

Relationship Between Personality Traits and Academic Underachievement among Students in Ekeremor and Yenagoa Local Government Areas of Bayelsa State, Nigeria

Dr Glory N. Amadi&Demaro E. Taiwo

Department of Educational Psychology, Guidance and Counselling,

University of Port Harcourt, Nigeria

Abstract

The study examined the relationship between selected personality traits and academic underachievement among secondary school students in Bayelsa State. The population of the study consisted of 3,610 SSII students in the two local government areas. Two research questions and two hypotheses were answered and tested respectively using the Statistical Package for Social Science (SPSS). Instruments used to gather data were; the Bakare's Progressive Matrices (BPM), used to identify students' mental abilities, Teachers Made Achievement Test (TMAT) on four subjects and Students' Personality Descriptive Scale (SPTDS) adopted from the Costa and McCrae (1992) Five NEO FFI scale. The study used 200 students identified as underachievers. Pearson products moment correlation was used to answer the research questions and probability level with chosen alpha level of 0.05 used to test the hypotheses. The study found a significant negative relationship between agreeableness and academic underachievement while a significant positive relationship exists between neuroticism and academic underachievement among the senior secondary school students used in the study. Based on these outcomes, it was recommended among others that taking students' personality inventory in secondary school should be made a regular exercise across the academic levels and school-based reinforcement programme should be designed by education administrators to encourage high ability students to maintain and improve their academic performance as well as monitor cases of underachievement.

Keywords: Relationship, personality traits, academic underachievement and students.

Introduction

The goal of education and the educational system is to ensure that all students gain knowledge of basic skills and perform at their proficiency levels. However, underachievement has in recent times constituted a grave setback to the full attainment of the aims and objectives of education. It has, therefore, become a persistent area of concern for educators, parents and students. Inconsistency in students' academic performance in schools is alarming as there are an observed sharp fluctuation across terminal, semester and session progress report and results of students tagged 'gifted' or 'high ability' in some subjects. Undoubtedly, parents get disenchanted when their children and wards perform below expectation, especially when there are proofs that they could do better. Against this failed expectation, the prevalence of academic underachievement among various categories of students has now been identified as a serious threat to the Nigerian educational system. This has provoked the researchers to conceive the thought of examining the relationship between two personality traits (agreeableness and neuroticism) of the big five-factor personality traits, and academic underachievement of secondary school students.

Underachievement is a situation where students are not able to work to their maximum potential and thus underperform in the classroom. It is a complex, challenging and a never-ending issue facing educators, yesterday, today and tomorrow. The problem would get worse if it is not identified and investigated. Reis and McCoach (2000) defined academic

underachievement as the discrepancy between ability and achievement. Colorado Department of Education (2017) defined underachievement as a discrepancy between a child's school performance and his or her actual ability. According to Theravive International (2018), academic underachievement is measured by the differences in IQ scores and grades which serve as the theoretical basis for the determination of the student's intellectual and potential. Anukwe (2006) noted that underachievement simply means to do less and below expectation in academic activities. The idea of underachievement only suggests a description of a child's current progress in school. Academic underachievers are those students, who do not perform according to expectation in a particular subject area; who as a result of behaviour do not show interest or perform well in their studies. They have the intellectual capacity to excel but still underachieve. Therefore, a student who is underachieving has a significant gap between his or her ability and what he or she is actually achieving at school.

Academic underachieving students may exhibit a variety of characteristics. Actually, academic underachievement is a symptom with multiple causes that need to be diagnosed by teachers in school. However, a comprehensive model has not yet been devised to help formalize and organize educationalists' current understanding of underachievement (Launch Pad, 2000). Montgomery in Launch Pad (2000) suggests that the presence in a pupil of five or more of the following indicators should lead teachers to suspect underperformance: Inconsistent pattern of achievement in school work subjects; inconsistent pattern of achievement with a subject area discrepancy between ability and achievements, with ability much higher; lack of concentration; daydreaming; clowning and other work-avoidance strategies; poor study skills; poor study habit; non-competition or avoidance of assignments; refusal to write anything down; overassertive and aggressive or over submissive and timid social behaviour; overactive and restlessness; inability to form and maintain social relationships with peers; inability to deal with failures; avoidance of success, lack of insight about self and others poor literacy skills; endless talking, avoiding to work among others. Voegeli, (2008) concluded that such students understand what they need to do intellectually, but their attitude constrains them since their lack of motivation has matured into a pattern of habit difficult to change.

Despite the worry and efforts of researchers to decipher the associated variables to academic underachievement, it appears that not much has been done to provide a lasting solution to the problems. Existing research on underachievement focused on gifted students using variables like biological composition, self-pressure, school pressure, peer pressure and parental pressure, and inappropriate teaching methods (Lukasic, Gorski, Lea & Cuiross, 1992). Other researchers point to the school environment as the place where bright students lose their interest and drive. They suggest that some teachers may be too easily satisfied with minimal work, and their low expectations may have a negative impact on the academic achievement of bright young stars (Pirozzo, 1982).

Kalgo (2002) in his study of academic underachievement found that parenting style has a tremendous influence on the behaviour of children and how they react to situations and challenges. Research indicated that the authoritative parenting style is most strongly associated with academic achievement, while authoritarian and permissive styles are not (Cohen and Rice in Vialle, Heaven & Crarochi, 2004). Also, many studies have centred on considering other areas such as gender and culture (Peterson & Colangelo, 1996; Barbara, 2005; Chukwu-Etu, 2009).

Sousal (2003) observed that a combination of factors both in the home and school can cause underachievement. Research conducted with students in Nigeria which aimed at determining the cause of underachievement found that a major cause was behaviour problems other than deficiencies inability or intellectual capability (Chukwu-Etu, 2009). Academic underachievement can be perceived as an emotionally based problem that applies to patterns

of behaviour that occur both inside and outside the school. From the foregoing, the researchers observed that there are several variables contributing to the academic underachievement among secondary school students. Based on personal experience, one is made to have the conviction that apart from the above and more variables as regards underachievement, there are other personality traits factors that could be associated with academic underachievement among school students hence the design of this study to examine the relationship between two personality traits (Agreeableness and Neuroticism) with academic underachievement of secondary school students in Bayelsa State.

Conceptual Clarifications

Agreeableness and Academic Underachievement

Agreeableness is a tendency to be compassionate and cooperative rather than suspicious and antagonistic toward others (Wikipedia encyclopaedia, 2018). The trait reflects individual differences in general concern for social harmony. Agreeable individuals value getting along with others. They are generally considerate, friendly, generous, helpful, and willing to compromise their interests with others. Agreeable people also have an optimistic view of human nature. They believe people are basically honest, decent, and trustworthy. Goldberg (1990) commented that individuals at a high level on the agreeableness continuum are described as interpersonal warm co-operative, accommodating, helpful patient, cordial, empathic, kind, understanding, courteous, natural; and sincere. Such people are also described as especially honest, ethical and selfless, peace-loving, humanists, committed to their friends, their family and other social groups.

There is no way a student with characteristics such as those described above cannot fit into the academic environment comfortable. Tendencies are that such a student will be free to share opinions on academic and non-academic ideas and through that learn most of the contents of the hidden curriculum. The student improves traits associated with trusting and being trusted, humility, loyalty and leadership, patience, honesty, kindness, modesty, cheerfulness e.t.c. Agreeableness encourages team discussion as noted by De Raad and Schouwenberg in Martey and Aborakwa-Larbi (2016). Though a student may be intellectually sound, a low score in agreeableness is bound to have problems with his/her teachers, peers, etc. and so would end up not achieving much. Highly agreeable people are more likely to fit into the academic environment and achieve success.

McCrae and Costa (1988) noted that the opposite of agreeableness is psychoticism, referring to a person who is sceptical, unsympathetic, uncooperative and rude. People who score low in agreeableness or appear disagreeable with others place self-interest above getting along with others and are generally unconcerned with others' well-being; as well as less likely to extend themselves for others. In order to avoid an argument or exposing their ignorance of basic skills and facts, such students in the classroom situation only find it difficult to discard old bad habits and interest. As a social trait, agreeableness has been found to correlate positively with the quality of relationships with classmates/ course mates and can be a veritable ingredient to lively up academic experience within and outside the classroom (Martey&Aborakwa-Larbi, 2016). But low scores on agreeableness can advertently lead to poor academic performance and increased underachievement. It is important to note that Eysenck's model for describing personality has been used to show a negative association between academic performance and some aspects of personality (Caprara and Gennaro in Troncone, Drammis& Labella, 2014). Rothstein, Paunonen, Rush and King (1994) reported a negative association between agreeableness and academic performance. In this case, their finding can also be interpreted that academic underachievement increases as the extent of agreeableness rises and vice versa. **This is similar to the findings of Ikpi, Enya and Johnny (2014).**

Huey and Weize in Daminabo (2008) found that low agreeableness was an independent predictor of externalizing problems. Also, Grazino and Ward in Daminabo (2008) used the Harter scale and reported that agreeableness was significantly related to self-esteem in the domains of academics and appearance but not social acceptance or athletics. People high in the disagreeableness continuum are vulnerable to academic underachievement. Marcus (2007) carried out a study of a random group of 100 underachievers and identified the oppositional trend in agreeableness in his finding. These students are constantly negative towards the authority figures around them. They often have a defiant and angry stance towards others. They are motivated to underachieve because underachievement is an act of rebellion.

Mount, Barrick and Stewart (1998), opined that agreeableness is obviously advantageous for attaining and maintaining popularity, Agreeable people are better liked than disagreeable people. In contrast, Howard and Howard (1995), sees a disagreeable person as one who tends to relate to others by being expressive, tough, guarded, persistent, competitive or aggressive. They may not accept information without checking and may come across other as hostile, rude, self-centred and not team players. To them, a disagreeable person is more interested in self-needs, wants, acknowledgement usually expresses opinions, enjoy being out front.

Neuroticism and Academic Underachievement

Neuroticism, on the other hand, is referred to as Emotional instability. Colman (2003) defines neuroticism as a psychological state characterized by neurosis, which is characterized by nervousness, tenseness, moodiness, temperamentally among others. Neuroticism is the tendency to experience negative emotions, such as anger, anxiety or depression. It is the degree to which a person is calm and self-confident as opposed to being anxious and insecure. Those who score high in neuroticism are emotionally reactive and vulnerable to stress. They are more likely to interpret ordinary situations as threatening, and minor frustration as terribly difficult. Their negative emotional reactions tend to continue for an unusually long period of time, which means, they are often in a bad mood. These problems in emotional regulation can diminish the ability of a person to think clearly, make decisions, and cope effectively with stress (Wikipedia encyclopaedia, 2018). At the other end of the scale, individuals who score low in neuroticism are less easily upset and are less emotionally reactive. They tend to be calm, emotionally stable and free from constant negative feelings. Freedom from negative feelings does not mean that low scorers experience a lot of positive feelings.

Eysenck in Daminabo (2008), holds that people high in neuroticism are emotionally over-reactive. They respond emotionally to events that would not affect most people and their reactions tend to interpret ordinary situations as threatening and minor frustrations as hopelessly difficult. They have a low opinion of themselves". Individuals with a low score in neuroticism are emotionally stable, usually calm, tempered and relaxed and better able to face stressful situations without becoming upset or rattled (Costa and McCrae, 1992). A neurotic person or student in a school is one who worries a lot and sometimes unnecessarily about his work or any other thing. Conditions such as these may adversely affect a student's academic performance and his relationship with peers. Some theorists suggest that high neuroticism might impair academic achievement (Chamorro-Premuric& Furnham, 2003), and have an attendant effect of high academic underachievement.

The American Psychiatric Association (APA, 1987), investigated the relationship between perfectionism, procrastination and the underachieving persons and found out that the neurotic socially-prescribed perfectionist, the behavioural procrastinator and the academic problem underachiever are related. The finding reveals that as the socially-prescribed

perfectionists when faced with great task situation, adopt self-defeating strategies such as procrastination in an attempt to protect their subjective self-worth there is an increased gap between their ability and actual performance. Students with such tendency will not perform up to their expected potentials and therefore underachieve. Thus their academic performance decreased. Costa and McCrae (1980), in a study of the daily life of 43 undergraduates over a semester, found that students high in neuroticism were likely to report greater cases of illness. Other studies have also found negative associations between Neuroticism and academic performance (Busato, Prins, Elshout, & Hamaker, 2000; Wagerman & Furnder, 2007).

Statement of Problem

The academic success of Nigerian youths is a priority for the nation's citizens. The government, parents and teachers expect students to do well academically. On the contrary, underachievement has constituted a grave setback to the full attainment of the aims and objectives of education. Undoubtedly, parents get disenchanted when their children and wards perform below expectation, especially when there is proof that they could do better. Underachievement at school can be one of the most frustrating challenges for concerned parents. Despite the effort by many teachers to deliver on their duties and the commitment seemingly shown by most students to study, the rate of academic underachievement is yet unabated. In as much as that most of the students do not suffer severe psychological or learning disorders that should account for the prevalent underachievement, there is suspicion about the possible impact of personality traits on their achievement. Therefore, the study examined two chosen personality traits and their relationship with students' academic underachievement.

Research Questions

The following research questions guided the study:

1. What is the extent of relationship between agreeableness and academic underachievement?
2. What is the extent of relationship between neuroticism and academic underachievement?

1.7 Research Hypotheses

The following null hypotheses formulated to guide the study and were tested at 0.05 level of significance:

1. There is no significant relationship between agreeableness and academic underachievement among senior secondary school students.
2. There is no significant relationship between neuroticism and academic underachievement among senior secondary school students.

Method

The study adopted the correlational research design. Agreeableness was correlated with academic underachievement of senior secondary school students in Ekeremor and Yenagoa Local Government areas of Bayelsa State, Nigeria. A sample of 200(SS2) students were selected from 10 secondary schools that were earlier drawn from forty-two secondary schools in the two local government areas through simple random sampling technique. The student sample adopted a purposive sampling technique which involved SS2 students only. The population of the study was 3,610 students (Bayelsa State Senior Secondary Schools Board,

Department of Planning, Research and Statistics). Three instruments were used for data collection. They include mental ability test scores using Bakare Progressive Matrices (BPM)(1977); Teachers Made Achievement Test (TMAT) for four subjects-Mathematics, English Language, Economics and Biology; and Students' Personality Trait Descriptive Scale (SPTDS) adopted from Costa and McCrae (1992). The face and content validity of the instruments was determined. The test-retest method was used for the reliability of Teachers Made Achievement Test (TMAT) which yielded the following reliability values: Mathematics 0.56, English Language 0.86, Economics 0.86 and Biology 0.60. For the test of the reliability of Students' Personality Trait Descriptive Scale, also known as the NEO FFI, Costa and McCrae (1992) obtained a temporary reliability coefficient for the Five NEO FFI scale as 0.80, 0.83, 0.79, 0.75 and 0.79 for openness to experience, conscientiousness, extraversion, agreeableness and neuroticism respectively.

Results and Discussions

Analysis and results related to research question one and hypothesis one

Table 1: Summary of Pearson's correlation of the relationship between Agreeableness and Academic Underachievement among secondary school students.

	N	Df	R	P	Chosen Alpha	Result
Agreeableness Academic underachievement	200	198	-0.87	0.000	0.05	Significant P < 0.05

From Table 1, it is shown that the correlation coefficient (r-value) of -0.87 indicates a negative relationship between agreeableness and academic underachievement. Since r is -0.87 at df of 198 and $p < 0.05$, the null hypothesis is rejected. The alternate hypothesis that there is a significant relationship between conscientiousness and academic underachievement among senior secondary students is accepted.

From the analysis, it is shown that the correlation coefficient (r) agreeableness and academic underachievement is -0.87. Hence, there is a significant negative relationship between agreeableness and academic underachievement of senior secondary school students in Ekeremor and Yenagoa Local Government Area of Bayelsa. It is evident that people who are high in agreeableness as in displaying the personality behaviour of being trusted, straight forward, cooperative, tender-minded, sympathetic and good-natured have the tendency of coping with academic challenges. In other word, they easily recover from academic lapses thereby reducing their academic underachievement. Through cooperation and straightforwardness, their academic problems are shared and eventually solved by others. Further results show that the percentage of association ($r^2 \times 100$) between the two variables was found to be 75.69 percent which shows that agreeableness was responsible for about 76 percent change in students' academic underachievement. This value representing the coefficient of determination indicates a high relationship between the variables.

Therefore, it means that agreeableness is one of the personality traits that relate to the level of academic underachievement. Disagreeable persons place self-interest first and less sociable. They are antisocial, self-centred, jealous and inflexible people and this negatively affects academic underachievement. In corroboration with this study, Karatas and Bademcioglu (2015) show that academic procrastination was negatively associated with agreeableness. Other studies that claimed that agreeableness was negatively associated with academic procrastination (Farsides & Woodfield, 2003; Gray & Watson, 2002); however

those that pointed that agreeableness did not predict academic procrastination include (Rothstein, Paunonen, Rush & Kinget, 1994).

Analysis and results related to research questions two and hypothesis two.

Table 2: Summary of Pearson's correlation of the relationship between Neuroticism and Academic Underachievement among secondary school students.

	N	Df	r	P	Chosen Alpha	Result
Neuroticism Academic underachievement	200	198	0.89	0.000	0.05	Significant P < 0.05

Table 2 with correlation coefficient (r-value) of 0.89 indicates a positive relationship between neuroticism and academic underachievement among senior secondary students. Since r is 0.89 at df of 198 and $p < 0.05$, the null hypothesis is rejected. The alternate hypothesis that there is a significant relationship between neuroticism and academic underachievement among senior secondary students is accepted.

The result of the analysis has shown that there is a significant positive relationship between neuroticism and academic underachievement of senior secondary school students in Ekeremor and Yenagoa Local Government Area of Bayelsa. The correlation coefficient was 0.89 which implies that students who scored high in neuroticism scale had high academic underachievement or vice versa. As the students become more emotionally unstable, they tend to perform below their abilities in school. In this case, they underachieve more. Both variables significantly and positively related to each other. The percentage of association ($r^2 \times 100$) was found to be 79.21 percent which shows that neuroticism accounts for about 79 percent change in students' academic underachievement, either positively or negatively. Such a value representing the coefficient of determination indicates a high relationship between the two variables.

It, therefore, means that neuroticism is one of the personality traits that predict students' academic underachievement. A student with a high score in neuroticism is tilting towards low academic performance and widening the gap between his/her ability and his/her actual performance. High level of anxiety, depression, impulsiveness, angry hostility and above all emotional instability are not too academic underachievement. Some people see impulsiveness as being smart and intelligent. The study shows that students who are high on neuroticism performed significantly worse than other traits. In the opposite direction of the neuroticism scale, calm, tempered, easy going and relaxed dispositions reduce academic underachievement. Individuals who score low in neuroticism are less easily upset and are less emotionally reactive. This result corroborated with the findings of previous researchers who reported negative associations between neuroticism and academic performance (Chamorro-Premuzic & Furnham 2003a; Wagerman & Funder, 2007). These findings, in a way, imply that students underachieve when they score high on neuroticism scale and vice versa. The result is not surprising because neurotic students are usually unstable emotionally. During the evaluation of academic progress in schools, neurotic students are known to experience anxiety and stress, thereby impairing their academic performance (Chamorro-Premuzic & Furnham, 2005).

Conclusion

In conclusion, the study has shown that agreeableness significantly and negatively affected academic underachievement while neuroticism directly predicted academic underachievement among secondary school students in Ekeremor and Yenagoa Local Government Area of Bayelsa. Students' cooperation encourages high academic achievement and has the tendency of reducing the academic underachievement of students. Agreeable students can stay in the academic environment and excel. However, depressed and impulsive students have the problem of the high level of underachievement. Thus, the understanding and the application of research findings in the area of students' personality and academic achievement/underachievement is necessary for educationists to ensure a commensurate pay-off on teachers' effort in the educational system.

Recommendations

Based on the results of the study, the researcher recommended that:

1. Taking students' personality inventory in secondary school should be made a regular exercise across the academic levels; for example very session the exercise should be conducted. This will help the school counsellor in explaining and students' academic behaviour
2. Government should establish counselling units in all the secondary schools in exercise the two local government areas. This will help to properly guide students' academic behaviours and associated factors so as to maximise their academic achievement.
3. School-based reinforcement programme should be designed by education administrators to encourage high ability students to maintain and improve their academic performance as well as monitor cases of underachievement.
4. Teachers should give moral support and help in sustaining the emotional stability of students with a high score of neuroticism as well as providing an enabling environment for effective and functional teaching and learning.

References

- Akomolafe, M. J (2013). Personality characteristics as predictors of academic performance of secondary school students. *Mediterranean Journal of Social Sciences*, 4(2), 657- 664.
- American Psychiatric Association (1987). *Diagnostic and statistical manual of mental disorder* (revised 3rd Ed) Washington D. C: APA.
- Anukwe, S. E. (2006). *Factors related to academic underachievement among junior secondary school students in Rivers State*. Unpublished M.Ed Thesis, University of Port Harcourt Rivers State.
- Bakare, C. M. (1977). Some Psychological correlates of academic success and failure. *African Journal of applied psychology*, 2(1),11-22.
- Barbara, H. S., (2005). Gifted underachievement: Oxymoron or educational enigma. *Gifted Child Today*, 28(2), 46-49.

- Barrick M. R., & Mount, M. K., (1991). The big five personality dimensions and job performance: A metanalysis. *Personnel Psychology*, 44(1), 1-26.
- Bayelsa State Senior Secondary Schools Board, Department of Planning, Research and Statistics, Yenagoa.
- Busato, V. V., Prins, F. J., Elshout, J. J., & Hamaker, C. (2000). Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences*, 29, 1057-1068.
- Chamorro-Premuzic, T., & Furnham, A. (2003a). Personality traits and academic examination performance. *European Journal of Personality*, 17, 237-250.
- Chamorro-Premuzic, T., & Furnham, A., (2004). A possible model for explaining the personality-intelligence interface. *British Journal of Psychology*, 95, 249-264.
- Chamorro-Premuzic, T., & Furnham, A. (2005). *Personality and intellectual competence*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Chukwu-Etu, O. (2009). Underachieving learners: Can they learn at all? *ARECLS*, 6, 84-102.
- Colorado Department of Education (2017). Underachievement-definition and characteristics of underachievement. Retrieved from <http://www.cde.stst.co.us>
- Colman, A. M. (2003). *Oxford Dictionary of Psychology*. New York: Oxford University Press.
- Costa, P. T. Jr., & McCrae R. R. (1992). *Revised NEO Personality Inventory (NEO-P-I) and NEO Five Factor Inventory (NEO-FFI) professional manual*. Odessa, F 1: Psychological Assessment Resources.
- Costa, P. T. Jr., & McCrae R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology*, 54, 853-863.
- Daminabo, W. H. (2008). *Relationship between Personality Traits and Academic Achievement of students in Rivers State*. Unpublished M.Ed Thesis, University of Port Harcourt.
- Farsides, T., & Woodfield, R. (2003). Individual differences and undergraduate academic success: The roles of personality, intelligence, and application. *Personality and Individual Differences*, 34, 1225-1243.
- Golberg, L. R. (1990). An alternative description of personality: The big five factors structure. *Journal of Personality and Social Psychology*, 59, 1216-1229.
- Gray, E. K., & Watson, D. (2002). General and specific traits of personality and their relation to sleep and academic performance. *Journal of Personality*, 70, 177-206.

- Howard, P. J., & Howard, J. M. (1995). *The big five big quick start: An introduction to the Five-Factor model for personality for human resources professionals*. Charlotte, North Carolina: Centre for Applied Cognitive Studies.
- Karatas, H., & Bademcioglu, M. (2015). The explanation of the academic procrastination behaviour of pre-service teachers with five factor personality traits. *The International Journal of Research in Teacher Education*, 6(2), 11-25.
- Kalgo, E. A. (2002). Parenting styles and learning achievement of Nigerian children: A study of Usman Danfodio University staff primary school pupils. *Journal of Nigerian Society for Educational Psychologists*, 1(1), 56-65.
- Ikpi, E. E., Enya, D. B. & Johnny, U. A. (2014). The influence of Personality traits on academic performance of secondary school students in Cross River State. *Journal of Humanities and Social Sciences*. 19 (3), 12 -19.
- Launch Pad (2000). *Launch Pad 4: Underachievement*. West minister Institute of Education. Oxford Brookes University.
- Lukasic, M., Gorski, V., Lea, M., & Cuiross, R. (1992). *Understanding among gifted/talented students: What we really know*. Houston, TX: University of Houston- Clear Lake.
- Mount, M. K., Barrick, M. R., & Stewart, G. L (1998). Five-factor model of personality and performance in job involving interpersonal interactions. *Human Performance*, 11(2), 145-165.
- Pirozzo, R. (1982). Gifted underachievers. *Roeper Review*, 4 (4), 18-21.
- Marcus, I. S. (2007). Personality styles of chronic Academic underachievers. Retrieve from http://www.selfgrowth.com/articles/personality_styles_of_chronic_academic_underachievers.html.
- Martey, E. M., & Aborakwa-Larbi, K. (2016). Assessing the Impact of Personality Traits on Academic Performance: Evidence from Tertiary Students in Ghana. *International Journal of Research in Engineering, IT and Social Sciences*, 6(3), 1-17.
- Peterson, D., & Colangelo, N. (1996). Gifted achievers and underachievers: A comparison of patterns found in schools files. *Journal of Counselling and Development*, 74 (2), 399-407.
- Rothstein, M. G., Paunonen, S. V., Rush, J. C., & King, G. A. (1994). Personality and cognitive ability predictors of performance in graduate business school. *Journal of Educational Psychology*, 86, 516-530.
- Sousa, D. A. (2003). *How the gifted brain learners*. California: Cowin Press.
- Theravive International (2018). Academic underachievement. Retrieved from <http://www.thravive.com>

Vialle, W., Heaven, P.C.L., & Ciarrochi J. (2004). *Gender differences in the first year of a longitudinal study of adolescent emotional well-being and academic outcomes*. A paper presented at the AARE Annual Conference, Melbourne.

Wagerman, S. A., & Funder, D. C. (2007). Acquaintance reports of personality and academic achievement: A case for conscientiousness. *Journal of Research in Personality*, 41, 221–229.

Wikipedia, the free encyclopedia (2018). Five personality traits. Retrieved from <http://en.wikipedia.org>.

Voegeli, S. M. (2008). *Academic underachievement: Understanding and implications for educators*. A Master's Thesis Submitted to University of Wisconsin-Stout.

UNDER PEER REVIEW