# RELATIONSHIPS BETWEEN EMOTIONAL INTELLIGENCE AND THE BIG FIVE IN YOUTHS

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#### ABSTRACT

The objective of this paper is to study the relationship between Emotional Intelligence (EI) and the Big Five of the youths in National Youth Skill Training Institute (IKBN) Miri, Sarawak. This survey involved a sampling of two hundred and ninety one youths who are currently learning at the IKBN Miri. The data was gathered through a self-report survey method using a questionnaire instrument. A newly developed instrument; Malaysian Youth Emotional Intelligence Test (MYEIT) is used to measure EI whereas Big Five Inventory (BFI) is used to measure the Big Five. Conscientiousness and Agreeableness strongly correlates with EI, followed by Extraversion, Openness and Neuroticism. Regression analyses further confirm that EI measured by MYEIT is overlap with the higher–order personality dimensions.

**Keywords:** Emotional Intelligence, Big Five

#### ABSTRAK

Objektif makalah ini adalah untuk mengkaji hubungan di antara Kecerdasan Emosi (EI) dan Big Five dalam kalangan belia Institut Kemahiran Belia Negara (IKBN) Miri, Sarawak. Kajian ini melibatkan sampel 291 belia yang sedang menuntut di IKBN Miri. Data dikumpul melalui kaedah soal selidik yang diisi sendiri oleh responden. Instrumen yang digunakan untuk mengukur tahap EI ialah instrumen yang baru dibangunkan; Ujian Kecerdasan Emosi Belia Malaysia (MYEIT) manakala Big Five Inventory (BFI) digunakan untuk mengukur personality Big Five. Mempunyai kesedaran (Conscientiousness) dan Mudah mencapai persetujuan (Agreeableness) berkait kuat dengan EI diikuti dengan Personaliti bersifat sosial (Extraversion), Sikap terbuka (Openness)dan Bersifat neurotik atau Mempunyai gangguan emosi (Neuroticism). Analisis regresi seterusnya mengesahkan bahawa EI yang dinilai melalui MYEIT bertindih dengan dimensi personaliti.

Kata kunci: Kecerdasan emosi, Big Five

# INTRODUCTION

Ever since Emotional Intelligence (EI) and the instruments to measure this construct appears widely in mainstream of the psychology, it has been associated with the personality traits. Theoretically, an important advantage of the theory of EI is that it links the construct to mainstream scientific models in differential psychology, such as Big Five (Petrides, et al., 2010). Numerous studies have been conducted with the EI and the relationships with the Big Five and the extent of the relationship depends

on the measures used in order to access EI and the relationship is moderate to high and in some case there is no relationship at all.

Mayleen, et al., (2009) has conducted a study to examine the possible relationship between an individual's personality types as defined by the MBTI and elements of EI as measured by EQ-i. The study was conducted in a large North America telecommunication equipment company and the participants were 529 respondents. The results of the study indicated there are a powerful associations between Extraversion/Introversion dimension and EI and its components; Intrapersonal, Interpersonal, Adaptability and General mood. Stress management significantly related to Introversion. Mayleen, et al., (2009) also found a positive and significant relationship between a preference for the use of feeling in decision making and an individual's EI.

Petrides, et al., (2010) investigated the relationships between EI and Big Five personality dimensions in two Dutch samples. The samples compromised 108 males in sample one and 104 males in sample two. The TEIQue-SF was used to measure EI and NEO-FFI was used to measure the personality traits. The result were consistent with studies conducted in North America and Britain whereby Neuroticism was the strongest correlated with EI in both samples followed by Extraversion, Conscientiousness, Agreeableness and Openness (Petrides et al., 2010).

Serdar & Suleyman (2009) explored the predictive ability of the Big Five personality traits and EI of psychical education teacher candidate's academic success. The sample were N=295, aged 23 to 32 years. The SSEIT is used to measure EI and The Short Form Five Factor Personality Inventory is used to measure personality traits. The results of the study which took place in Turkey indicated that there is no significant relationship between EI and Big Five personality traits.

The study by Athota, et al., (2009) indicated that EI is predicator of the Big Five. The study has taken place in Australia and the samples are 131 university psychology students. The instruments are The International Personality Item Pool (IPIP) to measure the Big Five and SSEIT to evaluate the EI. Athota, et al., (2009) conclude in his research that EI significantly predict 4 of the Big Five personality traits; Extraversion, Openness, Agreeableness and Neuroticism.

Samuel (2011) has investigated the relationship between Big Five personality factors and psychological well-being of adolescents and the moderating role of EI in that relationship. The samples was (N=400) randomly selected from secondary schools in South Western Nigeria. The instruments were used are NEO-FFI for measuring personality traits, WLEIS for measuring EI and PWB for measuring psychological well-being scales. Samuel (2011) founds that personality factors and EI had significant correlations with psychological well-being. Samuel (2011) summarized that EI moderated the relationship of Neuroticism and Extraversion with psychological well-being but not between Openness, Agreeableness and



Conscientiousness and psychological well-being. An important implication for the findings of this study is that counseling psychologists need to assess both Big Five personality factors and EI when counseling adolescents with emotional, social and personal problems (Samuel, 2011).

Christopher, et al., (2011) examined the relations among the Big Five personality traits, EI and happiness. The participants were 205 universities students in India. The instruments were NEO-PI-R to measure personality traits, a modified version of SSEIT for measuring EI and Oxford Happiness Questionnaire (OHQ) for measuring happiness. The findings of the study revealed that there are direct links between EI and all the personality traits expect Agreeableness. The results also showed that EI is a predictive to happiness in Indian culture in India (Christopher et al., 2011).

Hudani, et al., (2012) conducted a cross sectional study to determine inters relationships of EI and Big Five among the school educators in Malaysia. The sample was 306 teachers around Malaysia. The instrument used to measure EI is EIS and NEO PI-R is used to identify the Big Five factors. Their findings indicated that Conscientiousness, Openness, Extraversion and Agreeableness are positively correlates with EI. Hudani, et al., (2012) concluded that Conscientiousness is the only personality trait that has s stronger relationship with EI.

Scientific evidence continues to mount that suggests the constructs of 'young' EI represents a constellation of traits and abilities that are not fully accounts for by cognitive intelligence and traditional measures of personality. Hence, it can be concluded that EI has an often role to play in personality and social psychology, with effects that are incremental over the basic dimensions of personality.

The aim of this study is to examine the relationships between EI and the Big Five of the personality using the Malay adaptation of the newly developed MYEIT. This study is important, given that this is the first systematic investigation of the MYEIT and the BFI and from cultural perspective this is first investigation of the MYEIT on Sarawak's youth. In this study the researcher will perform the zero-order correlations between the EI scores (Total EI, plus scores on the ten dimensions of Appraisal of Emotion in Self and Others, Emotion Expression, Emotions Regulation, Utilization of Emotion, Social Skills, Empathy, Optimism, Self-Motivation, Handling Relationships and Happiness) and the factors of the Big Five (Neuroticism (N) Extraversion (E), Openness to experience (O), Agreeableness (A), and Conscientiousness (C)). On top of that multiple regression analyses also performed aiming to determine the extent to which the Big Five can predict each of the dimensions of EI variables.

# **METHODOLOGY**

This study is in form of survey to gauge the relationships between EI and the Big Five of IKBN's youth. This study uses quantitative approach. Quantitative research

methods is the approach that will be apply in this study because of the ability to use smaller groups of the folks to make inferences about larger groups. Furthermore, this approach could answer the research questions and portrait the nature of the large population of the study. Moreover, the nature of MYEIT and BFI questionnaires required statistical through this quantitative approach.

# **Participants**

The data was collected randomly from selected youth's who are currently studying in IKBN Miri. The samples comprise of (50.2%) 291 participants out of 580, the total of learners in IKBN Miri. Males are 78% (227 participants) and females 22% (64 participants). Mean age of the participants is 19.59 years (SD = 1.680, range 19-30). The largest ethnicity of the participants is, Others (67.0%), followed by Malay (24.1%) and Chinese (8.9%). The Others group in comprise of Bidayuh, Iban, Kedayan and Melanau. On the upbringing place, 46.0% participants are from city and 45.4% are from rural area of Sarawak. The participant's summary can be found in Table 1.

Table 1: Research 1 articipant 8 Summa	earch Participant's Summary
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Background	N	%						
Gender								
- Male	227	78.0						
- Female	64	22.0						
Age groups								
- 17 to 21	261	89.7						
- 22 to 26	28	9.6						
- 27 to 31	2	0.7						
Ethnic								
- Malay	70	24.1						
- Chinese	26	8.9						
- Other*	195	67.0						
Upbringing place								
- City	134	46.0						
- Suburbs	28	8.6						
- Rural	2	45.4						

<sup>\*</sup>Bidayuh, Iban, Kedayan, Melanau

#### Measures

The MYEIT is use to capture the EI of the sample. The MYEIT was developed by the researcher based on SSEIT (Schutte, et al., 1998) and TEIQue (Petrides,



2009) development ideas. The MYEIT measures ten dimensions of EI; Appraisal of Emotion in Self and Others (0.89), Emotion Expression (0.89), Emotion Regulation (0.90), Utilization of Emotion (0.90), Social Skills (0.89), Empathy (0.89), Optimism (0.90), Self-Motivation (0.89), Handling Relationships (0.90) and Happiness (0.90). The MYEIT survey comprised of 93 items will take only ten to twenty minutes to complete, using a 4-point Likert scale extending from 1= "strongly disagree" to 4= "strongly agree".

The Big Five Inventory (BFI) is the instrument used to capture the personality traits the respondents. The BFI developed by John, et al., (1991) to address the need for a short instrument to measure the big five dimensions of personality. The five BFI dimensions includes; Extraversion (E (0.90)), Conscientiousness (C) (0.90), Agreeableness (A) (0.90), Neuroticism (N) (0.92) and Openness to experience (O) (0.90). Each trait is assessed by eight to ten items. The BFI takes approximately five to ten minutes to administer. Participants rate each item using 4-point Likert scale ranging from 1= "strongly disagree" to 4= "strongly agree", based on how will they feel the item describes them.

#### Procedure

Prior to the field study the researcher has obtained a written permission to conduct the study from Skill Development Division of Ministry of Youth and Sports, whereby the researcher has copied the letter to IKBN Miri to get a suitable date to run the study. At the IKBN, in sampling process stage, the researcher approached the randomly selected sample to explain the intention of the survey and hand-over the survey booklet which contains of a cover letter, introducing and explaining the objective of this survey, a whole-hearted thank-you message and the survey (contains of Section I-MYEIT, Section II-BFI and Section III-demographic). The data collection took place on 13th August 2012.

# **RESULTS**

Zero-order correlations and multiple regression analyses are the two sets of analyses performed on the dataset obtained from the sample. Zero-order correlations were calculated to analyses the correlations between the ten dimensions of EI and the Big Five personality dimensions. Multiple regression analyses are carried out to analyses the regression point of each of the ten dimensions of EI onto Big Five personality dimensions. As pointed out earlier, the aims were to ascertain the strongest personality predictors for the different dimensions of EI and to obtain estimates of variance overlap. Table 2 exhibits the zero-order correlations between dimensions of EI and the Big Five personality dimensions. The table portrayed the data which allows for efficient comparison and indicated the evenness in the results. As can be seen in the table, most correlations are statistically significant. The Extraversion, Openness, Agreeableness and Conscientiousness significantly related to Total\_EI and the other ten dimensions of the EI; of Appraisal of Emotion in

Self and Others, Emotion Expression, Emotions Regulation, Utilization of Emotion, Social Skills, Empathy, Optimism, Self-Motivation, Handling Relationships and Happiness. Neuroticism is the only Big Five personality dimensions that do not reach significance level to EI. In relation with these findings it can be pronounce that these data essentially are very close to the true population and all the values are substantial, uphold the extensive overlap between EI and the personality dimensions.

Table 2: Correlations between the MYEIT and BFI

	EI_Total	EI_1	EI_2	EI_3	EI_4	EI_5	EI_6	EI_7	EI_8	EI_9	EI_10
Neuroticism	-0.045	0.026	-0.007	-0.158**	0.007	-0.003	0.095	0.059	-0.112	0.056	-0.162**
Extraversion	0.553**	0.390**	0.395**	0.387**	0.477**	0.382**	0.345**	0.445**	0.420**	0.315**	0.433**
Openness	0.515**	0.393**	0.377**	0.347**	0.518**	0.398**	0.306**	0.403**	0.421**	0.305**	0.265**
Agreeableness	0.591**	0.410**	0.381**	0.503**	0.448**	0.424**	0.332**	0.511**	0.487**	0.398**	0.384**
Conscientiousness	0.598**	0.464**	0.388**	0.490**	0.503**	0.394**	0.269**	0.521**	0.551**	0.411**	0.347**

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

#### Note

EI\_1 is represent Appraisal of Emotion in Self and Others

- EI\_2 is represent Emotion Expression
- EI\_3 is represent Emotions Regulation
- EI\_4 is represent Utilization of Emotion
- EI\_5 is represent Social Skills
- EI\_6 is represent Empathy
- EI\_7 is represent Optimism
- EI\_8 is represent Self-Motivation
- EI\_9 is represent Handling Relationships
- EI\_10 is represent Happiness

Table 3 displays the results of the multiple regression analyses. The table shows the regression (method = 'Enter') of each of the ten dimensions of EI scores on all of the Big Five personality dimensions and quantify the overall overlap between EI and the Big Five personality dimensions. Conscientiousness makes the largest independent contribution ( $\beta$  = 0.278) whereas Neuroticism makes the smallest ( $\beta$  = 0.055). The largest R² adj among the EI dimensions is Self-Motivation (0.357) and Optimism (0.351), whereas the smallest R² adj was Empathy (0.172) and Happiness (0.219). In term of Big Five predicators, Neuroticism had significant negative effects on Emotions Regulation (-0.062) and followed by Happiness (-0.099). Conscientiousness had highest significant positive effects on Self-Motivation (0.334) and followed by Appraisal of Emotion in Self and Others (0.309). Extraversion, Openness and Agreeableness had significant positive effects on the whole ten dimensions of EI.

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed)



Table 3: Regression of the Total EI and ten dimensions scores of the MYEIT on the Big Five

Dependent			on the bi	<b>5</b> - 1 · · ·			
variable	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F (df)	BFI	β	t
EI_Total	0.717	0.515	0.506	60.477** (5, 285)	N	0.055	1.946
					Е	0.172	3.143**
					О	0.211	4.255**
					A	0.252	4.503**
					С	0.278	4.612**
EI_1	0.545	0.297	0.284	24.034** (5, 285)	N	0.141	2.677**
					Е	0.090	1.374
					О	0.174	2.869**
					A	0.114	1.692
					С	0.309	4.266**
EI_2	0.492	0.242	0.228	18.174** (5, 285)	N	0.076	1.388
					Е	0.152	2.232*
					О	0.176	2.836**
					A	0.138	1.971
					С	0.163	2.167*
EI_3	0.565	0.32	0.308	26.764** (5, 285)	N	-0.062	-1.187
					Е	0.052	0.803
					О	0.119	2.029*
					A	0.294	4.438**
					С	0.205	2.876**
EI_4	0.633	0.400	0.390	38.046** (5, 285)	N	0.117	2.409*
					Е	0.141	2.326*
					О	0.291	5.273**
					A	0.104	1.666
					С	0.268	4.008**
EI_5	0.514	0.265	0.252	20.505** (5, 285)	N	0.072	1.340
					Е	0.101	1.500
					О	0.207	3.395**
					A	0.213	3.103**
					С	0.134	1.812
EI_6	0.432	0.186	0.172	13.062** (5, 285)	N	0.151	2.662**
_					Е	0.184	2.599**
					О	0.127	1.971
					A	0.171	2.359*
					С	0.049	0.630
EI_7	0.602	0.362	0.351	32.319** (5, 285)	N	0.057	1.130
					Е	0.110	1.756

					О	0.142	2.494*
					A	0.236	3.682**
					С	0.266	3.847**
EI_8	0.606	0.368	0.357	33.154 **(5, 285)	N	0.011	0.224
					Е	0.050	0.795
					0	0.183	3.231**
					A	0.180	2.817**
					С	0.334	4.851**
EI_9	0.487	0.237	0.224	17.716** (5, 285)	N	0.162	2.942**
					Е	0.039	0.572
					О	0.097	1.560
					A	0.069	2.491*
					С	0.082	3.760**
EI_10	0.482	0.232	0.219	17.265** (5, 285)	N	-0.099	-1.801
					Е	0.289	4.210**
					О	0.031	0.492
					A	0.201	2.863**
					С	0.017	0.226

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

#### Note:

- EI\_1 is represent Appraisal of Emotion in Self and Others
- EI\_2 is represent Emotion Expression
- EI\_3 is represent Emotions Regulation
- EI\_4 is represent Utilization of Emotion
- EI\_5 is represent Social Skills
- EI\_6 is represent Empathy
- EI\_7 is represent Optimism
- EI\_8 is represent Self-Motivation
- EI\_9 is represent Handling Relationships
- EI\_10 is represent Happiness
- N = Neuroticism
- E = Extraversion
- O = Openness
- A = Agreeableness
- C = Conscientiousness

### DISCUSSION

This latest report on the relationship between EI and Big Five is consistent with most of the previous findings of extensive overlap between these two popular constructs (e.g., Athota et al., 2009; Christopher et al., 2011; Hudani et al., 2012; Mayleen et al., 2009; Petrides et al., 2010). When the current results are compared to previous studies, it can be observed that the correlation of the Big Five with EI construct is a norm but gives a mixture scenario whereby the extend of the correlation is varied.

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed

However, the researcher does not indicate this huge relationship as a suggestion that EI is simply an aspect of personality, or even synonymous with personality, as claimed by Shulman & Hemenover (2006). In fact EI represents ability, rather than a disposition, it influences the development of personality, and can therefore be modeled as a distal precursor to personality. This line of reasoning is consistent with explanatory models of personality which view surface dimensions of personality having a distal basis in emotional control (Athota, et al 2009).

As for correlation analysis in this study, EI highly correlated with Conscientiousness, Agreeableness, Openness and Extraversion and slightly with Neuroticism. This outcome indicates those youths who are learning at IKBN Miri, Sarawak is very much affected by the personality traits and EI. Hence, it can be reported that IKBN Miri's youths are more emotionally stable and steady and they are tough to meet their objective in the skill development oriented environment. From this correlation analysis, it can be concluded that these youths are obviously portraying outward representation than inward.

As mentioned earlier in this study, the strongest correlation is so apparent for Conscientiousness. Hence, the higher the youth's level of EI the more Conscientiousness they are. This state of condition is consistent with the study done by Douglas, et al., (2004), formulated that a person who has s high level of EI brings a positive effects on Conscientiousness traits of the personality. Furthermore, Ones & Viswesvaran (1996) narrated that the highly conscientious individuals show greater self-control, organizing, strong-willed and careful than less conscientious individuals because: (a) they spend more time on orderliness(s) they are assigned to; (b) they acquire greater job knowledge; (c) they set goals autonomously and persist in following them; (d) they go beyond role requirement in the workplace; and (e) the avoid counterproductive behavior. Thus, the conscientious youths are become better person than the less conscientious. This is because the one very conscientious are well verse in controlling their behaviors and emotion regardless where they are assigned to. Life with goals, circumspectness, unwaveringness, punctuality and reliability are the characteristics of high Conscientiousness. On top of that the youths with high Conscientiousness and has high ability EI would always self-motivated, ambitious, self-worthiness and able to handle challenging situation wisely. These characters are an important and necessary for the youths who are staying and studying in technical and skill development environment like IKBN.

#### **CONCLUSION**

This is the first study to investigate the relationship between EI and Big Five among Malaysian youth specifically IKBN's youth. The results of this study show that with Conscientiousness highly correlated with EI, followed by Agreeableness, Openness and Extraversion. The findings support some of the associations found in other contexts, but also differ in several distinct ways. Given, these findings reflect only on youths of Sarawak, a thorough research is needed to generalize the findings.

Hence, the future research should include peninsular youths in order to provide a comprehensive overview.

# REFERENCES

- Athota, V. S., O'Connor, P. J., & Jackson, C. 2009. The role of emotional intelligence and personality in moral reasoning. In R. E. Hicks (ed.), *Personality and individual differences: Current directions*. Bowen Hills, QLD, Australian Academic Press.
- Christopher, H., Kamlesh Singh & Brett, L., 2011. The Happy Personality in India: The Role of Emotional Intelligence. *Journal of Happiness Study*, 12, 807-817.
- Douglas, Ceasar, Frink, Dwight D., Ferris, & Gerald R. 2004. Emotional Intelligence as a Moderator of the Relationship between Conscientiousness and Performance. *Journal of Leadership & Organizational Studies*, 10(3), 2-13.
- Hudani, M, N., Redzuan, M., & Hamsan, H. 2012. Inter Relationship between Emotional Intelligence and Personality Trait of Educator Leaders. International Journal of Academic Research in Business and Social Sciences, 2(5), 223-237.
- John, O. P., Donahue, E. M., & Kentle, R. L. 1991. The Big Five Inventory-Versions 4a and 54. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.
- Myleen, L., Michael, R., & William, F. 2009. A study of personality preferences and emotional intelligence. *Leadership and Organization Development Journal*, 30(4), 421-434.
- Ones, D. S. & Viswesvaran, C. 1996. A General Theory of Conscientiousness of works: Theoretical Underpinning and Empirical Findings. In J. R. Collins (Chair). *Personality Predicators of Job Performance: Controversial Issues*. Symposium conducted at the eleventh annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA. April.
- Petrides, K. V. 2009. *Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London: London Psychometric Laboratory.
- Petrides, K. V., Vernon, P. A., Schermer, J. A., Ligthart, L., Boomsma, D. I. & Veselka, L. 2010. *Relationships between trait emotional intelligence and the Big Five in the Netherlands. Personality and Individual Differences*, 48, 906-910.



- Samuel, S. 2011. Personality and Psychological Well-Being of Adolescents: The Moderating Role of Emotional Intelligence. *Social Behavior and Personality*, 39(6), 785-794.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., & Dornheim, L. 1998. Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*. 25, 167-177.
- Serdar T., & Suleyman, M. 2009. Trait Emotional Intelligence, The Big Five Personality Dimensions and Academic Success in Physical Education Teacher Candidates. *Social Behavior and Personality*, 37(7), 921-932.
- Shulman, E.T., & Hemenover, S.H. 2006. Is dispositional emotional intelligence synonymous with personality? *Self and Identity*, 5, 147-171.

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