



## PERSONALITY TRAITS AS CORRELATES OF SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN ENGLISH LANGUAGE IN ANAMBRA STATE-NIGERIA

NKECHI UZOCHUKWU OKEKE<sup>a</sup>, EZEBUNWA SANDRA ADAKU<sup>a</sup>,

<sup>a</sup> Nnamdi Azikiwe University, Awka, Faculty of Education,  
Department of Educational Foundation

### **Abstract**

*The study utilized correlational research design to investigate personality traits as correlates of secondary school students' academic achievement in English language in Anambra State. Three research questions and three null hypotheses were formulated and tested at 0.05 level of significance. The population consisted of 10,436 Senior Secondary School Two (SS II) students across the six education zones in Anambra State. Multi-stage sampling procedure was used to draw 600 students from the population who served as the sample of the study. Two sets of questionnaire were used to collect data for the study including 'Personality Inventory (PI), and Students' Academic Achievement in English language. 'Personality Inventory (PI) was validated by experts and subjected to reliability testing. A Cronbach Alpha coefficient of 0.73 was obtained, indicating good internal consistency. Data were analyzed using Pearson Product Moment Correlation Coefficient to answer the research questions, while regression analysis was used to test the hypotheses. The findings revealed that the trait of extraversion has a low but significant positive relationship with English Language scores, Agreeableness also showed a low but significant positive relationship and lastly, Neuroticism exhibited a low positive relationship that was statistically significant. The researchers recommend among others that Educational Psychologists and Guidance counsellors should implement peer-support initiatives, cooperative learning structures, and conflict-management programmes that encourage pro-social behaviour. Since agreeableness is linked to better English achievement, counsellors can help foster empathy, tolerance, and collaboration in students who may struggle socially, thereby enhancing a positive learning environment that supports academic achievement.*

**Keywords:** Personality traits and academic achievement.

### **1. INTRODUCTION**

Education is universally recognized as an instrument for social, political, scientific and technological development. Education especially in the 21st century has become an indispensable input for national development and an avenue for empowering citizens of any nation. It is a deliberate and organized process through which learners acquire essential knowledge, practical skills, positive attitudes, and values that enable them to understand their world, solve real-life problems, and contribute productively to societal development (Okeke, 2021), education. The importance of education gave rise to the establishment of structured systems and centres dedicated to teaching and learning. In Nigerian setting, just as in many other countries of the world, these institutions of learning vary from the levels of pre-primary, primary, secondary and tertiary.

Secondary education is a six-year form of education which children receive after primary school before proceeding to the tertiary level of education. The importance of secondary school education cannot be overemphasized because it absorbs the products of primary schools and produces candidates for tertiary education in the nation (Abdulrahman, 2020). Although, the subjects offered at the secondary school level in Nigeria are divided into arts, social sciences, entrepreneurship studies and science and technology; it is imperative to mention that in secondary schools in Nigeria, English language is a core subject which assumes important pride of place.

English language is a global language used for communication, education, business, science, and diplomacy across nations. According to Alshammari (2020), English language is “the global language used for international communication in politics, business, science, education, and media, spoken as a first, second, or foreign language by millions of people worldwide.” Akinwamide and Adedara (2020) described English language in the Nigerian context as “a second language that serves both official and educational purposes, functioning as the medium of instruction, governance, and interethnic communication. Operationally, English language is the primary medium of instruction from upper primary school through tertiary education, making it a key vehicle for transmitting knowledge and facilitating understanding among diverse ethnic groups with different mother tongues. It involves the systematic study of grammar, vocabulary, comprehension, composition, and oral communication, with the aim of enhancing students’ ability to use the language effectively for academic, social, and professional purposes.

The relevance of English language to the educational system in Nigeria cannot be overstated. Since it is the language of instruction in schools, mastery of English language determines a student’s ability to access and comprehend content in subjects such as Mathematics, Sciences, and Social Studies (Odey, and Abari, 2021). As such, the study of English language equips students with the reading, writing, speaking, and listening skills needed for effective communication. It enhances their ability to express ideas clearly, interpret academic texts, and participate confidently in both local and global conversations. Odey and Abari added that both internal and external examinations like the West African Examinations Council (WAEC), National Examinations Council (NECO), and Joint Admissions and Matriculation Board (JAMB) are all conducted in English language, making proficiency in the language essential for academic success. This implies that even though the responsibility of imparting knowledge revolves around the teacher who plans, organizes and implements the teaching learning process, the students are assessed regarding their attainment of their educational objectives in various subjects through their academic achievement.

Academic achievement of students has been of great concern to stakeholders in the education system. It refers to the extent to which a student has attained their short- or long-term educational goals, typically measured through grades, standardized test scores, or teacher evaluations (Okpala, 2021). This explains the persuasive sense of urgency for students to learn the content they are exposed to in school. In the expressions of Okoye (2019), academic achievement refers to “a student’s performance in standardized assessments, classroom tasks, and overall schoolwork, reflecting their mastery of curriculum content and learning objectives.” Similarly, Adeyemi and Adebayo (2020) describe academic achievement as the demonstrated level of competence learners show in cognitive tasks after instruction, often used as an indicator of educational effectiveness. In another perspective, Nwafor and Eze (2022) view academic achievement as the observable and measurable outcomes of learners’ engagement in academic activities, expressed through their performance in subject-specific assessments. Operationally, academic achievement refers to the measurable learning outcomes of secondary school students in English Language.

In Anambra State, where English serves as the primary medium of instruction across all subjects, students' achievement in English is critical for their overall academic readiness and success in national exams. This concern has intensified in 2025, following a dramatic drop in WAEC May/June results: only 62.96 % of candidates obtained credit passes in five subjects, including English Language, according to WAEC's corrected report (Lawal, 2025). This marked a 9.16% decline from the 72.12% pass rate in 2024. The initially reported 2025 pass rate was even more alarming—just 38.32% of candidates met the credit threshold (including English) before WAEC corrected its figures (Lawal, 2025).. This steep drop raises serious questions about the effectiveness of English language teaching and student preparedness in Anambra's secondary schools. If sustained, this downward trend could undermine students' academic progression, limit their tertiary education opportunities, and weaken the future human capital development of the state. This situation emerges at a time when many secondary school students in Anambra State are grappling with a wide range of personal challenges that negatively affect their learning. Across several public secondary schools, teachers and school administrators especially during workshops consistently report issues such as poor study habits, low motivation to learn, and limited personal discipline toward academic responsibilities. This is in addition to widespread behaviours like frequent absenteeism, excessive use of social media, and engagement in unproductive peer activities. Additionally, a significant number of students struggle with low self-confidence and examination anxiety, factors that can hinder their ability to perform well under pressure. These challenges collectively contribute to the growing concern over students' academic achievement in English Language.

Literature has revealed that several factors contribute to students' academic struggles in English language. Okoye (2019) noted that academic achievement in English language could depend on variables such as intelligence, aptitude, interest, socio-economic background, motivation, teaching methods, health, medium of instruction, parental encouragement, and both home and school learning environments. Anju and Amandeep (2021) further emphasized that the quality of the physical and material environment influences students' core behaviours, suggesting that learning spaces that encourage focus and discipline can enhance academic achievement. Beyond environmental and instructional factors, early childhood experiences also play a central role; as Nwikpo, Anierobi, Okeke, and Etodike (2021) explained, children's foundational learning is shaped by what they absorb from their home environment during their formative years. Despite this, emerging research has shown that these factors alone cannot fully account for students' academic differences. Studies by Rose-Krasnor (2018), Pellegrini and Smith (2019), and Thoma and Ochsner (2019) highlight that behavioural patterns—such as persistence, emotional regulation, sociability, and adaptability—often reflect deeper personality characteristics that influence how students respond to academic demands. More recent educational psychology findings also point to traits like conscientiousness, openness, and emotional stability as significant predictors of learning behaviours and academic outcomes, with studies showing that conscientiousness strongly influences students' effort and persistence (Adebayo and Oloyede, 2020) and that openness and emotional stability contribute to better language learning engagement and academic achievement (Zhang and Zhou, 2021). In light of these insights, it becomes plausible that students' achievement in English Language may not be shaped solely by environmental or instructional factors but may also have a strong personality component. This provides a compelling basis for examining personality traits as correlates of academic achievement among senior secondary school students.

Personality traits are enduring patterns of thoughts, feelings, and behaviours that are consistent over time and across different situations (Costa and McCrae, 2018). This explains personality traits as fundamental dimensions of human personality that remain stable and

influence behaviour across various contexts. In the expression of Roberts and Jackson (2017), personality traits are stable characteristics that reflect individual differences in behaviours, emotions, and thoughts that are observable and measurable over time. With this, Roberts and Jackson emphasised the stability of personality traits implying that they are traits that persist over a long period and are observable in how people respond to different situations. According to Mõttus, Bates and Condon (2017), Personality traits are behavioural dispositions that represent consistent patterns of functioning in cognitive, emotional, and social domains of human life. This definition highlights the connection between personality traits and behaviour, indicating that these traits shape a person's consistent ways of thinking, feeling, and interacting with others.

Personality traits are latent constructs that help explain regularities in behaviour, capturing individual tendencies in terms of interpersonal interactions, emotional expression, and cognitive processing (Wilmot, Ones and Johnson, 2017). Wilmot, Ones and Johnson further viewed personality traits as underlying qualities that give rise to observable patterns in how people interact with the world. For DeYoung (2020), Personality traits are neuropsychological structures that guide consistent patterns of behaviour, emotion, and thought, influenced by both genetic predispositions and environmental factors. DeYoung integrates biological and environmental perspectives, suggesting that personality traits are not just behavioural patterns but also have a neurological basis shaped by internal and external factors. Operationally, personality traits are enduring characteristics and behaviours that differentiate individuals and influence how they interact with the world. They are consistent patterns in thoughts, emotions, and actions, which form an individual's personality over time. Some Common frameworks of personality traits include: the Big Five personality traits, Eysenck's Three-Factor Model (PEN Model), Cattell's 16 Personality Factor Model (16PF), Myers-Briggs Type Indicator (MBTI), the HEXACO personality Model and the Dark Triad. However, the framework adopted for this study is the Big Five Personality Theory, not merely because of its relevance, but because it provides the most comprehensive, empirically validated structure for examining personality traits in educational research. Its broad cultural applicability and strong psychometric foundation make it particularly suitable for analyzing how specific personality dimensions relate to students' academic achievement. The Big Five personality model classifies personality into five broad dimensions: openness, conscientiousness, extraversion, agreeableness, and neuroticism. This clear classification makes the model particularly useful for examining the relationship between specific personality traits and students' academic achievement.

The Big Five Personality Traits, also known as the Five-Factor Model (FFM), is a widely recognized framework for understanding and categorizing human personality. The Big Five Model was initially developed in the 1940s by psychologists Gordon Allport and Henry Odbert, but the modern version of the model was refined by Paul Costa and Robert McCrae in the late 1980s and early 1990s. Their research led to the establishment of the Five-Factor Model as the most prominent and empirically validated theory of personality. As such, the Big Five Personality Traits organizes personality into five broad dimensions, which together encompass a range of human behaviours, thoughts, and emotions. These five traits are Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. However, this study is limited to the traits of Extraversion, Agreeableness, and Neuroticism.

Extraversion refers to the extent to which an individual is outgoing, energetic, assertive, and inclined toward social interaction and external stimulation. Recent studies (e.g., Komarraju and Karau, 2020; Soto, 2021) describe extraverted individuals as socially active, enthusiastic, and expressive in communication, attributes that influence how they engage in learning environments. In the context of English language achievement, extraverted students

often perform well in oral-based tasks such as discussions, debates, dialogues, and role-plays because they are comfortable interacting verbally and expressing ideas publicly. This comfort with communication can enhance fluency, pronunciation, and confidence in using English in real-time situations. However, students low in extraversion—who tend to be more reserved or introspective—may prefer individual tasks such as reading, writing, and quiet comprehension activities. Such preferences may strengthen their achievement in reflective writing, essay development, and critical reading skills, even though they may participate less in oral tasks. For instance, an extraverted student may excel during drama activities or classroom debates, while a less extraverted student may achieve higher achievement in written essays or detailed text analysis (Komarraju and Karau, 2020; Soto, 2021)

Agreeableness is another trait that constitutes the Big Five Personality Traits. Agreeableness refers to the extent to which individuals are cooperative, compassionate, and motivated to maintain positive interpersonal relationships (Graziano and Tobin, 2019). Students high in agreeableness tend to collaborate effectively with peers, show empathy, and contribute positively to group learning environments. Soto (2019) noted that agreeable individuals value harmony, communicate respectfully, and are willing to support others—behaviours that encourage a constructive and inclusive classroom climate. In the context of English language achievement, agreeable students often perform well in cooperative language-learning tasks such as peer-editing, group discussions, shared reading, and collaborative writing, as their willingness to listen, exchange ideas, and offer help enhances both comprehension and expressive skills. Conversely, students low in agreeableness—who may be more competitive, skeptical, or less cooperative—may participate less in group-based English activities, reducing opportunities for interactive communication, peer feedback, and spoken language practice. For example, a highly agreeable student may actively assist classmates in analyzing a text or engage enthusiastically in group dialogues, strengthening vocabulary use and communicative competence, whereas a less agreeable student may prefer solitary work and contribute minimally to collaborative English exercises (Graziano and Tobin, 2019; Soto, 2019). The last of the Big five is called neuroticism.

Neuroticism refers to the tendency to experience negative emotions such as anxiety, fear, emotional instability, and heightened stress reactivity. Recent studies describe individuals high in neuroticism as more vulnerable to worry, self-doubt, and persistent emotional fluctuations (Soto, 2021). Research by Widiger (2020) further notes that high neuroticism is associated with low stress tolerance, increased sensitivity to evaluative situations, and difficulty regulating emotions—all of which can adversely affect learning achievement. In the context of English language achievement, students high in neuroticism may struggle with oral presentations, reading aloud, essay writing, or interactive discussions due to anxiety that interferes with clarity of expression, concentration, and willingness to participate. They may also fear making grammatical or pronunciation errors, leading them to withdraw from communicative activities that build fluency. Conversely, students low in neuroticism tend to be more emotionally stable, calm under pressure, and capable of maintaining focus during demanding English tasks, which supports better engagement, confidence, and overall achievement. For instance, while a highly neurotic student may feel overwhelmed during speaking assessments or worry excessively about writing accuracy, a student with low neuroticism is more likely to participate actively and approach English tasks with composure and persistence (Soto, 2021; Widiger, 2020)

Educational stakeholders have long paid attention to students' academic achievement. It has been at the fore of their objectives that students receive meaningful learning and prove so with academic excellence. Given the exposed pressing challenges surrounding secondary school students' academic achievement in English especially in external examinations, it becomes imperative to explore the internal, psychological factors that may be influencing

students' academic outcomes—particularly personality traits. In the context of Anambra State, where external academic pressures are mounting and students' personal dispositions are increasingly coming into question, investigating the relationship between personality traits and academic achievement in English Language becomes both timely and necessary. This study, therefore, seeks to examine how personality traits correlate with the academic achievement of secondary school students in English Language in Anambra State Nigeria

Stress arises when an individual faces a situation he or she perceives as overwhelming or difficult to manage. The term "stress" originates from the Latin word *strictus*, meaning "tight" or "narrow." Many students entering polytechnics in Nigeria experience adjustment challenges for the first time due to the unfamiliar environment. These challenges can lead to acute or chronic stress, influenced by various conditions, events, or circumstances. If not properly managed, stress can hinder their academic performance, participation in extracurricular activities, and overall mental and physical well-being.

Polytechnic students in Oyo State express concerns about the heavy burden of academic assignments, particularly when balancing academic responsibilities and extracurricular activities. These concerns, which include excessive workload, tight deadlines, and inadequate time for rest and personal needs, are often expressed through complaints to lecturers and academic advisers, discussions with peers, and reports during counselling sessions. Stress-induced behaviours often emerge midway through the semester, and students frequently report symptoms of academic stress such as headaches, loss of appetite, feelings of inadequacy, and sleep disturbances (Dada et al., 2025). Prolonged academic stress can negatively affect students' academic performance and overall wellbeing (Power & Dalgleish, 2022). These challenges highlight the need for students to use polytechnic resources, including guidance counsellors, social workers, psychologists, nurses, and administrative staff, to manage academic stress effectively.

Numerous factors contribute to academic stress, including challenges with time management, financial pressures, interactions with teachers, personal objectives, social commitments, adapting to campus life, lack of support systems, concerns about post-graduation employment prospects, self-imposed expectations, peer expectations, familial expectations, parental standards, inconvenient school schedules, high student-to-teacher ratios, and unsuitable classroom environments (Arsenio & Loria, 2024). Nkwuda, Chuka, Sampson, and Oginyi (2020) further add to these factors, mentioning issues like insufficient teacher-student interactions, rigid disciplinary measures, physical punishment, overwhelming workload, teaching approaches, pressure from parents, pressure to maintain high grades, lateness to do assignments, difficulty in public speaking, and inadequate financial resources.

Academic stress among polytechnic students varies between gender, influenced by societal expectations and personal circumstances (Thawabieh & Qaisy, 2024). Female students often face high academic expectations, particularly in male-dominated fields, leading to increased pressure to excel. They also manage multiple responsibilities, such as family obligations and part-time jobs, which can exacerbate stress levels. In contrast, male students often deal with peer pressure to conform to social norms related to masculinity, impacting their academic performance (Adegboyega, 2020). Additionally, concerns about securing stable job prospects after graduation create anxiety for male students, while the competitive nature of their programmes adds further stress. Recognising these gender-specific sources of academic stress is essential for developing targeted support systems that promote a healthier academic environment for all students (Rahmayani, et al., 2024).

Academic stress is a significant concern that can negatively affect students' overall adjustment. It often manifests through physical, emotional, and behavioural symptoms such as frequent illnesses, anxiety, low self-esteem, depression, irritability, emotional distress, reduced academic performance, and experimentation with drugs or alcohol (Adegboyega,

2020). Students employ various coping strategies to manage these stressful situations, and those with more effective coping mechanisms typically experience lower levels of academic stress (Thawabieh & Qaisy, 2024). Such strategies may include time management, seeking support from peers or counsellors, engaging in relaxation techniques like meditation, and maintaining a healthy lifestyle. Developing strong coping skills helps students regulate emotions, maintain focus, and promote overall wellbeing and academic success.

Ukeh, Hassan, and Dauda (2023) suggested that managing academic stress may require employing various techniques, with students who adopt better coping strategies experiencing low anxiety levels and risk of academic frustration and stress. Dada, Babatunde, and Adeleye (2025) proposed relaxation techniques, exercise, maintaining good health, and effective time management as methods for managing academic stress. Power and Dalglish (2022) identified the five most commonly utilised coping strategies among students, including internet browsing, sleeping and resting, watching TV shows or movies, instant messaging, and seeking counselling. Notably, 70% of Nigerian students surveyed expressed the belief that having a counselling center on campus would be beneficial (Nkwuda, et al., 2020). Therefore, there is a need for counselling programmes staffed by trained professional counsellors to assist students in managing academic stress effectively.

Afonne et al. (2023) proposed several strategies for coping with academic stress, including relaxation techniques, breathing exercises, challenging irrational thoughts, assertiveness training, effective time management, maintaining a healthy diet, engaging in regular exercise, participating in recreational activities, and altering daily routines to manage stressful situations experienced in school. Nkwuda, et al. (2020) advocated for the guidance and counselling services to mitigate academic stress and tension, which adversely impact students' abilities. Effective techniques such as biofeedback, yoga, life skills training, mindfulness meditation, and psychotherapy have been shown to effectively reduce academic stress among students. Mauthner (2024) identified various methods students employ to mitigate academic stress, including efficient time management, seeking social support, adopting positive reappraisal techniques, and refraining from drug use or substance abuse.

Coping with academic stress varies significantly between male and female students due to differences in socialisation and expectations. Female students often rely on social support and engage in emotion-focused strategies, such as journaling and collaborative learning, which foster community and help them process their feelings (Arsenio & Loria, 2024). Many also turn to mindfulness practices like meditation and yoga to manage anxiety effectively (Ezelote, et al., 2024). In contrast, male students tend to adopt problem-solving approaches, focusing on identifying challenges and finding practical solutions. They often engage in physical activities, using exercise as an outlet for stress, while some may resort to distraction or avoidance strategies that can lead to procrastination (Power & Dalglish, 2024).

Numerous research studies had been carried out on the nature of academic stress in Nigeria. For instance, Ifeagwazi, et al. (2013) examined role of stress reactivity, age and gender on neuroticism among students; Lamidi (2016) worked on prevalence and correlates of depression, anxiety and academic stress among undergraduates in Oduduwa University, Ile- Ife, Nigeria; Adegboyega (2020) investigated sources of academic stress among undergraduates at University of Ilorin, Ilorin, Nigeria. Despite the efforts of earlier researchers on academic stress; to the best of the researchers' knowledge, none of the previous researchers had worked on the sources of academic stress and coping strategies among polytechnic students in Oyo State. Therefore, the study contributed and filled the gap left by the previous researchers, and examined the sources of academic stress and coping strategies among polytechnic students in Oyo State, Nigeria.

## **2. OBJECTIVE AND HYPOTHESES**

### **2.1. OBJECTIVE**

The objective of this study is to explore personality traits as correlates of secondary school students' academic achievement in English language in Anambra State. Specifically, this study was designed to find out the nature of relationship between:

1. extraversion and secondary school students' academic achievement in English language in Anambra State.
2. agreeableness and secondary school students' academic achievement in English language in Anambra State.
3. neuroticism and secondary school students' academic achievement in English language in Anambra State.

### **2.2. HYPOTHESES**

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant relationship between extraversion and secondary school students' academic achievement in English language in Anambra State.
2. There is no significant relationship between agreeableness and secondary school students' academic achievement in English language in Anambra State.
3. There is no significant relationship between neuroticism and secondary school students' academic achievement in English language in Anambra State.

## **3. METHOD**

The study adopted correlational research design. The correlational research design according to Stephen (2017) examined the degree, patterns and strength of relationship between two or more variables being studied rather than explore causal relationship between them. Therefore, the correlational survey research design becomes imperative as this study is set to ascertain personality traits and social skills as correlates of secondary school students' academic achievement in Anambra State.

The population of the study comprised all the 10,436 Senior Secondary School Two (SS II) students across the six education zones in Anambra State. SS II students were used for the study because, at this stage, they had developed more stable personality traits and academic identities, which made it appropriate to examine the correlation between their personality traits and academic outcomes. This level of schooling played a significant role in preparing students for national examinations such as WAEC and NECO, making it a pivotal point to assess the factors influencing their academic achievement. Furthermore, at the SS II level, students had typically established stronger peer relationships and social connections, making it particularly relevant to examine how personality traits might influence academic performance within the context of their school social environment. Their social networks and interpersonal behaviours were generally well-formed at this stage, providing valuable data for assessing personality-related tendencies that could be linked to academic achievement—particularly in a subject as foundational as English Language.

The study sample consisted of 600 Senior Secondary School Two (SS II) students selected through a multi-stage sampling procedure.

Two sets of questionnaire were used to collect data for the study. The two sets of questionnaire are titled 'Personality Inventory (PI), and SS2 Students' Academic Achievement in English language.

The instrument used for the measurement of personality traits in this study is an adapted version of the Ten-Item Personality Inventory (TIPI) originally developed by Gosling, Rentfrow, and Swann in 2003. The TIPI was initially designed as a concise tool for measuring the Big Five personality dimensions: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability (Neuroticism). However, in order to enhance the reliability, content coverage, and contextual suitability of the instrument for Nigerian secondary school students, particularly in public secondary schools in Anambra State, the TIPI was expanded from 10 to 25 items in this study. Each of the five personality traits is now represented by five items (a mix of positively and negatively worded statements) to ensure broader and more accurate trait representation. To align with students' cognitive levels and increase response clarity, the original 7-point Likert scale was adapted to a 4-point Likert scale with the following response options: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1. For negatively worded items, reverse scoring was applied: Strongly Agree (SA) = 1, Agree (A) = 2, Disagree (D) = 3, Strongly Disagree (SD) = 4. Each of the five personality traits is measured using five items. After scoring each item based on the student's selected response, the total score for each trait is obtained by summing the scores of the five items corresponding to that trait. Minimum score per trait = 5 (if all five items are scored 1), Maximum score per trait = 20 (if all five items are scored 4). This scoring system applies as follows: Openness to Experience → 5 items (e.g., curiosity, imagination, preference for variety), Conscientiousness → 5 items (e.g., organization, dependability, goal-directedness), Extraversion → 5 items (e.g., sociability, assertiveness, talkativeness), Agreeableness → 5 items (e.g., kindness, trust, cooperativeness), Emotional Stability (Neuroticism) → 5 items (e.g., calmness vs. anxiety, emotional control). For each student, the total score on each trait was used as an independent variable, which was statistically analyzed against their academic achievement scores in English Language to determine the correlational strength and direction between personality traits and academic achievement in English Language.

The second instrument for data collection in this study was the academic achievement scores in English Language of the respondents, which serve as the dependent variable. These scores were obtained from each student's 2nd Term examination results for the 2024/2025 academic session. This term was chosen because of the availability of recent, complete, and standardized academic records at the time of the study. The respondents' results were collected directly from the official school records, with the approval of the relevant school authorities, to ensure both accuracy and authenticity. The scores represent each student's cumulative performance in English Language, combining continuous assessment components (such as classwork, assignments, and periodic tests) with the end-of-term examination, and were recorded using the standardized 0–100 grading scale used by all public secondary schools in the state. To achieve the intent of the study, the raw English Language scores of all 600 SS II student respondents were compiled and then subjected to statistical analysis. The individual scores were used to calculate the mean academic achievement score for each student. These mean scores were then aggregated and analyzed to examine patterns of performance across different personality trait groupings, as measured by the adapted personality inventory. This process enabled the researcher to determine the extent to which variations in personality traits are associated with differences in academic achievement among secondary school students in English Language.

The instrument—Personality Inventory (PI)—was subjected to face and content validation with the help of three experts from the Department of Educational Foundations, Faculty of Education, Nnamdi Azikiwe University, Awka.

The reliability of the adapted Personality Inventory (PI) was established through a pilot study conducted using 20 Senior Secondary II (SS II) students selected from public secondary schools in Enugu State. Enugu State was chosen for the trial testing because it shares similar educational and socio-cultural characteristics with Anambra State, the actual study area, but was not included in the main study to avoid contamination of the sample. To determine the reliability of the instrument, the data collected from the pilot group were subjected to internal consistency analysis using the Cronbach Alpha statistical technique. The items were grouped into five clusters corresponding to the Big Five personality traits, and the following reliability coefficient values were obtained: Cluster 1 (Openness to Experience) – 0.76, Cluster 2 (Conscientiousness) – 0.71, Cluster 3 (Extraversion) – 0.72, Cluster 4 (Agreeableness) – 0.74, Cluster 5 (Emotional Stability/Neuroticism) – 0.72. These yielded an overall mean reliability coefficient of 0.73, which is considered acceptable for social science research and confirms that the instrument is reliable and suitable for data collection in the main study. The academic achievement scores in English Language, which serve as the dependent variable, were not subjected to reliability testing. This is because the scores are standardized school-based assessments, officially recorded by qualified subject teachers using state-approved syllabuses and grading systems. As such, they are inherently regarded as valid and reliable indicators of students' academic achievement, as such not requiring additional reliability verification.

For the administration of the Personality Inventory, the researchers employed the assistance of five trained research assistants. On the other hand, the academic achievement scores of the respondents in English Language was obtained directly from official school records, specifically the 2nd Term results of the 2024/2025 academic session. With appropriate permissions from school principals and the approval of relevant authorities, the researchers and the research assistants liaised with the school examination officers or academic coordinators to access and record the scores of the identified students. These scores were copied as they appear in the records, without alteration, to preserve authenticity.

To ensure confidentiality, all collected data—both personality scores and academic results—were matched using coded identifiers rather than student names. This two-pronged approach ensured that the instruments were administered and managed in ways appropriate to their nature: interactive and supervised for the questionnaire, and discrete and archival for the achievement scores.

The data collected from the two instruments—the adapted Personality Inventory (PI) and the students' academic achievement scores in English Language—was analyzed using the Statistical Package for the Social Sciences (SPSS), version 20. To address the research questions, the Pearson Product Moment Correlation Coefficient was employed to determine the strength and direction of the relationship between each of the five personality traits (Extraversion, Agreeableness, and Emotional Stability) and students' academic achievement in English Language. To interpret the strength of the correlation coefficients obtained, the correlation decision rule suggested by Stephen (2017) was applied: 0.00–0.20 → Negligible correlation, 0.21–0.40 → Low correlation, 0.41–0.60 → Moderate correlation, 0.61–0.80 → High correlation and 0.81–1.00 → Very High correlation. To test the null hypotheses, simple and multiple regression analyses was used to determine the predictive capacity of each personality trait (independent variable) on academic achievement (dependent variable). This helped in understanding not just whether relationships exist, but the extent to which each trait significantly predict academic achievement in English Language. For hypothesis testing, the level of significance was set at 0.05. The decision rule is as follows: If  $p < 0.05$ , the null

hypothesis was rejected, indicating a statistically significant relationship. If  $p \geq 0.05$ , the null hypothesis was accepted, indicating that the relationship is not statistically significant.

#### 4. RESULTS

The findings of the present study revealed that there is a significant but low positive relationship between Extraversion and secondary school students' academic achievement in English Language in Anambra State. The results demonstrated that students who scored higher on Extraversion—characterized by sociability, assertiveness, and energetic engagement with others—tend to achieve slightly higher scores in English Language compared to their less outgoing peers. This significant relationship led to the rejection of the null hypothesis of no relationship. As such, while Extraversion does not strongly correlate with English Language achievement, students who are more expressive and socially active may benefit from increased participation, discussion, and interaction in English Language learning contexts, which can contribute modestly to improved achievement. This finding is consistent with the results of Hill, Rottinghaus, and Jacobson (2020), who found through a meta-analytic review that Extraversion is positively associated with academic motivation, which in turn contributes to academic achievement. Their study suggests that extraverted students, who are generally outgoing and sociable, are more likely to engage in interactive learning environments that can enhance their motivation and performance. Similarly, Jones, Cho, and Ko (2020) established that Extraversion has a positive relationship with academic motivation and learning outcomes, indicating that extraverted students benefit from active participation and interaction in academic activities. Ziegler, Schroeter, and Bühner (2020) further supported this by demonstrating that Extraversion positively influences teamwork effectiveness in academia, which indirectly boosts academic outcomes, especially in collaborative tasks like group projects, discussions, and peer-based learning. These findings imply that students who are more sociable, talkative, and energetic may benefit academically, especially in language-based subjects that require active verbal engagement and social interaction.

The findings of this study indicated that there is a significant but low positive relationship between Agreeableness and secondary school students' academic achievement in English Language in Anambra State. Specifically, students who demonstrated higher levels of Agreeableness—marked by traits such as trust, cooperation, and kindness—tended to record slightly higher scores in English Language than their less agreeable counterparts. This significant result led to the rejection of the null hypothesis of no relationship. This reveals that while Agreeableness alone does not strongly correlate with English Language achievement, students who are more cooperative and harmonious may benefit from positive peer interactions, better classroom relationships, and increased willingness to engage in collaborative language activities, which can contribute modestly to improved academic outcomes in English Language.

This finding aligns with the pattern noted by Komarraju et al. (2019), who found that Agreeableness is often linked to cooperative learning styles, which can indirectly benefit academic achievement by fostering collaborative classroom interactions. Likewise, the meta-analysis by O'Connor and Paunonen (2020) reported a generally positive, though modest, relationship between Agreeableness and academic performance, highlighting that agreeable students tend to be cooperative, helpful, and willing to work harmoniously with peers and teachers—qualities that can support success in collaborative and language-based tasks.

The findings of this study revealed that there is a low positive relationship between Neuroticism and secondary school students' academic achievement in English Language in Anambra State. However, the test of the hypothesis confirmed that this relationship is statistically significant and indicates a moderate positive relationship overall. Specifically, the analysis showed that students who scored higher on Neuroticism—a trait often associated with emotional sensitivity, self-consciousness, and anxiety—tended to achieve moderately higher scores in English Language than their peers with lower levels of this trait. This significant outcome led to the rejection of the null hypothesis that there is no relationship between Neuroticism and students' English Language achievement. This finding implies that while Neuroticism is traditionally viewed as a negative predictor of academic achievement due to its link with stress and emotional instability, it may, in this context, motivate students to be more cautious, attentive, or driven by worry to prepare more thoroughly. This nuanced result differs somewhat from earlier studies, such as those by Komarraju et al. (2019) and O'Connor et al (2020), who typically found a negative link between Neuroticism and academic success, arguing that excessive anxiety undermines focus and performance. In contrast, this study suggests that when Neuroticism is present at moderate levels, its associated worry and self-consciousness may sometimes enhance students' carefulness and attention to detail—qualities that can positively influence performance in a language subject that demands precision, reflection, and thoroughness.

**Research Question One:** What is the Relationship Between Extraversion and Secondary School Students' Academic Achievement in English Language In Anambra State?

**Table 1:** Pearson r on the Relationship between Extraversion and Secondary School Students' Academic Achievement in English Language

S/N	Variables	N	Mean	SD	Correlation	p-value	Remark
1	Extraversion	600	12.80	3.00		0.001	Significant ( $p < .05$ )
2	English Language Score	600	65.40	9.80	0.15		Low Positive Relationship

Data presented in Table 1 shows the Pearson product moment correlation coefficient computed to determine the relationship between Extraversion and secondary school students' English Language scores in Anambra State. The mean score for Extraversion is 12.80 with a standard deviation of 3.00, while the mean English Language score is 65.40 with a standard deviation of 9.80. The correlation coefficient ( $r$ ) is 0.15 with a  $p$ -value of 0.001, which is significant at  $p < .05$ . This indicates a low positive Relationship between Extraversion and students' academic achievement in English Language.

**Research Question Two:** What Is the Relationship between Agreeableness and Secondary School Students' Academic Achievement in English Language in Anambra State?

**Table 2:** Pearson r on the Relationship between Agreeableness and Secondary School Students' Academic Achievement in English Language

S/N	Variables	N	Mean	SD	Correlation	p-value	Remark
1	Agreeableness	600	13.70	2.60		0.000	Significant (p < .05)
2	English Language Score	600	65.40	9.80	0.22		Low Positive Relationship

Data presented in Table 2 shows the Pearson product moment correlation coefficient computed to determine the Relationship between Agreeableness and secondary school students' English Language scores in Anambra State. The mean score for Agreeableness is 13.70 with a standard deviation of 2.60, while the mean English Language score is 65.40 with a standard deviation of 9.80. The correlation coefficient (r) is 0.22 with a p-value of 0.000, which is significant at  $p < .05$ . This indicates a low positive Relationship between Agreeableness and students' academic achievement in English Language.

**Research Question Three:** What is the Relationship between Neuroticism and Secondary School Students' Academic Achievement in English Language in Anambra State?

**Table 3:** Pearson r on the Relationship between Neuroticism and Secondary School Students' Academic Achievement in English Language

S/N	Variables	N	Mean	SD	Correlation	p-value	Remark
1	Neuroticism	600	12.30	2.80		0.000	Significant (p < .05)
2	English Language Score	600	65.40	9.80	0.30		Low Positive Relationship

Data presented in Table 3 shows the Pearson product moment correlation coefficient computed to determine the Relationship between Neuroticism and secondary school students' English Language scores in Anambra State. The mean score for Neuroticism is 12.30 with a standard deviation of 2.80, while the mean English Language score is 65.40 with a standard deviation of 9.80. The correlation coefficient (r) is 0.30 with a p-value of 0.000, which is significant at  $p < .05$ . This indicates low positive Relationship between Neuroticism and students' academic achievement in English Language.

**Hypothesis One:** There is no Significant Relationship between Extraversion and Secondary School Students' Academic Achievement in English Language in Anambra State.

**Table 4:** Pearson r on the Relationship between Extraversion and Secondary School Students' Academic Achievement in English Language

S/N	Source of Variation	N	R	p-value	Remark
1	Participatory Decision Making Practices	600	0.15	0.001	Significant
2	English Language Academic Achievement				

Data presented in Table 4 shows the Pearson product moment correlation coefficient computed to test the significance of the relationship between Extraversion and secondary school students' academic achievement in English Language in Anambra State. The analysis reveals a correlation coefficient (r) of 0.15 with a p-value of 0.001 at a sample size of 600. Since the p-value is less than the 0.05 level of significance, the null hypothesis which states that there is no significant relationship is rejected. This result therefore indicates that there is a significant low positive relationship between Extraversion and secondary school students' academic achievement in English Language.

**Hypothesis Two:** There Is No Significant Relationship between Agreeableness and Secondary School Students' Academic Achievement in English Language in Anambra State.

**Table 5:** Test of Significance of Relationship between Agreeableness and Secondary School Students' Academic Achievement in English Language

S/N	Source of Variation	N	R	p-value	Remark
1.	Agreeableness	600	0.22	0.000	Significant
2.	English Language Academic Achievement				

Data presented in Table 5 shows the Pearson product moment correlation coefficient computed to test the significance of the relationship between Agreeableness and secondary school students' academic achievement in English Language in Anambra State. The analysis reveals a correlation coefficient (r) of 0.22 with a p-value of 0.000 at a sample size of 600. Since the p-value is less than the 0.05 level of significance, the null hypothesis which states that there is no significant relationship is rejected. This result therefore indicates that there is a significant low positive relationship between Agreeableness and secondary school students' academic achievement in English Language.

**Hypothesis Three:** There is no Significant Relationship between Neuroticism and Secondary School Students' Academic Achievement in English Language in Anambra State.

**Table 6:** Pearson r on the Relationship between Neuroticism and Secondary School Students' Academic Achievement in English Language

S/N	Source of Variation	N	R	p-value	Remark
1.	Neuroticism	600	0.30	0.000	Significant
2.	English Language Academic Achievement				

Data presented in Table 6 shows the Pearson product moment correlation coefficient computed to test the significance of the relationship between Neuroticism and secondary school students' academic achievement in English Language in Anambra State. The analysis reveals a correlation coefficient (r) of 0.30 with a p-value of 0.000 at a sample size of 600. Since the p-value is less than the 0.05 level of significance, the null hypothesis which states that there is no significant relationship is rejected. This result therefore indicates that there is a significant moderate positive relationship between Neuroticism and secondary school students' academic achievement in English Language.

## 5. CONCLUSIONS

Based on the findings of the study, it was concluded that secondary school students' personality traits show positive correlation with their academic achievement in English Language in Anambra State. The trait of extraversion revealed a low but significant positive relationship with English Language scores, suggesting that students who are more outgoing and expressive may slightly outperform their less extraverted peers. Agreeableness also showed a low but significant positive relationship, indicating that students who are more cooperative, tolerant, and empathetic tend to achieve slightly higher results in English Language. Lastly, Neuroticism exhibited a low positive relationship that was statistically significant, suggesting that students with higher levels of emotional sensitivity and self-consciousness tend to achieve moderately better results in English Language, possibly due to a heightened sense of caution or motivation driven by academic anxiety. Given the foregoing, the study concludes that personality traits, whether expressed at low or moderate levels, have meaningful and significant associations with students' academic achievement in English Language in secondary schools in Anambra State.

## ACKNOWLEDGMENT

The researchers acknowledge all researchers and authors whose works served as a reference to this study.

## REFERENCES

- Adebayo, D. O., and Oloyede, O. I. (2020). Personality traits as predictors of students' learning behaviour and academic achievement in secondary schools. *Journal of Educational Psychology and Counselling*, 12(2), 44–58.
- Adeyemi, M. B., and Adebayo, O. M. (2020). Students' learning outcomes and instructional effectiveness in Nigerian secondary schools. *Journal of Educational Research and Evaluation*, 25 (2), 112–123.
- Anju, M. and Amandeep, K. (2021). Study of academic achievement of students in relation to organizational climate in schools. *Scholarly Research Journal for Humanity Science and English Language*, 12 (8), 2283-2295. <https://doi.org/10.1186/146824033013>
- Costa, P. T., and McCrae, R. R. (2018). The five-factor model of personality and its relevance to personality psychology. *European Journal of Personality*, 32(5), 313–316.
- Costa, P. T., and McCrae, R. R. (2018). The Revised NEO Personality Inventory (NEO-PI-R). In *The SAGE Handbook of Personality and Individual Differences: 2*, 179–198. SAGE Publications Ltd.
- DeYoung, C. G. (2020). Personality neuroscience and the biology of traits. In *The Cambridge Handbook of Personality Psychology (2nd ed., pp. 101-117)*. Cambridge University Press. <https://doi.org/10.1017/9781108264822>
- Gosling, S. D., Rentfrow, P. J., and Swann, W. B. (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality*, 37(6), 504-528. DOI: 10.1016/S0092-6566(03)00046-1.
- Graziano, W. G., and Tobin, R. M. (2019). Agreeableness. In V. Zeigler-Hill and T. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1–7). Springer.
- Hill, P. L., Rottinghaus, P. J., and Jacobson, C. J. (2020). Extraversion, academic motivation, and achievement. *Personality and Social Psychology Bulletin*, 46(3), 449-461.
- Jones, N., Cho, J., and Ko, M. (2020). Emotional intelligence and openness in academia. *Journal of Educational Development*, 16(3), 206-219.

- Jones, N., Cho, J., and Ko, M. (2020). The impact of Big Five personality traits on academic motivation and learning. *Journal of Educational Development*, 16(3), 206-219. <https://doi.org/10.1177/0022022120927805>
- Komarraju, M., and Karau, S. J. (2020). Personality traits and academic performance: The role of student engagement and motivation. *Journal of Educational Psychology*, 112 (4), 743–757.
- Möttus, R., Bates, T. C., and Condon, D. M. (2017). Personality traits and intelligence: A study of 16,000 European adolescents. *Personality and Individual Differences*, 113, 56–61. <https://doi.org/10.1016/j.paid.2017.03.058>
- Möttus, R., Bates, T. C., and Condon, D. M. (2019). Towards understanding the structure and correlates of personality trait change in adulthood. *Journal of Personality*, 87(3), 377–394.
- Nwafor, C. E., and Eze, J. U. (2022). Assessment practices and students' academic performance in secondary schools. *African Journal of Educational Measurement*, 14 (1), 45–58.
- O'Connor, M. C., and Paunonen, S. V. (2020). Big Five personality predictors of post-secondary academic performance. *Personality and Individual Differences*, 154, 109-119. <https://doi.org/10.1016/j.paid.2019.109676>
- Okeke, C. I. (2021). *Foundations of contemporary education in Africa*. Pretoria University Press
- Okoye, N. S. (2019). The Nigerian university teachers' effectiveness as perceived by their students. *College Student Journal*, 42 (2), 565-573.
- Okpala, P. N. (2021). Students' factors as correlates of academic achievement in secondary schools in Abia State. *Physics Education*, 12 (3), 361 – 367. <https://dx.doi.org/10.1016/2021.v12s3.361-8>.
- Pellegrini, A. D. (2019). The Role of Play in Human Development. *Developmental Review*, 55, 210-228.
- Pellegrini, A. D., and Smith, P. K. (2019). Social skills and peer interactions in the school context. *International Journal of Behavioural Development*, 43(5), 457-469.
- Roberts, B. W., and Jackson, J. J. (2017). The personality development of everyday life. *Journal of Personality*, 85(1), 5–7. <https://doi.org/10.1111/jopy.12292>
- Rose-Krasnor, L. (2018). The nature of social competence: A theoretical review. *Social Development*, 27(1), 11-26. <https://doi.org/10.1111/sode.12271>
- Soto, C. J. (2021). How the Big Five personality traits predict academic motivation and achievement: A longitudinal perspective. *Personality and Individual Differences*, 171, 110456
- Thoma, P., and Ochsner, K. N. (2019). The neuroscience of social skills. *Trends in Cognitive Sciences*, 23(10), 869-884. <https://doi.org/10.1016/j.tics.2019.07.005>
- Widiger, T. A. (2020). Neuroticism and its central role in psychological disorders. *Annual Review of Clinical Psychology*, 16, 297–321. <https://doi.org/10.1146/annurev-clinpsy-071119-115928>
- Wilmot, M. P., Ones, D. S., and Johnson, R. E. (2017). A century of research on the empirical status of the five-factor model of personality traits: Directions for future research. *Journal of Applied Psychology*, 102(3), 486–500. <https://doi.org/10.1037/apl0000161>
- Zhang, L., and Zhou, Y. (2021). Big Five personality traits and language learning performance among senior secondary students. *International Journal of Educational Research*, 109, 101840. <https://doi.org/10.1016/j.ijer.2021.101840>
- Ziegler, M., Schroeter, T., and Bühner, M. (2020). Conscientiousness and teamwork in academia. *Educational and Psychological Measurement*, 80(5), 893-915.

**Copyright:** Submission of a manuscript implies that the work described has not except in the form of an abstract or as part of a published lecture, been published before (or thesis) and it is not under consideration for publication elsewhere; that when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher.