

The Relationship between Big-Five Personality Traits and Academic Achievement of Bachelor Students: A Review

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Abstract

Academic achievements are assessed through multiple criteria such as exams, quizzes, assignments, and personality is considered as one of the factors that contribute to attainment among students. Besides, majority of the society agreed that student's academic achievement or performance have significant impact towards the students' future. Most studies conducted under this topic are among different countries. Meanwhile in Malaysia, there are limited study on the relationship of Big-Five personality traits and students' academic achievement. Therefore, the purpose of the study is to examine the relationship between Big-Five personality traits and academic achievement of degree students in UiTM Samarahan 2. Big-Five are consists of conscientiousness, extraversion, agreeableness, neuroticism and openness to experience. Not all five traits are considered as influential factors because various studies show different results between conscientiousness, agreeableness, openness to experience, extraversion and neuroticism towards academic achievement. Conscientiousness has been found by various educational researchers to be the most consistently associated or positively related with all academic achievement criteria which also lead to higher and better results. Hence, the objectives of this paper are to investigate the most dominant traits and also identify the association between Big-Five personality traits with degree students' academic achievement in UiTM Samarahan 2. The researchers also review whether there is any gender differences in personality traits that influence academic achievement.

Keywords : *Big-Five personality traits; academic achievement; personality; conscientiousness; gender*

1.0 Introduction

Personality traits are a vital factor that influenced students' academic achievement. Lim and Abdullah (2012) state that personality as a multidimensional psychological construct that affect students' academic achievement and the way they involve in learning. O'Conner and Paunonen (2007) found that students' academic success is influenced by personality that form the behavior of a person that will affect a person's learning habit which will lead to academic success. Other than that, the researchers and educators can recognize the student's individual differences by taking personality traits into account (Soraya hakimi et al. 2011). This shows that Big-Five personality traits is crucial in predicting students' academic achievement.

The Big Five traits is the most widely used model to evaluate personality traits. Big Five Traits includes: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. The first researchers who identify a set of words describing personality features or characteristics in the English language is Allport and Odbert in 1936 (Horward and Horward, 2004). Howard and Howard (2004) also added that it was the essential beginning stage of language-based personality trait research throughout the previous sixty years that conducted by Allport and Odbert in 1936 with a conclusion of 4500 words. Liebert and Spieler (1994) mentions that Cattell (1946) later deductively determined 16 personality traits using factor-analytic and related measurable techniques whereby Cattell (1946) suggest that these variables speak to the real measurements for clarifying the distinctions in human personality. However, Fiske (1949) recommends that five components represented the variance in personality trait descriptor, not sixteen. Hence, it can be clearly observed from the evolution of the Big-Five factors model that is primarily observationally based, although other theories of personality were based on psychological theory that is found in factor analysis (Attia, 2013).

2.0 Literature Review and Concept

2.1 Big-five personality traits and academic achievement

The Big-Five personality traits that consist of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness have been associated with an extensive variety of behaviors (Ozer and Benet-Martinez, 2005). It is additionally have been most generally utilized approach in clarifying the learning behavior and academic achievement of students (Gray and Watson, 2002; Chamorro-Premuzic and Furham, 2003a; Chamorro-Premuzic and Furham, 2003b; Noffle and Robins, 2007). As indicated by O'Connor and Paunonen (2007), big-five personality domains which are neuroticism, extraversion, openness to experiences, agreeableness and conscientiousness were observed to be associated with academic achievements of more established undergraduates, including those at the university and college level. Previous studies have indicated positive associations between academic achievement with openness to experience, agreeableness and extraversion but negative associations between academic achievement with neuroticism (Laidra et al. 2007; Lounsbury et al. 2003a).

However, an examination on 308 college undergraduates conducted by Komaraju, Karau and Schmeck (2009), strikingly detailed a positive connection among neuroticism and academic achievement. This is in contrast with other studies where there is no relationship has been accounted for between academic performance and extraversion (Bratko et al. 2006), neuroticism (Hair and Graziano, 2003), and agreeableness, extraversion and openness to experiences (Wolfe and Johnson, 1995). However, previous research conducted by Rothstein, Paunonen, Rush and King (1994) discovered that agreeableness and openness to experience were strongly associated to CGPA. Furthermore, studies conducted by Laidra, Pullman and Allik (2007), shown that there is a positively connection among conscientiousness and academic achievement. Komaraju, Karau and Schmeck (2009) also reported the positive associations between conscientiousness and academic achievement. The other domain such as agreeableness has few significant positive correlations with academic achievement (O'Conner and Paunonen, 2007). Thus, various outcomes reported by different researcher demonstrate that there is a connection between Big-Five personality traits and students' academic achievement.

2.2 Dominant personality traits that predict academic achievement

Diverse personality domains appear to have particular impact on academic achievement. Previous researchers have distinct results from their studies in investigating the connection between Big-five personality traits and academic achievement. For instance, previous studies conducted by Laidra, Pullman and Allik (2007), reported that negative associations between neuroticism with academic achievement but positive associations between academic achievement with openness to experience, agreeableness and extraversion. This is in contrast with studies conducted by Komaraju, Karau and Schmeck (2009), reported that there is positive connection between neuroticism and academic achievement. To sum up, Ridgell and Lounsbury (2004) state that, the model of relationships among personality domains is inconsistent even though Big-five personality traits are evidently associated to academic achievement. This seems that academic achievement not only related to personality traits but also partially depends on others factors, for example, academic year at college and standards used to assess performance (Ridgell and Lounsbury, 2004).

2.3 Gender differences in personality traits

Gender differences in the personality traits have likewise caught the consideration of educational researchers apart from academic achievement (Lim and Abdullah, 2012). In Malaysia, females seem to perform better at all academic levels (Primary, Secondary and tertiary) compare to male students (Loh, 2008). According to Dunsmore (2005), gender is a variable that impact academic outcomes among dimensions of personality at diverse academic settings. This means that the association between these five components, gender and academic achievement is probably going to bring about diverse outcomes, even though the Big-five model of personality has been witnessed among both male and female students (Hakimi, Hejazi and Lavasani, 2011). Women were found to acquire higher scores in neuroticism, agreeableness and openness to experience (Costa, Terracciano and McCrae, 2001). Furthermore, study

conducted by Nguyen, Allen and Fraccastoro (2005) also discovered that female students were found to obtain higher in agreeableness and conscientiousness while male students were emotionally steady compare to female students. Feingold (1994) also found that female scored very slightly higher in conscientiousness than male based on seven studies relevant to the trait of order which yielded a median of -0.07. Higher score in conscientiousness as reported by (e.g. Feingold (1994); Nguyen et. al. (2005) is the possible reason why female students seem to have high academic achievement compare to male students. This is because majority of previous researchers found that conscientiousness is the strongest factors that influence high academic achievement.

However, Khairul (2003) indicate that there were no critical gender differences in agreeableness, extraversion, conscientiousness and openness to experience between male and female but he found that female students' mean score in neuroticism area was more prominent than male students. This seems that there are no much dissimilarities in term of academic achievement between male and female because both of them have few differences in personality traits. This is in contrast with the study conducted by (e.g. Chapman, B., Duberstein, P., Sorensen, S., and Lyness, J. M. (2007)) whereby female college students had more agreeableness characteristic compare to male students. However, in term of neuroticism traits, Chapman et. al. (2007) also found the same results whereby female students had more neuroticism traits compare to male students. In term of openness to experience, Costa et al. (2001) discovered that men scored higher in a few aspects of openness to experience such as openness to idea while women score higher in other facets of openness to experience such as openness to aesthetic and feelings. Besides, Costa et al. (2001) also found that in a few aspects of extraversion, for example, excitement seeking, men score higher than women while in other extraversion aspects, for example, warmth, women score higher. Thus, the finding from these past investigations indicates that there are gender differences in personality traits between male and female students that influence their academic achievement.

2.4 Personality

'Personality' can be defined as the relatively enduring pattern of thoughts, emotions, and behaviors that characterize a person, along with the psychological processes behind those characteristic (McShane, 2013).

2.5 Big-Five personality traits

Conscientiousness characterizes people who are organized, dependable, goal-focused, thorough, disciplined, methodical, and industrious. A person with low conscientiousness tends to be careless, less thorough, disorganized, and irresponsible. **Agreeableness** includes the traits of being trusting, helpful, good-natured, considerate, tolerant, selfless, generous, and flexible. According to Mc Crae and John (1992) agreeableness is described by traits such as sympathy, altruism, honesty, sense of cooperation and hospitality. **Neuroticism** characterizes people who tend to be anxious, insecure, self-conscious, depressed, and temperamental. People with low neuroticism (high emotional stability) are poised, secure, positive, and calm. **Openness to experience** refers to the extent to which people are imaginative, creative, unconventional, curious, nonconforming, autonomous, and aesthetically perceptive. Extraversion characterizes people who are outgoing, talkative, energetic, sociable, and assertive. The opposite is introversion, which characterizes those who are quiet, cautious, and less interactive with others.

2.6 Academic achievement

Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university (Steinmayr, Meibner, Weidinger and Wirthwein, 2014).

3.0 Conclusion

The personality traits are believed have some influence towards academic achievement. Therefore, it is essential to the educators to predict students' academic achievement through observing and studying the personality domains so that they can recognize or understand the factors that lead to students'

excellent academic performance. This is also to ensure that the students understand their capabilities and fully actualize their talents to achieve higher and better academic results. It is also essential to be comprehended by the students because they themselves know better about their personality well compare to the others. It is crucial towards the students as the academic achievement is not only depending on intelligence but also non-cognitive factors which is their own personality. Hence, it will help the students in improving their academic performance for the benefits of their future.

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