self-Rated Malaysian Emotional Intelligence Scale. Malaysia Online Journal of Counselling 3(2): 24-36.
- Urquijo, I., Extremera, N., & Sanchez, A.V. 2016. Emotional intelligence, life satisfaction, and psychological well-being in graduates: The mediating effect of perceived stress. Applied Research in Quality of Life 11(4): 1241-1252. DOI:10.1007/s11482-015-9432-9
- Valois, R.F., Zullig, K.J., Huebner, E.S. & Drane, J.W. 2001. Relationship between life satisfaction and violent behaviors among adolescents. *American Journal of Health Behavior* 25(4): 353-366. DOI: 10.5993/ ajhb.25.4.1
- Webb, C.A., Schwab, Z.J., Weber, M., DelDonno,
  S., Kipman, M., Weiner, M.R. & Killgore,
  W.D.S. 2013. Convergent and divergent
  validity of integrative versus mixed model measures of emotional intelligence. Intelligence 41(3): 149-156. DOI: 10.1016/j. intell.2013.01.004
- Xiao, J.J., Tang, C. & Shim, S. 2009. Acting for happiness: Financial behavior and life satisfaction of college students.

Social Indicators Research 92(1): 53-68. DOI:10.1007/s11205-008-9288-6