HRMARS
Exploring Intellectual Capital

Emotional Intelligence and Personality Traits: A Correlational Study of MYEIT and BFI

Hari Krishnan Andi

Faculty of Education & Human Development, Sultan Idris Education University, Malaysia

Abstract

The objective of this paper is to study the relationship between Emotional Intelligence (EI) and the personality traits using Malaysian Youth Emotional Intelligence Test (MYEIT) and Big Five Inventory (BFI). MYEIT is a newly developed measures to meets the need of a reliable instrument to measure EI among Malaysian samples. The dimensions of this newly developed MYEIT are similar to the well known SSEIT and TEIQue and however the items have been designed to suit the Malaysian socio-politics and cultures. Although MYEIT is new instrument but, it's has the capacity to linked to mainstream scientific models in differential psychology such as Big Five. The finding of this study is shows that there are strong relationships between EI and Big Five, consistent with previous studies. 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, personality traits, relationship

Introduction

The relationship between EI and personality has been widely discussed, and the extent of the relationship depends on the measures used in order to access EI. For example, while less correlated with traditional intelligence, the Bar-On's EQ-i, Goleman's ESCI and other mixed model theory of EI show a higher degree of overlap with traditional measures of personality (Brackett and Mayer, 2003). Bracket and Mayer (2003) found that by using Bar-On's EQ-i and the NEO-PI-R, a measure of Big Five Personality factors, that EI is highly significantly correlated with Neuroticism, Extraversion, Agreeableness and Conscientiousness, but moderately related to Openness to experience. Also, Goleman's ESCI is significantly related to Extraversion, Openness to experience, and Conscientiousness (Sala, 2002).

The ability based measures; MSCEIT and the earlier version MEIS demonstrate discriminant validity from the Big Five model of personality. MSCEIT is weakly related to personality factor (Brackett and Mayer, 2003). While the earlier version of MSCEIT, MEIS is found out to be not related at all to personality factors (Mayer et al., 2000). The level of relationship also lies in how EI is measured. When it is assessed through self-report measure EI is more strongly related to personality factors and the two measures; MSCEIT and MEIS which assessed through performance-based tests while has weak relationship with personality factors, more related to

cognitive ability measures (Petrides, Furham and Frederickson, 2004). On the other development, the study conduct by Davies, Stankov and Roberts (1998) on the factor analysis on several existing EI measures and personality measures concludes that EI was an elusive construct.

By analysing the literatures, noted that the correlations between mixed model-based EI measures and traditional measures of personality that assess the Big Five are moderate to high. However, researchers have often been able to demonstrate the dicriminant validity of mixed model based approaches to EI (Ciarrochi, et al., 2001; Saklofske, et al., 2003; Schutte, et. al., 1998; Van Der Zee, et al., 2002; Van Rooy and Viswesvaran, 2004). Although correlations with traditional psychological construct are normal, researchers (e.g. Brackett and Mayer, 2003; Zeidner, et al., 2004) indicate that EI as a newly incepted construct in the psychology domain, should not only demonstrate criterion and predictive validity but also incremental validity. Evaluation the incremental validity should be considered to account for additional variance. More recent research on the incremental validity of EI, when IQ and personality are controlled for has shown that EI is indeed a unique construct that accounts for unique variance (Ciarrochi et al., 2001; Palmer, et al., 2003; Sakofske, et al., 2003; Schutte, et. al., 1998; Van Der Zee, et al., 2002; Van Rooy and Viswesvaran, 2004). 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.

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).

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.

The aim of this study is to explore the relationships between EI and the personality traits using MYEIT; a newly and locally developed instrument to measure the Malaysian's EI. The study is very imperative since this is the first investigation of the MYEIT. This study is also very important for MYEIT to be a prominent and reliable instrument in measuring Malaysian's EI. 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.

Method

This study is in form of survey to gauge the relationships between Emotional Intelligence and the personality of Malaysian sample. 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 participants who attended carrier talk and seminar at Kuala Lumpur. The samples comprise of (50.2%) 291 participants out of 580 attended the three days program. Males are 58% (169 participants) and females 52% (122 participants). Mean age of the participants is 19.59 years (SD = 1.680, range 19 – 30). The largest ethnicity of the participants is, Malay (71%), followed by Chinese (27%) and Indian (2%).

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. MYEIT is comprise of 93-item questionnaire which, the items have been designed to suit the Malaysian socio-politics and cultures. Furthermore, all the items of MYEIT were formed and written primarily in Malay, making it a more reliable and valid instrument to measure Malaysian's EI. 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 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 the organizer of the seminar and the researcher present personally at the seminar to meet the participants. 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 6th to 8th September 2012.

Results and Discussions

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 1 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 1: 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
Neuroticism	-0.045	0.026	-0.007	-0.158**	0.007	-0.003	0.095	0.059	-0.112	0.056
Extraversion	0.553**	0.390**	0.395**	0.387**	0.477**	0.382**	0.345**	0.445**	0.420**	0.315**
Openness	0.515**	0.393**	0.377**	0.347**	0.518**	0.398**	0.306**	0.403**	0.421**	0.305**
Agreeableness	0.591**	0.410**	0.381**	0.503**	0.448**	0.424**	0.332**	0.511**	0.487**	0.398**
Conscientiousness	0.598**	0.464**	0.388**	0.490**	0.503**	0.394**	0.269**	0.521**	0.551**	0.411**

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

 * Correlation is significant at the 0.05 level (2-tailed)

Note:
EI_1 = Appraisal of Emotion in Self and Others
EI_2 = Emotion Expression
EI_3 = Emotions Regulation
EI_4 = Utilization of Emotion
EI_5 = Social Skills
EI_6 = Empathy
EI_7 = Optimism
EI_8 = Self-Motivation
EI_9 = Handling Relationships
EI_10 = Happiness

Table 2 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 (β = 0.278) whereas Neuroticism makes the smallest (β = 0.055). The largest R^2 adj among the EI dimensions is Self-Motivation (0.357) and Optimism (0.351), whereas the smallest R^2 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.

Table 2: Regression of the Total_EI and ten dimensions scores of the MYEIT on the Big Five

Dependent variable	R	R^2	Adjusted R^2	F (df)		BFI	β	t
EI_Total	0.717	0.515	0.506	60.477**	(5, 285)	N	0.055	1.946
						E	0.172	3.143**
						O	0.211	4.255**
						A	0.252	4.503**
						C	0.278	4.612**
EI_1	0.545	0.297	0.284	24.034**	(5, 285)	N	0.141	2.677**
						E	0.090	1.374
						O	0.174	2.869**
						A	0.114	1.692
						C	0.309	4.266**
EI_2	0.492	0.242	0.228	18.174**	(5, 285)	N	0.076	1.388
						E	0.152	2.232*

						O	0.176	2.836**
						A	0.138	1.971
						C	0.163	2.167*
EI_3	0.565	0.32	0.308	26.764**	(5, 285)	N	-0.062	-1.187
						E	0.052	0.803
						O	0.119	2.029*
						A	0.294	4.438**
						C	0.205	2.876**
EI_4	0.633	0.400	0.390	38.046**	(5, 285)	N	0.117	2.409*
						E	0.141	2.326*
						O	0.291	5.273**
						A	0.104	1.666
						C	0.268	4.008**
EI_5	0.514	0.265	0.252	20.505**	(5, 285)	N	0.072	1.340
						E	0.101	1.500
						O	0.207	3.395**
						A	0.213	3.103**
						C	0.134	1.812
EI_6	0.432	0.186	0.172	13.062**	(5, 285)	N	0.151	2.662**
						E	0.184	2.599**
						O	0.127	1.971
						A	0.171	2.359*
						C	0.049	0.630
EI_7	0.602	0.362	0.351	32.319**	(5, 285)	N	0.057	1.130
						E	0.110	1.756
						O	0.142	2.494*
						A	0.236	3.682**
						C	0.266	3.847**
EI_8	0.606	0.368	0.357	33.154**(5, 285)		N	0.011	0.224
						E	0.050	0.795
						O	0.183	3.231**
						A	0.180	2.817**
						C	0.334	4.851**
EI_9	0.487	0.237	0.224	17.716**	(5, 285)	N	0.162	2.942**
						E	0.039	0.572
						O	0.097	1.560

					A	0.069	2.491*
					C	0.082	3.760**
EI_10	0.482	0.232	0.219	17.265** (5, 285)	N	-0.099	-1.801
					E	0.289	4.210**
					O	0.031	0.492
					A	0.201	2.863**
					C	0.017	0.226

** Correlation is significant at the 0.01 level (2-tailed)
 * Correlation is significant at the 0.05 level (2-tailed

Note:
EI_1 = Appraisal of Emotion in Self and Others
EI_2 = Emotion Expression
EI_3 = Emotions Regulation
EI_4 = Utilization of Emotion
EI_5 = Social Skills
EI_6 = Empathy
EI_7 = Optimism
EI_8 = Self-Motivation
EI_9 = Handling Relationships
EI_10 = Happiness

N = Neuroticism
E = Extraversion
O = Openness
A = Agreeableness
C = Conscientiousness

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. 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).

By compared to previous studies, it can be observed that this MYEIT provide near-identical estimates of total EI and EI's dimensions. In fact these results can be linked to mainstream

differential psychology research as MYEIT provide context for the interpretation of results accurately.

Therefore, the MYEIT which is developed to assess level of Malaysian's EI has the ability to produce reasonable results, as when associated with other psychology instruments, such as Big Five instrument, BFI. Hence, MYEIT is a capable instrument of measuring EI which has strong psychometric properties and can be widely used. Siu (2009) explained, many self-report questionnaires of emotional intelligence tend to have weak psychometric properties. In addition Petrides et al (2010) related there are self-report instruments which provide limited coverage of the construct's sampling domain. Petrides et al (2010) elaborated that they are often invalid for the purpose for which they were originally developed (i.e., to measure emotional intelligence as an ability, competency, or skill), these measures overlook many (in some cases, most) central facets of the construct.

Based on the arguments above, I recommend MYEIT as a must instrument to be used in Malaysian's EI research. Furthermore MYEIT which designed based on its suitability and compatibility with the local cultures and values provides a gateway to assess EI Malaysian' society without offending anyone whom has been part of Malaysian socio-politic.

Conclusion

In conclusion the results of this study show that with Conscientiousness highly correlated with EI, followed by Agreeableness, Openness and Extraversion. This means that, MYEIT is a well developed instrument which has strong psychometric properties in measuring EI and can be associate the construct to mainstream scientific models in differential psychology, such as Big Five, BFI.

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.

Brackett, M. A., and Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*, 29, 1147-1158.

Christopher, H., Kamlesh Singh & Brett, L., (2011). The Happy Personality in India: The Role of Emotional Intelligence. *Journal of Happiness Study*, 12, 807-817.

Ciarrochi, J., Chan, A. Y. C., and Bajar, J. (2001). Measuring emotional intelligence in adolescents. *Personality and Individual Differences*, 31, 1105-1119.

Davies, M., Stankov, L., and Roberts, R. D. (1998). Emotional Intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology*, 75, 989-1015.

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.

Mayer, J. D., Salovey, P., and Caruso, D. R. (2000). Emotional intelligence as zeitgeist, as personality, and as a mental ability. In R. Bar-On and J. Parker (Eds.), *The Handbook of Emotional Intelligence*. San Francisco, CA: Josey-Bass.

Myleen, L., Michael, R., & William, F. (2009). A study of personality preferences and emotional intelligence. *Leadership and Organization Development Journal*, 30(4), 421-434.

Palmer, B., Gardner, and Stough, C. (2003). *The relationship between emotional intelligence, personality, and leadership effectiveness*. Paper presented at the 5th Australian Industrial & Organizational Conference. Melbourne.

Petrides, K. V. (2009). *Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London: London Psychometric Laboratory.

Petrides, K. V., Furnham, A. and Frederickson, N. (2004). Emotional intelligence. *The Psychologist*, 17, 574-577.

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.

Saklofske, D. H., Austin, E. J., and Minski, P. S. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Differences*, 34, 707-721.

Sala, F. (2002). *Emotional Competence Inventory: Technical manual*. Philadelphia, PA: McClelland Center For Research, HayGroup.

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.

Siu, A. F. Y. (2009). Trait emotional *intelligence and its relationships with problem behavior in Hong Kong adolescents. Personality and Individual Differences*, 47, 553–557.

Van Der Zee, K., Melanie, T. and Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the Big Five. *European Journal of Personality*. 16, 103-125.

Van Rooy, D. L., and Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65, 71-95.

Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. Applied Psychology: *An International Review*, 53, 371-399.