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The Relationship Between Emotional Intelligence and Academic Self-Efficacy: A Correlational Study

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**Declaration**

I declare that this submission is my own work. Where I have read, consulted, and used the work of others I have acknowledged this in the text.

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**List of Acronyms**

EI - Emotional Intelligence

SE - Self- Efficacy

ASE - Academic Self-Efficacy

SEA - Self- Emotions Appraisal

ROA - Regulation of Emotion

OEA - Others Emotion Appraisal

UOE - Use of Emotion

WLEIS - Wong and Law Emotional Intelligence Scale

MSLQ - Motivated Strategies for Learning Questionnaire

 **1**

**Abstract**

Emotional intelligence and academic self-efficacy have been considered as vital skills for students to develop to increase their academic achievement and psychological well-being. Previous research has focused predominantly on examining the relationship between emotional intelligence and general self-efficacy. Additionally, research regarding the components of emotional intelligence that have a relationship with academic self-efficacy is inconclusive and ambiguous. This study aimed to investigate the relationship between emotional intelligence and its domains, self-emotions appraisal, regulation of emotion, use of emotion, others-emotion appraisal and academic self-efficacy. Using a quantitative, cross-sectional, correlational design, an online questionnaire was presented to participants via social media who are residing in Ireland using convenience sampling. One hundred and thirteen participants, 37 identifying as male, 73 as female and three as non-binary completed the Wong and Law Emotional Intelligence Scale and the Self-Efficacy for Learning and Performance Scale. Pearson’s correlation and multiple linear regression were conducted to test the hypotheses. Results indicated that there is a strong positive linear relationship between emotional intelligence and academic self-efficacy. Nonetheless, the multiple linear regression analysis demonstrated that the use of emotion was a significant predictor of academic self-efficacy. The results from the study are congruent with previous research. The strengths and limitations were discussed, including gender and cultural differences concerning emotions and inaccurate emotional intelligence measure. The incorporation of emotional intelligence workshops may be seen as a practical implication. Future research with regard to experimental approaches and expanding the field of cultural differences in emotional intelligence have been advised.

1. **Introduction**

 Education plays a pivotal role in human existence, enabling individuals to acquire knowledge and skills that may enhance the quality of their life (Akessa & Dhufera, 2015). Consequently, thousands of students attend schools, universities or colleges to obtain an education which may provide them with a fulfilling career and increase their life satisfaction (Karamen et al., 2019). Furthermore, academic success is closely connected to higher income and psychological well-being (Battle & Lewis, 2002). As a result of the highlighted importance of academic success, students are faced with increased feelings of stress to outperform themselves with regard to academic performance (Karamen et al., 2019).

 Academic self-efficacy and emotional intelligence have been regarded as critical skills for students to develop, as they promote positive beliefs about one's abilities to achieve an educational goal and the capability to manage one's emotions (Elias & MacDonald,2007; Mayer & Salovey, 1997). However, educational institutions have generally focused on teaching students conventional knowledge, deemphasising the importance of incorporating other psychological competencies that may result in higher academic achievement and decreased stress (Ononye et al., 2022). Therefore, students who lack mental skills may not perform optimally in challenging and stressful situations (Ononye et al., 2022). Hence why, understanding the relationship between academic self-efficacy and emotional intelligence may provide insight into the actions that might be taken to promote the two concepts in educational organisations.

**1.1 Emotional Intelligence**

 Emotional intelligence (EI) is conceptualised as the ability to use emotions to facilitate thought and reason about emotions (Salovey & Sluyter, 1997). It incorporates the capacity to "accurately perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions to promote emotional and intellectual growth" (Salovey & Sluyter, 1997, p.10). Previous literature regarding emotional intelligence has described the concept as a set of an eclectic group of traits such as optimism, self-esteem etc., as opposed to an ability-based construct (J. E. Mayer et al., 2008). However, according to Mayer et al., (2004), emotional intelligence is the ability to partake in sophisticated information processing. Consequently, emotional intelligence may qualify as a form of intelligence as it contains the ability component (J. E. Mayer et al., 2008). Nonetheless, researchers have established emotional intelligence both as a trait and as an ability to comprehensively define it in a wide range of domains (Schutte et al., 2001). Furthermore, according to previous research regarding models of emotional intelligence, EI consists of personality dimensions subsequently, classifying it as Trait emotional intelligence (Kanesan & Fauzan, 2019). Trait emotional intelligence encompasses factors such as self-control, emotionality, sociability and well-being (Kanesan & Fauzan, 2019). Studies have indicated that trait emotional intelligence is localised in the lower parts of the personality. However, arguments have been proposed concerning the ability component of emotional intelligence, leading to speculation with regard to the accuracy of the Trait emotional intelligence model (Kanesan & Fauzan, 2019). Nonetheless, Bar-on and Goleman proposed a model of emotional intelligence that combines both ability and trait concepts, coining it as the mixed model of EI (Kanesan & Fauzan, 2019). Acknowledging all the emotional intelligence models would be beyond the scope of this literature review. Subsequently, the present study will refer to the four-branch model proposed by Mayer and Salovey, as their conceptualisation offers a comprehensive model of emotional intelligence combining relevant research regarding emotion and intelligence (Karim, 2010).

 The four-branch emotional intelligence model is characterized by four abilities that relate to each other: perceiving, using, understanding and managing emotions (Salovey & Grewal, 2005). The organisation of emotional abilities is based on an individual's extensive psychological system (Mayer et al., 2004). Perceiving emotion involves the ability to recognise and detect emotions in voices, faces, cultural artefacts and pictures (Salovey & Grewal, 2005). The perception of emotion may be the most primitive component of EI, as it allows the following information to be processed (Mayer et al., 2016). The second ability, using emotion, refers to the utilization of emotions to facilitate thought, such as memory and attention alongside problem-solving (Olderbak et al., 2019). Understanding emotion is the capacity to accurately analyse emotions, acknowledge their trends with regard to occurrence and understanding their outcomes (Mayer et al., 2004). The final ability involves the management of emotions meaning, regulating emotions both in the self and others (Salovey & Grewal, 2005). This process may involve the remainder of the personality as it is determined based on the individual's self-knowledge, goals and social awareness (Mayer et al., 2004). The concept is advised to be measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Salovey & Grewal, 2005). The measure consists of 141 items and takes 40 minutes to complete, aiming to test the individual's abilities with regard to the four branches of emotional intelligence as well as overall EI (Salovey & Grewal, 2005). However, shorter measures of emotional intelligence are available such as the Wong and Law Emotional Intelligence Scale which is based on the ability model of EI and encompasses four domains, self-emotion appraisal (SEA), regulation of emotions (ROE), other's emotion appraisal (OEA) and use of emotion (UOE) (Acosta-Prado & Zárate-Torres, 2019). The four domains are based on the model proposed by Mayer & Salovey and are incongruence with perceiving, using, understanding and managing emotions.

 Furthermore, research regarding EI postulates that it is a skill that can be learned and improved through emotional intelligence training and experiences (Yavuz, 2004, as cited in (ÜREDİ et al., 2022). In academia, an agreement is beginning to form between researchers, educators and policymakers that emotional intelligence is a vital skill for students to develop (MacCann et al., 2020). Emotional intelligence is thought to affect numerous aspects of one's life such as psychological and physical health, social interaction and performance in the workplace and at school (Baron, 2006). Regarding emotional intelligence in an educational setting, Low & Nelson, 2006, as cited in Mohzan et al., 2013 proposed that it is a crucial concept for students' well-being and educational success. The researchers claim that students who display emotional intelligence skills cope with complex and demanding educational experiences efficiently (Low & Nelson, 2006, as cited in Mohzan et al., 2013). When students are capable of leading their academic life successfully, their focus shifts towards learning and performing well academically (Low & Nelson, 2006, as cited in Mohzan et al., 2013).

 Considering the research on emotional intelligence, the importance of incorporating

interventions/ workshops in academia may be encouraged (Cantero et al., 2020). It has been observed that despite the increased focus on emotional intelligence, individuals display a deficit in monitoring and understanding their emotions (Bradberry & Greaves, 2009 as cited in Qanwal & Ghani, 2023). Nonetheless, educational institutions generally do not provide emotional intelligence training on how to manage one's own emotions (Qanwal & Ghani, 2023). However, understanding and mastering one's emotions may have a significant impact on the success the individual will accomplish (Bradberry & Greaves, 2009 as cited in Qanwal & Ghani, 2023).

**1.2 Academic Self-Efficacy**

 To coherently define academic self-efficacy (ASE), self-efficacy has to be explored. The concept derives from the Social Cognitive Theory which posits that the combination of a external social systems and internal self-influence factors regulate and motivate behaviour (Bandura, 2012). Self-efficacy (SE) is a constituent of the self-influence factors and refers to beliefs about one's abilities to perform or learn behaviours at designated levels (Bandura, 2012). Individuals who display high self-efficacy are comprised of positive qualities such as portraying confidence in their capabilities to cope with difficult tasks, setting arduous objectives and continuing to pursue them regardless of the failure they may encounter (Chang & Tsai, 2022). Nonetheless, self-efficacy allows the individual to control their feelings, thoughts and behaviours consequently, increasing one's belief in their competence to obtain a desired goal (Chang & Tsai, 2022). In contrast, individuals who lack self-efficacy may find certain tasks strenuous which contributes to increased feelings of pressure subsequently, decreasing psychological well-being (Chang & Tsai, 2022). The impact of self-efficacy has been explored in extensively in other psychological disciplines such as academic performance and addiction relapse (Honicke & Broadbent, 2016).

 Concerning academics, self-efficacy is often conceptualised as academic self-efficacy, which is defined as a learner's judgement about their ability to obtain educational goals successfully (Elias & MacDonald,2007). Academic self-efficacy has often been linked to academic achievement and career development (Akomolafe et al., 2013). When the student displays strong academic self-efficacy skills more occupational options arise, leading to greater interest and academic preparation to achieve the goal (Bandura et al., 1996). Academic self-efficacy may affect an individual's behaviour through four processes: motivational, cognitive, selective and affective (Bandura, 1993, as cited in Liu et al., 2020). Individuals who display high academic self-efficacy experience positive expectations once the task is completed (Liu et al., 2020). Moreover, high academic self-efficacy may reduce negative experiences while attaining a task (Liu et al., 2020). Subsequently, academic self-efficacy determines or influences an individual's choice of behaviour and it may also predict one's persistence and effort to complete a given task (Liu et al., 2020).

 However, difficulties arise when an attempt is made to accurately measure the concept of academic self-efficacy. According to Zimmerman (2000), self-efficacy is a multidimensional construct which varies in accordance with the domain of demands. Thus, the concept is advised to be measured at a level that is dictinct to the outcome domain (Pajares, 1996). Previous meta-analysis studies suggest that examining self-efficacy in academic settings with specific academic self-efficacy measures correlates with stronger effects on academic outcomes (Zajacova et al., 2005 as cited in Abd-Elmotaleb & Saha, 2013).On the contrary, the use of generalised self-efficacy indices produced a less closely associated result. Irrespective of the research proposed by Zimmerman (2000) and Pajares (1996), the appropriate measure of academic self-efficacy remains ambiguous in the current literature on ASE.

**1.3 Emotional Intelligence and Self-Efficacy**

 Salovey and Mayer (1990) demonstrated that the construct of emotional intelligence aids with the ability to manage emotions in the self and others. They also claimed that emotional intelligence is the competence in distinguishing between emotions (Salovey & Mayer, 1990). Furthermore, acquiring this type of self-awareness is a vital component of the adjustment of emotions (Chang & Tsai, 2022). Self-awareness is closely tied with self-efficacy since self-efficacy gave importance to self-regulation and self-awareness. Moreover, emotional intelligence may assist individuals by altering negative emotions which results in damaging their beliefs with regard to what they can and cannot do (Chang & Tsai, 2022). Additionally, individuals who display high emotional intelligence tend to utilise effective coping strategies when being faced with a problem thus, presenting self-efficacy (Gharetepeh et al., 2015). Furthermore, previous research has indicated that emotional intelligence may display a positive relationship with self-efficacy consequently, predicting each other (Gharetepeh et al., 2015). Emotional intelligence impacts one's capability to have control over their self-efficacy through self-awareness and emotion, resulting in higher self-efficacy (Chang & Tsai, 2022)

 In relation to academic self-efficacy, if a student effectively manages their own emotions, it may enhance their judgements about their abilities to achieve an educational goal. Nonetheless, previous literature on the relationship between emotional intelligence and academic self-efficacy is inconsistent and inconclusive as there is ambiguity with regard to the academic self-efficacy indices. Research regarding academic self-efficacy conceptualises and measures the concept in a general context which may lead to confusion. Furthermore, the relationship between emotional intelligence and its domains and academic self-efficacy is limited.

**1.4 Present Study**

 The present study aims to investigate whether emotional intelligence positively correlates with academic self-efficacy. Despite previous literature indicating a positive relationship with self-efficacy, less research has been conducted on the relationship between academic self-efficacy. Considering that self-efficacy is a multidimensional construct, previous studies have undertaken a generalised approach with regard to the measurement of academic self-efficacy. However, according to Pajares (1996), self-efficacy should be measured according to the domain one is investigating. Consequently, this study aims to utilise a scale that is designed to accurately measure the concept of academic self-efficacy.

 Additionally, emotional intelligence is a concept characterised by four distinct domains, perceiving, using, understanding and managing emotions (Salovey & Grewal, 2005). Thus, the domains of emotional intelligence may be taken into consideration when investigating the concept. Furthermore, more exploration of what parts of emotional intelligence play a significant role in academic self-efficacy needs to be carried out (Shipley et al., 2010 as cited in Chang & Tsai, 2022). This knowledge may assist with composing accurate emotional intelligence interventions to increase academic self-efficacy in students.

**1.5 Research Questions**

Is there a positive linear relationship between emotional intelligence and academic self-efficacy?

Is there a positive linear relationship between the domains of emotional intelligence i.e Self-Emotion Appraisal (SEA), Regulation of Emotions (ROE), Other's Emotion Appraisal (OEA), Use of Emotion (UOE) and academic self-efficacy?

**1.6 Hypotheses**

H1: There will be a positive linear relationship between emotional intelligence and

academic self-efficacy.

H2: There will be a positive linear relationship between the domains of emotional intelligence SEA, ROE, OEA, UOE and academic self-efficacy

1. **Method**

**2.1 Design**

 This study employed a quantitative, cross-sectional and correlational design, using an online questionnaire. Pearson’s correlation and multiple regression was used to determine if there was a relationship between the target variable, academic self-efficacy and the independent variables. The independent variables were the four subscales of the Wong and Law Emotional Intelligence Scale (WLEIS), self-emotions appraisal, regulation of emotions, other's emotion appraisal and use of emotion and overall emotional intelligence.

**2.2 Participants**

 Convenience sampling was carried out in the recruitment process. Initially, 116 participants took part in the study however, three participants had to be excluded due to incomplete data. The final sample consisted of 113 participants of which, 37 identified as male (32.7%), 73 as female (64.6%) and three as non-binary (2.6%). Participant's ages ranged

From 18 to 34 years of age. The participant's exact age was unknown as the information was not required. Participants were recruited through the use of an online link which was distributed via social media. The treatment of participants was in accordance with the ethical standards of the Psychological Society of Ireland (Code of Professional Ethics, 2019). The study was approved by the Department of Technology and Psychology Ethics Committee (DTPEC) after the completion of a amber route ethics application (see Appendix A)

* 1. **Materials**

***2.3.1 Information Sheet***

 An online survey was developed using Google Forms. The information sheet was initially displayed once the survey was opened (see Appendix B). The information sheet outlined the purpose of the study, the requirements to take part and privacy information. The consent form allowed the researcher to gain fully informed consent from the participant (see Appendix C)

***2.3.2 Demographic Questions***

 The participants were then asked for their gender, age and educational status. Furthermore, a unique identification code was created so the data could be removed if the participant wished to do so (see Appendix D).

***2.3.3 Wong and Law Emotional Intelligence Scale (WLEIS)*** (Wong & Law, 2002)

 The WLEIS contains 16 items and is measured on a 7-point Likert scale (from 'strongly disagree' to 'strongly agree') (see Appendix E). The scale aims to measure the individual's level of emotional intelligence and it is based on the ability model of EI. It was developed by Wong and Law (2012). The WLEIS contains four domains, self-emotions appraisal (e.g., ' I really understand what I feel'), regulation of emotions (e.g., ' I am a good observer of other's emotions) others-emotion appraisal (e.g.,’ I have good control of my emotions) and use of emotion (e.g., 'I am a self-motivating person) . The scale reports a high Cronbach's Alpha ranging from .83 to .90 (Wong & Law, 2012). Furthermore, Cronbach's Alpha for the four domains is SEA, .82, ROE, .79, OEA, .80 and UOE, .78 (Karim, 2010). The present study calculated a Cronbach's Alpha of .836 for the overall scale and .851 for SEA, .751 for ROA, .839 for OEA and .793 for UOE. Additionally, the WLEIS displays good convergence with previous EI measures such as EQ-i and Trait Meta-Mood (Wong & Law, 2002).

***2.3.4 Self-Efficacy for Learning and Performance Scale***

 To measure participant's academic self-efficacy, the study used the 'scale for Self-Efficacy Related Learning and Performance' a subscale of 'Motivated Strategies for Learning Questionnaire (MSLQ), developed by Pintrich, Smith, Garcia and McKeachie (1991)(Ilker et al., 2014). The scale is composed of eight items. Items are measured on a 7-point Likert scale, ranging from 1 ('very false ) to 7 (' very true ') (see Appendix F). The subscale reports a high Cronbach's Alpha of .93. The overall scale, MSLQ reports a Cronbach's Alpha ranging from .52 to .81 (Khoism & Awang, 2020). The present study calculated a Cronbach's Alpha of .903 for the Self-Efficacy Related and Performance subscale.

**2.4 Pilot Study**

 A pilot study involving five individuals was conducted to identify any problems with the questionnaire and to verify the completion time. This enabled the researcher to carry out any appropriate changes before the questionnaire was distributed for data collection. Minor changes were made to the questionnaire such as grammatical and layout corrections.

**2.5 Procedure**

 An online link was distributed to each participant via social media. The link invited individuals to take part in the study and provided information that participation is voluntary. Once the link was activated, participants were then presented with the information sheet entailing the purpose of the study, and the consent form. Following on, participants completed the provided demographic questions which provided the researcher information with regard to their age, gender and education status. Participants were then asked to complete the WLEIS to assess their emotional intelligence. Subsequently, the Self-Efficacy for Learning and Performance scale was presented to assess academic self-efficacy. Lastly, each participant was presented with a debrief from (see Appendix G) and thanked for their involvement in the study. Additionally, participants were informed of their right to have their data withdrawn at any time before the data collection concluded on the 5th February 2023.

1. **Results**

**3.1 Overview of Results**

 This correlational study investigated the relationship between emotional intelligence and its domains, self-emotions appraisal (SEA), regulation of emotion (ROE), other’s emotion appraisal (OEA), and use of emotion (UOE) and academic self-efficacy. Version 26 of IBM SPSS Statistic Software was used to conduct a multiple linear regression analysis. The predictor variable was emotional intelligence and its domains SEA, OEA,UOE and ROE. The target variable was academic self-efficacy.

**3.2 Descriptive Statistics**

 Table 1 below provides the means, standard deviations and the n-value for emotional intelligence and its domains, SEA, ROE,OEA and UOE

**Table 1**

*Descriptive Statistics for Emotional Intelligence and the Domains*

 **N M SD**

Emotional Intelligence 113 5.33 0.72

Self-Emotions Appraisal 113 5.45 1.00

Regulation of Emotion 113 5.62 0.89

Other’s Emotion Appraisal 113 5.05 1.14

Use of Emotion 113 5.18 1.10

 Table 2 below, provides descriptive statistics of the mean, standard deviation and the n-value for academic self-efficacy.

**Table 2**

*Descriptive Statistics for Academic Self-Efficacy*

 **N M SD**

Academic Self- Efficacy 113 5.12 1.02

**3.3 Inferential Statistics**

 Pearson’s correlation and multiple linear regression were performed to investigate the relationship between emotional intelligence and its domains, SEA, ROE, OEA, UOE and academic self-efficacy.

**3.4 Analysis 1: The Relationship between Emotional Intelligence and Academic Self-Efficacy**

***3.4.1 Inferential Statistics***

 Hypothesis 1, that there would be a positive linear relationship between emotional intelligence and academic self-efficacy, was supported. Pearson’s correlation demonstrated a strong positive linear relationship between overall emotional intelligence and academic self-efficacy (*r=* .630, *p*<.001). Additionally, 39.6% of the variance in academic self-efficacy was associated with emotional intelligence. A scatterplot representing the positive linear relationship is displayed in Figure 1 overleaf.

**Figure 1**

*Scatterplot Illustrating the Relationship between Emotional Intelligence and Academic Self-Efficacy*

**3.5 Analysis 2: Multiple Regression**

 A multiple linear regression was conducted on the target variable academic self-efficacy and the domains of emotional intelligence, SEA, ROA, OEA and UOE

***3.5.1 Assumptions***

 Prior to conducting the analysis, the assumptions of the absence of multicollinearity,

(Tolerance= 0.89 VIF=1.41), linearity of correlations and independence of residuals (Durbin-Watson=2.05) were intended to be met. Furthermore, Mahalanobis Distance (*p>.*001) and Cook’s (*Di* <1.0*)* statistics demonstrated that no significant outliers were present. The histogram of standardised residuals indicated that the data contained normally distributed residuals, as did the normal P-P plot of regression standardised residuals (see Appendix I). Lastly, the scatterplot of standardised predicted values (see Appendix J) indicated that homoscedasticity was not violated thus, homoscedasticity was assumed.

***3.5.2 Multiple Regression***

 The analysis of a multiple linear regression indicated that 46.9% of the variation in academic self-efficacy may be explained by the domains of emotional intelligence, SEA, ROE, OEA and UOE. Additionally, the model was a significant predictor of academic self-efficacy, F(4,108)=25.75, *p<.001, R2Adjusted* = .469. Upon further inspection of the individual predictors, the analysis showed that SEA (β=.153*, t (*113)= 1.86, *p=* .065), ROE (β=.112, *t(*113)=1.54*, p*= .126) and OEA (β=.063, *t(*113)= .799, *p=.*426) did not significantly predict academic self-efficacy. However, UOE (β=.560 *t(*113)= 6.95, *p<*.001was a significant predictor of academic self-efficacy. Furthermore, after controlling for SEA, ROE and OEA the analysis showed a strong positive linear relationship between UOE and academic self-efficacy. Table 3, below, demonstrates unstandardised beta coefficients, zero-order and partial correlations for SEA, ROE, OEA and UOE.

**Table 3**

*Unstandardised Beta Coefficients, Zero-Order and Partial Correlations for SEA, ROA, OEA and UOE.*

 **B** **Zero-Order** **Partial Correlations**

 SEA .155 .448 .177

 ROA .128 .218 .147

 OEA .057 .387 .077

 UOE .522 .662 .556

 Concluding from the multiple linear regression analysis, hypothesis 2 that there would a positive linear relationship between the domains of emotional, SEA, ROA,OEAand UOE was, not supported, as only UOE was a significant predictor of academic self-efficacy.

1. **Discussion**

**4.1 Overview**

 This study aimed to investigate the relationship between emotional intelligence and its domains, SEA, ROE, OEA, UOE and academic self-efficacy. Hypothesis 1, that there would be a positive linear relationship between emotional intelligence and academic self-efficacy, was supported. The strong positive linear relationship between emotional intelligence and academic self-efficacy may imply that academic self-efficacy increases as emotional intelligence increases. The findings of this study are congruent with previous literature on the relationship between the two concepts. The study indicated that individuals who display high levels of emotional intelligence also display high academic self-efficacy. This may suggest that developing the skill of emotional intelligence may enhance the learner's judgement about their abilities to obtain their educational goals (Elias & MacDonald,2007). Emotional intelligence equips the student with the ability to effectively manage their own emotions when difficult situations arise thus, it may allow the student to build a positive perspective with regard to their academic abilities (Shenaar et al., 2020). Consequently, leading to greater academic achievement and satisfaction.

 Hypothesis 2, that there would be a positive linear relationship between the domains of emotional intelligence SEA, ROA, OEA, UOE and academic self-efficacy, was not supported. Multiple regression analysis demonstrated that self-emotion appraisal, regulation of emotions and others' emotion appraisal were not significant predictors of academic self-efficacy. However, the analysis indicated that the use of emotion was a significant predictor of academic self-efficacy. This may suggest that when individuals accurately comprehend their emotions while simultaneously detecting what emotions facilitate positive thoughts, judgements about one's educational capabilities may increase (Salovey & Grewal, 2005). A study conducted by Gharetepeh et al.,l. (2015) has found that the components of emotional intelligence that were significant predictors of self-efficacy were self-motivation and self-awareness factors. Using one's emotions to facilitate thought may be categorized as having awareness of the emotions one is experiencing and guiding one's actions to obtain the desired outcome. (Mayer et al., 2004). Therefore, the finding of this study displays minor consistencies with Gharetepeh et al., (2015) findings. However, it must be acknowledged that Gharetepeh et al., (2015) examined the concept of self-efficacy in a general context in contrast, to the present study examining self-efficacy in an academic setting. The practical and theoretical implications of these findings will be discussed below.

**4.2 Theoretical and Practical Implications**

 According to Mozan et al. (2013) scoring of emotional intelligence, respondents' displayed high levels of EI. Additionally, respondents revealed to have high levels of emotional intelligence across all four domains, self-emotion appraisal, regulation of emotions, other's emotion appraisal and use of emotion. Furthermore, the findings of the study suggest that the respondents' displayed high awareness of their own emotions and feelings while also having the capability to regulate one's emotions. This ability is a vital component of living the life of a student successfully, as it aids with failures and academic pressure (Pfeifffer, 2001). However, respondents' demonstrated having less awareness of the emotions that other individuals may display and less frequently using their own emotions to facilitate thought.

 The findings of this study may highlight the importance of increasing the implementation of emotional intelligence workshops in schools, colleges and universities. Emotional intelligence is a skill that can be developed through actions that are oriented towards building intrapersonal and interpersonal abilities (Kuk et al., 2021). Additionally, academic self-efficacy has previously been linked to academic achievement and career development thus, it may be beneficial for individuals who are attending schools colleges or universities (Akomolafe et al., 2013). Subsequently, it may be implied that academic self-efficacy may be improved through the application of emotional intelligence training. Upon further investigation of the domains that emotional intelligence encompasses perhaps, increased focus may be devoted to aiding students with the understanding of their emotions and the various intricacies that may occur when one is attempting to distinguish which emotion they are experiencing. Subsequently, this may enable students to appropriately use their emotions to produce actions that align with the task they intend to complete, as the use of emotion was a significant predictor of academic self-efficacy. However, it is important to acknowledge that although EI and UOE had a significant relationship with ASE it does not imply that the EI and UOE will cause ASE (Liang & Yang, 2021).

 Regarding the information that the present study obtained, it may be beneficial for individuals who are seeking to design emotional intelligence workshops for schools, colleges and universities which focus on helping students with acquiring psychological skills that may increase their academic self-efficacy. As emotional intelligence may be conceptualised as a four-dimensional construct (Mayer & Salovey, 2006), it may be advantageous to create workshops that focus on specific parts of emotional intelligence, to receive the desired outcome for the specific skill one is aiming to improve.

**4.3 Strengths and Limitations of the Present Study**

 The present study displayed various strengths and limitations. One strength of the study may be the utilisation of a domain-specific questionnaire to measure academic self-efficacy. According to Zimmermann (2000). self-efficacy is conceptualised as a multidimensional construct thus, one would be advised to measure the concept with indices that are specific to the domain that is being examined. Additionally, the Self-Efficacy Learning and Performance Scale displayed high internal consistency. Furthermore, the present study may have highlighted the importance of developing the skill of emotional intelligence with regard to students. It has also examined the various domains that emotional intelligence encompasses and how they relate to academic self-efficacy thus, contributing to the expanding field of emotional intelligence.

 Nonetheless, some limitations were evident within the study. The concept of emotional intelligence was based on the ability model proposed by Mayer and Salovey. Although the Wong and Law Emotional Intelligence Scale was constructed according to the ability model, the questionnaire was a self-report test. However, previous studies found that scores on self-report questionnaires were highly correlated with certain personality traits such as neuroticism and extroversion (Brackett & Mayer, 2003). Subsequently, questions arise with regard to the competence of the individuals to accurately report their emotional abilities and whether the questions are answered truthfully (Salovey & Grewal, 2005). Due to the complex nature of emotions, participants may have answered the questions inadequately thus, altering the results of the study. Moreover, another limitation of the present study is the method employed to recruit participants. Predominantly, participants were asked to take part in the study through social media thus, participants may have been familiar with the researcher. Consequently causing social desirability and potentially effecting the results (Meriac & Gorman, 2017). Biological sex may also be considered a limitation. The study largely consisted of participants who identified as female (64.6%).Therefore, this must be acknowledged as differences may exist among females and males in emotional dimensions (D'Amico & Geraci, 2022). Lastly, the sample was obtained only from Irish students. Previous research has suggested that emotions are maintained and shaped by the culture one has been brought up in thus, leading to differences in emotion expression and comprehension (Johnsen et al., 2012). Therefore, the results of the study may not provide generalisability.

**4.4 Suggestions for Future Research**

Research regarding cultural differences in emotional intelligence among students may be expanded on. As emotions are constructed based on the culture an individual is a part of, there may be differences with regard to emotional expression and perception (Johnsen et al., 2012). Therefore, comprehensively examining how emotional intelligence differs among students from different cultures may impact the way emotional intelligence is being taught through interventions in schools, colleges and universities. Additionally, an experimental approach may be taken into account when examining the concept of emotional intelligence and the effects it has on the student's academic self-efficacy ie. the incorporation of emotional intelligence interventions/workshops in the educational system. Furthermore, when examining emotional intelligence, the correct indices for the specific models of emotional intelligence should be used to measure the concept accurately.

**4.5 Conclusion**

 The present study aimed to examine the relationship between emotional intelligence and its domains, SEA, ROE, OEA, UOE and academic self-efficacy. The findings of this study suggest that emotional intelligence significantly predicts academic self-efficacy. The present study contributes to the expanding field of emotional intelligence with regard to academia. Additionally, the findings highlighted the importance of incorporating emotional intelligence interventions/workshops into schools, colleges and universities subsequently, assisting students with the development of academic self-efficacy. Moreover, the finding resulting from the multiple regression, indicated that the use of one's emotion was a significant predictor of academic self-efficacy. This provides greater insight into the relationship between emotional intelligence and academic self-efficacy subsequently, aiding with the development of emotional intelligence interventions/workshops that may be incorporated into the educational system.

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1. **Appendices**

**6.1 Appendix A: Amber Ethics Form**

**Section 1: Project Information**

Student Name: Klaudia Sidwinska

Student Email Address: N00191108@student.iadt.ie

Supervisor Name: Marian Mc Donell

Working Project Title: The Effects of Emotional Intelligence on Academic Self Efficacy and in Undergraduate Students.

Main Variables Being Investigated: Emotional Intelligence and Academic Self-Efficacy.

**Section 2: External Agencies**

|  |  |  |
| --- | --- | --- |
| Does your project involve recruitment from any external agency (e.g. a school, sports club, medical centre, voluntary organisation, or any other organisation outside of the IADT)?  | Yes\* | No X  |
| \* You must include a letter from a senior manager of each organisation stating that you have approval to collect data within that organisation. Include copies of each of these letters in the Appendices to your application. If the organisation has its own ethical review board (which is very common in some settings, such as hospitals), then you are also required to get ethical approval from that board prior to starting data collection, and to submit notice of this approval to your supervisor so that it can be forwarded on to the ethics committee. Some online forums also require permission to post requests for participants – make sure to check the relevant forum/organisation’s code of conduct or terms and conditions. You do not need to include approval letters if you are conducting recruitment using mainstream social media routes (e.g., Twitter, Instagram, Facebook, Snapchat, TikTok) to your own followers, and/or snowball sampling/word of mouth recruitment.  |

**Section 3: Project Methodology – Please tick which type of project you are seeking approval from the PEC for. If your project involves mixed methods, then tick all which apply.**

|  |  |  |
| --- | --- | --- |
| **Route Type** | **Methodology** | **Tick here** |
| Green Route (no direct contact with participants required, and no data is collected/recorded which could identify participants) | Theoretical paper / systematic literature review / Rapid Structured Literature Review (RSLR) |  |
| Novel analysis of an existing dataset gathered by another researcher or group which you are certain has abided by appropriate ethical procedures for the relevant discipline |  |
| Observation of participants in a public place in which they could reasonably be expected to be observed by strangers or in an online space which does not require users to log in to access. |  |
| Content analysis of material which is publicly available and does not require users to log in to access content.  |  |
| Other method without direct contact with participants \*\* |  |
|  |
| Amber Route (direct contact with participants, but no additional ethical considerations beyond the minimum requirements) | Requirements gathering for and/or user testing of a prototype which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group  |  |
| An experiment which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  |
| A survey/questionnaire design which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  X |
| An observational study which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  |
| Content analysis research which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group |  |
| Interviews and/or focus groups which are highly unlikely to cause any harm or distress to participants and which do not aim to collect data from a potentially vulnerable group |  |
| Other method which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group \*\* |  |
|  |
| Red Route (direct contact with participants, including one or more project aspects which require special ethical consideration) | Requirements gathering for and/or user testing of a prototype which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group  |  |
| An experiment which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| A survey/questionnaire design which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| An observational study which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| Content analysis research which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| Interviews and/or focus groups which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group |  |
| Any project which includes use of any illegal materials or substances as part of the materials for the study, regardless of methodology employed. |  |
| Any project which includes use of any dangerous materials or substances as part of the materials for the study, regardless of methodology employed. |  |
| Any project employing ethnographic or autoethnographic methodologies. |  |
| Other method which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group \*\* |  |
|  |
| \*\* If you are using a methodology not listed above then provide a short description (fewer than 100 words) here:  |

**Section 4: Checklist of Attached Appendices and Other Completed Sections**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Applicable Project Ethics Route Colour Guide |  | Section / Item | I have attached this item/completed this section | I have checked with my supervisor and we have agreed that this item/section is not relevant to my project |
|  |  |  | 1 | Section 1 |  Yes  |  |
| 2 | Section 2 |  Yes  |  |
| 3 | Section 3 |  Yes  |  |
| 4 | Section 4 |  Yes  |  |
| 5  | Letters of permission from any external agencies to be used for data collection |  |  |
| 6 | Statement of approval from ethical review boards in external agencies |   Yes  |  |
|  | 7 | Section 5 (Green Route Projects only) |  |  |
|  |  | 8 | Section 6 (Amber and Red Route Projects only)  |  Yes  |  |
|  | 9 | Section 7 (Amber Route Projects only) |  Yes  |  |
|  | 10 | Section 8 (Red Route Projects only) |  |  |
| 11 | Section 9 (Red Route Projects only) |  |  |
| 12 | Evidence of why you need to complete a Red Route Project (see note in Section 8) |  |  |
| 13 | Project Information Sheet (Red Route Projects only) |  |  |
| 14 | Project Consent Form (Red Route Projects only) |  |  |
| 15 | Project Demographic Questionnaire (Red Route Projects only) |  |  |
| 16 | All Other Questionnaires and Data Collection Materials (Red Route Projects only) |  |  |
| 17 | Project Debrief (Red Route Projects only) |  |  |

**Section 5: Declaration of a Green Route project**

I hereby declare that [all of / this aspect of (delete as appropriate)] my project involves no direct interaction between me and any research participants, and that having checked with my supervisor, that I do not need to seek informed consent from those whose data I use in my research. In addition, I will ensure that all data which I do gather is held in a manner which is compliant with GDPR, and will be deleted once it is no longer required (and definitely within 6 years of collection). At all times my study will be conducted in adherence to the ethical policies of the Psychological Society of Ireland and the British Psychological Society.

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 6: Confirmation of Adherence to Basic Ethical Principles for Amber and Red Route Projects**

Complete the Table below with guidance from your supervisor. If you need to tick any of the ‘red’ boxes, then your project must be submitted under the ‘Red Route’.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Yes** | **No** | **N/A** |
| **6.1** | **I will describe the main research procedures to participants in advance so that they know what to expect. I will use the sample Information Sheet provided by PEC to do this.**  | **X** |  |  |
| **6.2** | **I will tell participants that their participation is voluntary.** |  **X** |  |  |
| **6.3** | **I will obtain written consent from participants using a ‘tick’ consent form which follows the current template provided by PEC prior to starting data collection.** | **X** |  |  |
| **6.4** | **I will verify that participants still wish to include their data in online studies by including a final indicator of consent at the end of the questions.**  | **X** |  |  |
| **6.5** | **If my research involves content analysis or observation in any private or partially private setting then I will ensure to obtain informed consent prior to collecting data.**  |  |  | **X** |
| **6.6** | **I will explain to participants that they can withdraw from the study at any time and for any reason.** | **X** |  |  |
| **6.7** | **I will ensure that participants know that they can refrain from answering any question that they don’t want to, even if this is part of a psychometric scale.** | **X** |  |  |
| **6.8** | **If using an online data collection method I will ensure that the only questions which require answers in order to proceed are the questions relating to providing informed consent, and I will ensure that participants are provided with an option which indicates that they do not give their consent.**  | **X** |  |  |
| **6.9** | **I will inform participants that their data will be treated with full confidentiality, and that, if published, it will not be identifiable as theirs.** | **X** |  |  |
| **6.10** | **I will debrief participants at the end of their participation (i.e. give them a brief explanation of the study, whether or not deception was involved) following the current template provided by PEC** | **X** |  |  |
| **6.11** | **I will obtain passive consent from parents/guardians for studies involving people aged between 16 and 18 years, as well as active consent from the participant and their school/organisation** |  |  | **X** |
| **6.12** | **I will obtain active consent from parents/guardians for studies involving people aged under 16 years. Where feasible I will also obtain active consent from the participant themselves. I will ensure that the parent/guardian or their nominee (e.g. a teacher) will be present throughout the data collection period.** |  |  | **X** |
| **6.13** | **I will ensure that my project supervisor has full access to the data that I collect and will only use data collection software which permits this.**  | **X** |  |  |
| **6.14** | **I will ensure that my project supervisor retains full rights to the data collected, including the ability to delete all data at any time, and that third-parties (e.g., software companies) will not ‘own’ the data collected.** | **X** |  |  |
| **6.15** | **I will ensure that participants in studies involving Virtual Reality (VR) are not susceptible to extreme motion sickness or other physical conditions which may result in harm to the participants. I will ensure that a chaperone is present during VR sessions, and that the participant has the option of also having a nominee of their choosing present as well.**  |  |  | **X** |
| **6.16** | **I will ensure that any equipment used in this study is cleaned and disinfected after each participant, and that appropriate hygienic barriers (e.g. masks) are used by all participants** |  |  | **X** |
| **6.17** | **Is there any realistic risk of any participant experiencing either physical or psychological distress or discomfort?** |  | **X** |  |
| **6.18** | **I plan to use animals as part of my research study** |  | **X** |  |
| **6.19** | **I plan to tell participants their results on a task or scale which I am using in my research.** |  | **X** |  |
| **6.20** | **I am researching a sensitive topic which may cause some participants distress (such as, but not limited to, religion, sexuality, alcohol, crime, drugs, mental health, physical health, parenting, family relationships)** |  | **X** |  |
| **6.21** | **One or more aspects of my study is designed to change the mental state of participants in a negative way (such as inducing aggression, frustration, sadness, etc.)** |  | **X** |  |
| **6.22** | **My study involves deception or deliberately misleading participants in some way.** |  | **X** |  |
| **6.23** | **My target population includes people who have learning or communication difficulties** |  | **X** |  |
| **6.24** | **My target population includes patients (either inpatient or outpatient)** |  | **X** |  |
| **6.25** | **My target population includes people in custody** |  | **X** |  |
| **6.26** | **My target population includes people who may feel under personal or professional pressure to take part in my research (for example, close friends; family; employees or staff of managers or school principals who may support the research).**  |  | **X** |  |
| **6.27** | **My project includes the use of any illegal materials or substances as part of the materials for the study, regardless of methodology employed.** |  | **X** |  |
| **6.28** | **My project includes the use of any dangerous materials or substances as part of the materials for the study, regardless of methodology employed.** |  | **X** |  |
| **6.29** | **My project employs ethnographic or autoethnographic methodologies.** |  | **X** |  |

**Section 7: Declaration of an Amber Route project**

I hereby declare that all of my project involves no risk of physical, emotional, social or cognitive harm to participants; that I will obtain full informed consent from all participants and provide a full debrief afterwards. that I will provide full anonymity and/or confidentiality to participants; and that my participants are not a potentially vulnerable population. In addition, I will ensure that all data which I gather is held in a manner which is compliant with GDPR, and will be deleted once it is no longer required (and definitely within 6 years of collection). At all times my study will be conducted in adherence to the ethical policies of the Psychological Society of Ireland and the British Psychological Society.

Student Signature: Klaudia Sidwinska Date: 6th of November 2022

**6.2 Appendix B: Online Survey Information Sheet**

**Title of the project :**The Relationship Between Emotional Intelligence and Academic Self-Efficacy

You are being invited to take part in the research study entitled, ‘’The Relationship Between Emotional Intelligence and Academic Self-Efficacy” .This project is being undertaken by Klaudia Sidwinskaf or the major research project as part of the BSc (Hons) in Applied Psychology, IADT.

Before you decide whether you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with someone you trust. If there is anything that is unclear or if you would like more information please ask, our contact details are at the end of this information sheet. Thank you for reading this.

**What is the purpose of the project?**
Emotional intelligence is a concept which can be defined as the individuals’ skill of coping with their feelings. Previous literature states that emotional intelligence may enhance an individual’s academic achievement and self-efficacy. However, when it comes to academic self-efficacy and what domains of emotional intelligence affect it, the research seems to be ambiguous. This research study aims to understand whether emotional intelligence affects academic self-efficacy and what domains of emotional intelligence have a higher effect on academic self-efficacy.

**Who is being invited to take part?**
This study is for undergraduate students of the age 18 and above who are taking part in an academic course which displays some level of academic challenge.

**What is involved?**
If you choose to participate, you will be asked demographic questions about your age and gender, followed by two questionnaires. The first questionnaire asks about your emotional intelligence levels and the second about your academic self-efficacy. The study will take approximately 5 minutes.

**Do I have to take part?**

You are free to decide whether you wish to take part or not.If you do decide to take part, you will be asked to fill out a consent form that lets us know you have read this information sheet and understand what is involved in the research. You are free to withdraw from this study at any time and without giving reasons. For students of IADT by choosing to take part or not take part in the study there will be no impact on grades, assessments or future studies.

**What are the disadvantages and risks (if any) of taking part?**
This study will entail two questionnaires about emotional intelligence and academic self-efficacy and there is a possibility that there will be questions that you may wish to leave unanswered.

**What are the possible benefits of taking part?**
We cannot promise the study will help you, but the information we get from the study will help to increase the understanding of the effects of emotional intelligence on academic self-efficacy.

**How will my information be used?**
Your responses to the questionnaire will be combined with all other participants data and statistically analysed. No individual’s data will be identifiable in the final report. The results of this analysis will be reported in the thesis for the BSc (Hons) in Applied Psychology in the Dun Laoghaire Institute of Art, Design & Technology. This can be requested through the library at IADT, or by emailing the researcher or supervisor atN00191108@student.iadt.ieorMarian.McDonnell@iadt.ie.This study may also be published in an academic journal article and may be written about for blog posts or media articles and these can be requested from the researcher.

**How will my data be protected?**
Under the EU General Data Protection Regulation (GDPR) the legal basis for collecting data for scholarly research is that of public interest. The regulations regarding the protection of your data will be followed. Only data which is needed for analysis will be collected. By giving your consent to take part in the study you are consenting to the use of your data as detailed in this information sheet.

The data will be retained by the researcher for at least one year, and may be retained for up to 7 years if the results of the study are published in certain capacities (e.g. in a journal article). There is also a possibility that the fully anonymised dataset may be submitted to a journal and made available to other researchers and academics worldwide for verification purposes, but if this occurs it will be ensured that you are not identifiable from the data.

As the supervisor on this project, I, Marian McDonnellam responsible for ensuring that all datasets will be stored in accordance with GDPR regulations and those which are not submitted to a journal will be fully deleted on or before date 7 years from data collection.

You will find contact information for IADT's Data Protection Officer, Mr Bernard Mullarkey, and more information on your rights concerning your data at https://iadt.ie/about/your-rights-entitlements/gdpr/

**Who has reviewed the study?**
This study has been approved by the Department of Technology and Psychology Ethics Committee (DTPEC).

**What if you have any questions or there is a problem?**
If you have a concern about any aspect of this study, you may wish to speak to the researcher(s) who will do their best to answer your questions.You should contactKlaudia Sidwinska atN00191108@student.iadt.ieor their supervisorMarian.McDonnell@iadt.ie

**Thank you**
Thank you for taking the time to read the information sheet.

**Date**
20/01/2023

**6.3 Appendix C: Consent Form**

**Title of Project: Title of Project:**The Relationship Between Emotional Intelligence and Academic Self-Efficacy

**Name of Researcher:**Klaudia Sidwinska

Please tick the following boxes

## Please tick box

|  |  |  |
| --- | --- | --- |
| 1 | I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. | □ |
| 2 | I understand that my participation is voluntary and that I am free to withdraw at any time. | □ |
| 3 | I understand that data collected about me during this study will not be identifiable when the research is published. | □ |
| 4 | I am over 18  | □ |
| 5 | I agree to take part in this study. | □ |

**6.4 Appendix D: Demographic Questions**

1. Please provide us with an anonymised code which we can use to identify your data if you later wish to have it removed from our dataset. Please do so by answering the following two questions
	* What are the second letters of your first and last name? (For example, if your name is Jane Smith, these letters would be ‘AM’)
	* What are the last three digits of your telephone number?
2. Gender: I identify as:
	* I identify as \_\_\_\_
	* I prefer not to say
3. Age: I am
	* Under 18 years
	* 18-24 years
	* 25-34 years
	* 35-44 years
	* 45-54 years
	* 55-64 years
	* 65-74 years
	* 75 years or older
	* I prefer not to say
4. My highest level of education achieved is:
	* No formal education
	* Some primary level / national school education
	* Completed primary level / national school
	* Some secondary level, but no state examinations
	* Junior Certificate
	* Leaving Certificate
	* Some college or university or trade training, but no degree or qualification
	* Trade / technical / vocational training
	* College / university certificate, diploma, or ordinary degree
	* Honours Bachelor’s degree
	* Master’s degree
	* Professional degree
	* Doctorate degree
	* Other qualification
	* I prefer not to say

**6.5 Appendix E: Wong and Law Emotional Intelligence Scale**

**Scale:**

*Instructions*: Here is a short 16-item measure of emotional intelligence, developed for use in management research and studies. The items on the Wong and Law Emotional Intelligence Scale (WLEIS) is based on the ability model of emotional intelligence. A list of statements are provided below, and to complete this questionnaire, mark the extent to which you agree or disagree to each of the statements.

• 7 - Strongly agree • 6 - Agree • 5 - Slightly agree • 4 - Neither agree nor disagree • 3 - Slightly disagree • 2 - Disagree • 1 - Strongly disagree

1. **I have a good sense of why I feel certain feelings most of the time.**
2. **I have a good understanding of my own emotions.**
3. **I really understand what I feel.**
4. **I always know whether I am happy or not.**
5. **I always know my friends’ emotions from their behaviour.**
6. **I am a good observer of others’ emotions.**
7. **I am sensitive to the feelings and emotions of others.**
8. **I have a good understanding of the emotions of people around me.**
9. **I always set goals for myself and then try my best to achieve them.**
10. **I always tell myself I am a competent person.**
11. **I am a self-motivating person.**
12. **I would always encourage myself to try my best.**
13. **I am able to control my temper so that I can handle difficulties rationally.**
14. **I am quite capable of controlling my own emotions.**
15. **I can always calm down quickly when I am very angry**
16. **I have good control of my emotions.**

Scoring

Total Emotional Intelligence = Average items 1-16.

Total Self-emotions appraisal = Average items 1-4.

Total Regulation of Emotions = Average items 5-8.

Total Use of Emotion = Average items 9-12.

Total Others-Emotion Appraisal = Average items 13-16.

**6.6 Appendix F: Self-Efficacy for Learning and Performance Scale**

**Scale:**

*Instructions*: Students rate themselves on a seven point Likert scale from ‘very false’ to ‘very true’. Scales are constructed by taking the mean of the items that make up that scale.

• 7 – Very • 6 - True • 5 - Slightly True • 4 - Neither True or False • 3 - Slightly False • 2 - False • 1 – Very False

1. I believe I will receive an excellent grade in my course.
2. I'm certain I can understand the most difficult material presented in the readings in my course.
3. I'm confident I can understand the basic concepts taught in my course.
4. I am confident that I can understand the most complex material presented by the instructor in my course
5. I'm confident I can do an excellent job on the assignments and tests in my course.
6. I except to do well in my course.
7. I'm certain I can master the skills being taught in my course.
8. Considering the difficulty of this course, the teacher and my skills, I think I will do well in my course.

**6.7 Appendix G: Debrief Form**

**Title of Project:** The Relationship Between Emotional Intelligence and Academic Self-Efficacy

**Name of Researcher:**Klaudia Sidwinska

**Thank you very much for taking part in this research study.**

Emotional intelligence is a concept which can be defined as the individuals’ skill of coping with their feelings. Previous literature states that emotional intelligence may enhance an individual’s academic achievement and self-efficacy. However, when it comes to academic self-efficacy and what domains of emotional intelligence affect it, the research seems to be ambiguous. This research study aimed to understand whether emotional intelligence affects academic self-efficacy and what domains of emotional intelligence have a higher effect on academic self-efficacy.The information you and other participants have provided will help create a more current view of the effect of emotional intelligence on academic self-efficacy and as a result display the importance of cultivating emotional intelligence in young adults.

 **Withdrawal information**If you have any questions about this study, or if you would like to withdraw your data from the study, please contact the researcher or supervisor atN00191108@student.iadt.ieand/orMarian.McDonnell@iadt.ie.In your email let them know your unique ID code which was created by using second letters of your name and last 3 digits of your phone number if you submit a request for data removal, all data collected from you will be securely deleted. You will be able to remove your data from the study until10/02/2023when the data will be combined and analysed. Data removal will not be possible after that date. Please keep a copy of this information in case you wish to remove your data after leaving this screen.
 **Data protection**Your data will be treated according to GDPR regulations. You will find contact information for IADT's Data Protection Officer, Mr Bernard Mullarkey, and more information on your rights concerning your data at https://iadt.ie/about/your-rights-entitlements/gdpr/

**6.8 Appendix H: Analysis 1: Pearson’s Correlation**

Table 4 below displays the Pearson Correlation values, significance levels, and participant numbers for the relationships between emotional intelligence and academic self-efficacy.

**Table 4**

*Correlation Matrix for the Relationship Between Emotional Intelligence and Academic Self-Efficacy*

  **EI Av. ASE Av.**

EI Av. Pearson 1 .630\*\*

 Correlation

 Sig. (1-tailed) .001

 N 113 113

ASE Av. Pearson .630\*\* 1

 Correlation

 Sig. (1-tailed) .001

 N 113 113

\*\*. Significant strong positive correlation

**6.9 Appendix I: Normal P-P Plot of Regression Standardised Residual**

Figure 2 below demonstrates the normal p-p plot of regression standardised residual to test the assumption of normal distribution residuals. Residuals were normally distributed.

**Figure 2**

*Normal P-P Plot of Regression Standardised Residuals*

**6.10 Appendix: J: Scatterplot for Testing the Assumption of Homoscedasticity**

Figure 3 below displays the scatterplot obtained by testing for the assumption of homogenous residuals for the multiple linear regression analysis. The scatterplot of standardised predicted values indicated that the assumption for homoscedasticity was met.

Figure 3

*Scatterplot of Regression Standardised Residuals by Standardised Predicted Values*

**6.11 Appendix K: Model Summary of Multiple Regression**

Table 5 below presents the SPSS output from conducting a multiple linear regression between the domains of emotional intelligence, SEA, ROA, OEA, UOE and academic self-efficacy.

Table 5

*SPSS out for Model Summary of Multiple Regression*

**Model R R Square Adj. R Squared Std. Error Es. Durbin-Watson**

1. .699 .488 .469 .748. 2.04

a. Predictors: (Constant), SEA Av., ROE Av., OEA Av., UOE.,

b. Dependent Variable: ASE Av.