

RELATIONSHIP BETWEEN BIG FIVE PERSONALITY TRAITS AND WORK ENGAGEMENT AMONG PRIVATE UNIVERSITY ACADEMIC STAFF

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Abstract: *This study has examined the relationship between Big Five personality traits and work engagement among academic staff of private universities in Perak, Malaysia. The aforementioned traits included extraversion, conscientiousness, agreeableness, neuroticism, and openness to experience. This quantitative, survey-based research had 102 respondents who comprised the academic staff of selected private universities in Perak. Demographic data, Big Five personality traits, and work engagement were assessed using a biographical questionnaire, Neuroticism Extraversion Openness Five-Factor Inventory 3 (NEO-FFI-3), and Utrecht Work Engagement Scales (UWES) respectively. Partial least squares (PLS) structural equation modelling (SEM) was conceptualized and executed. As per the results, agreeableness, conscientiousness, and openness to experience had significant positive effects on work engagement. This study would be beneficial to the government and private universities of Malaysia since it has provided insight and recommendations for further enhancements of the quality of private higher education in the country.*

Keywords: *Big Five Personality Traits, Work Engagement, Academic Staff, Private University*

Introduction

Malaysia is attempting to expand its higher education system in order to support an innovative economy (Ahrari, Samah, Hassan, Wahat & Zaremohzzabieh, 2016). The vision of the Malaysian government is to create a higher education landscape that encourages excellence in academic development so as to attain the status of a global education hub. There are two types of post-secondary education centers in Malaysia, namely public higher education institutions (HEIs) and private HEIs. The increasing demand for higher education has become the basis for the existence of private HEIs in the quest to ensure the availability of higher education to all. With the growing demand for private higher education in Malaysia from both local and international students, it is of utmost importance to ensure that the quality of education is constantly reviewed and upgraded. Education is a service-based industry and hence, its

employees are the most important part of the business (Ministry of Education, 2017). Therefore, it is crucial that the academicians in private universities be tightly scrutinized in terms of their work engagement.

Work engagement is defined as – a concept in its own right – “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, Gonzá & Bakker 2002). It has also been associated with certain personality traits (Macey & Schneider, 2008; Stephen & Julitta, 2013). The Big Five Personality Traits Model provides a foundation for an understanding of the effects of personality and behavior on work engagement (Komarraju, Karau, Schmeck & Avdic, 2011). However, there are limited previous studies on the relationship between Big Five personality traits towards work engagement; most of them have mainly focused on the antecedents (traits) of work engagement like emotional intelligence, self-efficacy, self-esteem, and self-regulation (Nayyar, Rana, Farheen, Ghazala & Mohammad, 2013). Therefore, there was a practical and theoretical need to expand the literature by investigating the said factors. According to recent studies, all Big Five personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) correlated well with work engagement (Hyun, Kang & Nancy, 2008; Nayyar et al., 2013; Amirul & Amogh, 2017). Evidently, engagement levels are affected by the personalities of individual employees. As such, a correct match between occupation and individuals will help to increase the efficiency and effectiveness of job performance (Ozgur, 2014).

Research Objective

To examine the relationship between Big Five personality traits (extraversion, conscientiousness, agreeableness, neuroticism & openness to experience) and work engagement.

Literature Review

Big Five personality traits and Work Engagement

Little is known regarding the link between Big Five personality traits and work engagement. Hence, explorations into the association between personality traits and work engagement have been of increased interest in recent years. Christian, Garza and Slaughter (2011) has shown that work engagement was positively associated with job performance. Therefore, in order to improve employee well-being and organizational performance, there is the need to understand how and why individuals become engaged with their work. It has been argued that certain personality dimensions reflected a propensity for engagement owing to their specific behavioral characteristics. Preliminary evidence suggested that high levels of extraversion, agreeableness, openness to experience, and conscientiousness, as well as low levels of neuroticism, were related to elevated degrees of work engagement (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009).

Interestingly, individual differences did have an impact on work engagement, in the sense that engaged employees had lower levels of neuroticism and higher levels of extraversion (Langelaan, Bakker, Van Doornen & Schaufeli, 2006). The same findings have been reported by Inceoglu and Warr (2011). In terms of conscientiousness, individuals who were highly conscientious were more likely to be achievement-oriented (Schaufeli & Bakker, 2004). Also, conscientious employees had higher levels of work engagement since they were less subjected to work interference from their families. Therefore, these people potentially had more energy at work (Halbesleben, Harvey, Bolino, 2009; Akhtar, Boustani, Tsivrikos & Chamorro-Premuzic, 2015).

Apart from conscientiousness and extraversion, agreeableness predicts work engagement as well. A major part of any profession requires teamwork for the efficient performance of tasks and thus, agreeableness can foster supportive relationships with peers (Wefald, Reichard & Serrano, 2011), as well as stimulate personal growth and help individuals cope with their occupational demands (Morgeson, Reider & Campion, 2005; Bakker & Demerouti, 2007). Nevertheless, Inceoglu and Warr (2011) found that creative thinking styles – a facet of openness to experience – were the only significant predictor of engagement. This finding was in line with Griffin and Hesketh (2004), who argued that the ability of openness to experience to predict organizational outcomes was reduced in light of its multidimensionality. A possible reason for the abovementioned situation was that different jobs had different requirements, organizational settings, and work cultures. Possibly, openness to experience was only essential for employees who needed to adopt new behaviors and ideas in order to perform well (Bing & Lounsbury, 2000; Rothmann & Coetzer, 2003). This might explain the inconsistent findings pertaining to the relationship between openness to experience and job performance. With reference to the associations of agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience with work engagement, we predicted the following:

Hypothesis 1: Agreeableness has a significant effect on work engagement.

Hypothesis 2: Conscientiousness has a significant effect on work engagement.

Hypothesis 3: Extraversion has a significant effect on work engagement.

Hypothesis 4: Neuroticism has a significant effect on work engagement.

Hypothesis 5: Openness to experience has a significant effect on work engagement.

Methodology

Participant and Procedure

This was a descriptive, cross-sectional, survey-based research (Struwig & Stead, 2001; Parmjit et al., 2008). An online questionnaire was used for data collection from University X in Perak, Malaysia. Overall, 102 academicians completed the survey; the overall response rate of 87% fulfilled the minimum requirement for PLS-SEM (Hair, Hult, Ringle & Sarstedt, 2014). The majority of the respondents ($n = 86$; 84%) were female, while 16 (16%) were male. In terms of job position, 51 (50%) were lecturers, 12 (12%) senior lecturers, 28 (27%) assistant professors, and 11 (11%) associate professors.

Instrument

The Big Five personality traits construct was measured using the Neuroticism Extraversion Openness Five-Factor Inventory 3 (NEO-FFI-3), which was developed by Costa and McCrae (1992) with Cronbach's alphas of 0.71 to 0.85. There are 5 sub-items in the aforementioned variable, namely extraversion, conscientiousness, openness to experience, neuroticism, and agreeableness. We measured work engagement using the Utrecht Work Engagement Scales (UWES) that was designed by Schaufeli, Bakker and Salanova (2006) with a reliability (Cronbach's alpha) of over 0.85. Its 3 sub-items included vigor, dedication, and absorption, which were measured using a five-point Likert scale.

Data Analysis

The data from 102 respondents were analyzed and interpreted using Statistical Package for the Social Sciences (SPSS) 20.0 and SmartPLS 3.0 software. The former was used to evaluate the demographic characteristics (gender and job position) of the respondents, while the partial least squares-structural equation modelling (PLS-SEM) to test the relationships between the Big Five personality traits and work engagement of academicians in University X. PLS-SEM was a two-

stage process. Stage one examined the reliability and validity of outcomes with respect to specific criteria which were associated with the specifications of reflective measurement models. Meanwhile, stage two assessed the structural model after the measurement model has been validated (Hair et al., 2014).

Findings

According to Hair et al. (2014), factor loadings and the composite reliability (CR) must be greater than 0.7. Meanwhile, an acceptable convergent validity should have an average variance extracted (AVE) which exceeds the threshold value of 0.5. Table 1 shows the factor loadings and the items which remained in the model (i.e. those which satisfied the three abovementioned prerequisites). The latter comprised three items of extraversion (E) (E3, E8 & E9), two items of agreeableness (A) (A3 & A7), three items of conscientiousness (C) (C4, C7 & C10), two items of openness to experience (O) (O7 & O8), two items of neuroticism (N) (N4 & N6), and seven items of work engagement (WE) (WE2, WE5, WE7, WE8, WE9, WE10, WE15). From table 1, it can be seen that the AVE and CR of all constructs were above the threshold values, thus indicates that the items had satisfactory convergent validity and internal consistency reliability.

Table 1: Results of Measurement Model

Construct	Items	Factor loadings	Composite Reliability (CR)	AVE
Extraversion (E)	E3	0.764	0.820	0.696
	E8	0.813		
	E9	0.899		
Agreeableness (A)	A3	0.780	0.806	0.676
	A7	0.862		
Conscientiousness (C)	C4	0.886	0.918	0.790
	C7	0.888		
	C10	0.891		
Openness to experience (O)	O7	0.771	0.773	0.630
	O8	0.815		
Neuroticism (N)	N4	0.995	0.779	0.779
	N6	0.804		
Work Engagement (WE)	WE2	0.749	0.772	0.672
	WE5	0.832		
	WE7	0.793		
	WE8	0.833		
	WE9	0.908		
	WE10	0.819		
	WE15	0.797		

Next, discriminant validity was assessed in accordance with Fornell and Larcker (1981) criterion. Satisfactory discriminants are obtained when the square root of the AVE – which are represented by the bolded (diagonals) elements in Table 2 – are greater than the correlations between the constructs – which are represented by the non-bolded (off-diagonal) elements. As per Table 2, the square roots of the AVEs (diagonal elements) were higher than the off-diagonal elements, so the discriminant validities were acceptable.

Table 2: Discriminant Validity

	A	C	E	N	O	WE
A	0.822					
C	-0.017	0.889				
E	0.339	0.201	0.834			
N	-0.436	-0.471	-0.166	0.883		
O	-0.006	0.548	0.270	-0.313	0.794	
WE	0.365	0.482	0.381	-0.433	0.726	0.820

Table 3 presents the results of the structural model, whereby agreeableness, conscientiousness, and openness to experience had significant positive effects on work engagement. On the other hand, extraversion and neuroticism did not have a significant impact on work engagement.

Table 3: Results of Structural Model

Path	Path Coefficient	Standard Error	t-value	Results
A → WE	2.138	0.159	2.138	Supported
C → WE	0.565	0.113	5.428	Supported
E → WE	0.444	0.150	0.444	Not Supported
N → WE	-0.098	0.199	0.098	Not Supported
O → WE	0.887	0.165	3.887	Supported

Discussion and Conclusion

An individual's success is significantly influenced by his/ her education status (Husain & Syed, 2016). Education enables a person to acquire the skills that are needed to deal with mental, social, and physical challenges – or basically all aspects of life. Bearing in mind the role of academicians as the front-liners of the higher education sector, we have investigated the relationship between Big Five personality traits and work engagement. As per the results of this study, agreeableness, conscientiousness, and openness to experience had significant positive effects on work engagement. These were similar to the findings of Liao, Yang, Wang, Drown and Shi (2013), Ozgur (2014), Reeca, Lara, Dimitrios and Tomas (2015), as well as Justyna and Kinga's (2016). An agreeable employee was proven to be better engaged in his/ her tasks, apart from being more likely to foster teamwork at the workplace. This was especially true for jobs whereby the employees had face-to-face, direct, or verbal contact with the customers. Indeed, the job scopes of academicians entailed (1) speaking at conferences and symposia, (2) involvement in research collaborations, as well as (3) student contact and supervision of postgraduate students. With reference to the above discussion, it could be concluded that agreeableness predicted work engagement (Ozgur, 2014; Justyna & Kinga, 2016). Next, conscientious employees exhibited a strong desire to accomplish the task-related goals, so they were more willing to invest time and effort to finish their tasks. As an evidence of their accomplishment – striving nature, academicians who set greater goals for themselves showed more commitment and engaged than their unconscientious counterparts (Liao et al., 2013). In term of openness to experience, Reeca et al. (2015) argued that workers who were open to experiences were more imaginative, creative, curious, and resilient. Evidently, resilient employees had a better ability to control their environment and easily recover from challenging situations; these in turn enhanced their intrinsic motivation to attain the work goals. The outcomes of our study would be beneficial to the government and private universities of Malaysia since it has provided insight and recommendations for further enhancements of the

quality of private higher education in the country. Nevertheless, further researches are needed to test the applicability of our findings in other private universities.

References

- Ahrari, S., Samah, B. A., Hassan, M. S., Wahat, N. W. & Zaremohzzabieh, Z. (2016). Deepening critical thinking skills through civic engagement in Malaysian higher education. *Thinking Skills and Creativity*, 22, 121-128.
- Akhtar, R., Boustani, L., Tsivrikos, D. & Chamorro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personality and Individual Differences*, 73, 44-49.
- Amirul Hasan Ansari & Amogh, T. (2017). Emotional Intelligence and Work Engagement as Mediators of Big Five Personality and Knowledge Sharing. *Global Journal of Enterprise Information System*, 9(3), 16-26.
- Bakker, A. B. & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328.
- Bing, M. N. & Lounsbury, J. W. (2000). Openness and job performance in US-based Japanese manufacturing companies. *Journal of Business and Psychology*, 14(3), 515-522.
- Christian, M. S., Garza, A. S. & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64, 89–136.
- Costa, P. T. & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) Manual. Odessa, FL: Psychological Assessment Resources.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(2), 39-50.
- Griffin, B. & Hesketh, B. (2004). Why openness to experience is not a good predictor of job performance. *International Journal of selection and assessment*, 12(3), 243-251.
- Hair, J. F., Hult, G. T. M., Ringle, C. M. & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.
- Halbesleben, J. R., Harvey, J. & Bolino, M. C. (2009). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology*, 94(6), 1452-1465.
- Husain, S. A. & Syed, S. H. (2016). Determinants of education quality: what makes students' perception different? *Journal Open Review of Educational Research*, 3(1), 52-67.
- Hyun, J. K., Kang, H. S. & Nancy, S. (2009). Burnout and engagement: A comparative analysis using the big five personality dimensions. *International Journal of Hospitality Management*, 28(1), 96-104.
- Inceoglu, I. & Warr, P. (2011). Personality and job engagement. *Journal of Personnel Psychology*, 10, 177–181.
- Justyna, M. & Kinga, K. (2016). Relationships between personality, emotional labor, work engagement and job satisfaction in service professions. *International Journal of Occupational Medicine and Environmental Health*, 29(5), 767 – 782.
- Komarraju, M., Karau, S. J., Schmeck, R. R. & Avdic, A. (2011). The Big Five personality traits, learning styles, and academic achievement. *Personality and Individual Differences*, 51, 472–477.
- Langelan, S., Bakker, A. B., Van Doornen, L. J. & Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and individual differences*, 40(3), 521-532.

- Liao, F., Yang, L. Q., Wang, M., Drown, D. & Shi, J. (2013). Team-member exchange and work engagement: Does personality make a difference? *J. Bus. Psychol.*, 28, 63–77.
- Macey, W. H. & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 1, 3-30.
- Morgeson, F. P., Reider, M. H. & Campion, M. A. (2005). Selecting individuals in team settings: The importance of social skills, personality characteristics, and teamwork knowledge. *Personnel psychology*, 58(3), 583-611.
- Ministry of Education Malaysia (2017). *Malaysia Education Blueprint 2013*. Retrieved from <http://www.moe.gov.my/en/pelan-pembangunan-pendidikan-malaysia> on October 2017.
- Nayyar Raza Zaidi, Rana Abdul Wajid, Farheen Batul Zaidi, Ghazala Batul Zaidi & Mohammad Taqi Zaidi (2013). The big five personality traits and their relationship with work engagement among public sector university teachers of Lahore. *African Journal of Business Management*, 7(15), 1344-1353.
- Ozgur, O. (2014). A study of relationship between personality traits and job engagement. *Procedia - Social and Behavioral Sciences*, 141, 1315-1319.
- Parmjit, S., Chan, Y. F. & Gurnam, K. S. (2008). *A comprehensive guide to writing a research proposal*. Selangor, Malaysia: Venton.
- Reeca, A., Lara, B., Dimitrios, T. & Tomas C. P. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personality and Individual Differences*, 73, 44-9.
- Rothmann, S. & Coetzer, E. P. (2003). The big five personality dimensions and job performance. *SA Journal of Industrial Psychology*, 29(1), 68-74.
- Schaufeli, W. B., Bakker, A. B. & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, 66(4), 701-706.
- Schaufeli, W. B. & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of organizational Behaviour*, 25(3), 293-315.
- Struwig, F. W. & Stead, G. B. (2001). *Planning, designing and reporting research*. Cape Town: Pearson Education South Africa.
- Schaufeli, W. B., Salanova, M., Gonzales-Roma, V. & Bakker, A. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor-analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.
- Stephen A. W. & Juilitta A. S. (2013). Personality and engagement at work: the mediating role of psychological meaningfulness. *Journal of Applied Social Psychology*, 43(11), 2203-2210.
- Wefald, A. J., Reichard, R. J. & Serrano, S. A. (2011). Fitting engagement into a nomological network: The relationship of engagement to leadership and personality. *Journal of Leadership & Organizational Studies*, 18(4), 522-537.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E. & Schaufeli, W. B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82(1), 183-200.