**CHAPTER ONE**

**INTRODUCTION**

There is an international concern on academic performance of students (Romerhausen, 2013). Globally and Nigeria in particular, improving the quality of education and investment on educational and human resources are regarded as effective factors paving the way for a country’s pervasive development. Improvement of students’ academic performance is also among the basic goals of educational planning. And it’s through academic performance that students can fully actualize their talents and capabilities in line with educational goals. Notably, academic performance is considered as one important criteria of educational quality. Therefore, without doubt academic performance presently is a major issue among students, teachers, parents, school administrators, and the community at large. Researchers have made several attempts to unravel the complexities surrounding academic performance (Ikpi, Enya & Johnny, 2014). For example, psychology researchers have put forward a lot of reasons why disparities in achievement among young people exist (Ikpi, Enya & Johnny, 2014). As noted by these researchers, a lot of attention had been paid to external factors such as type of school, teaching methods, school location, instructional materials, quality of lecturers and their experience.

Academic performance is considered an intellectual competence indicator. Opinions vary as to why some students excel academically while others appear to be underachievers. As a result, many psychologists have consistently attempted to identify the major predictors of individual academic performance. Academic performance on examinations is the result of interactions among multiple variables such as learning. Learning occupies a significant role in the life of students (Mangal & Mangal 2009). It means modification of behaviour (Dutt, 2007) that is measured using the yardstick of academic performance. People have different learning styles that are reflected in different academic strengths, weaknesses, skills, and interests. It has often been asserted that academic performance can be explained largely by factors such as individual initiative, effort, and merit (Timothy, & Kammeyer-Mueller, 2007)

Although education is not the only road to success in the working world, much effort is made to identify, evaluate, track and encourage the progress of students in schools (Bell, 2017). Parents care about their child's academic performance because they believe good academic results will provide more career choices and job security (Bell, 2017). Similarly, schools invested in fostering good academic habits for the same reason. For example they often influence concerns about school's reputation and the possibility of monetary aid from government institutions, which shows the overall academic performance of the school.

In the past, academic performance of secondary school students was not measured using the present form of using numerical method. Teachers' observations made up the bulk of the assessment, and today's summation, or numerical, method of determining how well a student is performing is a fairly recent invention. Grading systems came into existence in the United States in the late Victorian period and were initially criticized due to high subjectivity. However, performance results also allow students to be ranked and sorted on a scale that is numerically obvious, minimizing complaints by holding teachers and schools accountable for the components of every grade.

Academic performance for some researchers is defined by students’ reporting of past semester CGPA/GPA and their expected GPA for the current semester. The grade point average or GPA is now used by most of the tertiary institutions as a convenient summary measure of the academic performance of their students. The GPA is a better measurement because it provides a greater insight into the relative level of performance of individuals and different group of students.

Academic performance is the extent to which a student has achieved their short or long-term educational goals (Ward, Stoker, & Murray-Ward 1996). Cumulative [GPA](https://en.wikipedia.org/wiki/GPA) and completion of educational degrees such as High School and bachelor's degrees represent academic performance.

Academic performance is commonly measured through [examinations](https://en.wikipedia.org/wiki/Test_%28assessment%29) or [continuous assessment](https://en.wikipedia.org/wiki/Continuous_assessment)s but there is no general agreement on how it is best evaluated or which aspects are most important — [procedural knowledge](https://en.wikipedia.org/wiki/Procedural_knowledge) such as [skills](https://en.wikipedia.org/wiki/Skill) or [declarative knowledge](https://en.wikipedia.org/wiki/Declarative_knowledge) such as [facts](https://en.wikipedia.org/wiki/Fact) (Bhagat 2013). Furthermore, there are inconclusive results over which individual factors successfully predict academic performance, elements such as test anxiety, environment, motivation, and emotions require consideration when developing models of school performance (Mosche, 1998).Butindividual differences in academic performance have been linked to differences in [intelligence](https://en.wikipedia.org/wiki/Intelligence) and [personality](https://en.wikipedia.org/wiki/Personality_traits) (Sophie, Benedikt, & Tomas 2011). Students with higher mental ability as demonstrated by [IQ tests](https://en.wikipedia.org/wiki/IQ_tests) and those who are higher in [conscientiousness](https://en.wikipedia.org/wiki/Conscientiousness) (linked to effort and achievement motivation) tend to achieve highly in academic settings. A recent meta-analysis suggested that mental curiosity (as measured by [typical intellectual engagement](https://en.wikipedia.org/wiki/Typical_intellectual_engagement)) has an important influence on academic achievement in addition to intelligence and conscientiousness (Sophie, Benedikt, & Tomas 2011).Cognitive factors or learning factors are the extent to which a person’s individual capabilities can influence their academic or learning performance. These factors include cognitive functions like [attention](https://en.wikipedia.org/wiki/Attention), [memory](https://en.wikipedia.org/wiki/Memory), and [reasoning](https://en.wikipedia.org/wiki/Reason). Undergraduate students with high academic performance present mature learning beliefs, and a strong [knowledge integration](https://en.wikipedia.org/wiki/Knowledge_integration) (Brenda Ann Marie 2014). Research has also found that students with higher academic performance, motivation and persistence use intrinsic goals rather than extrinsic ones (Leslie & Ingrid 2013). Furthermore, students who are motivated to improve upon their previous or upcoming performance tend to perform better academically than peers with lower motivation (Barry, & Rhonda 2011). In other words, students with higher need for achievement have greater academic performance.

As noted earlier, research showed that there are also non-cognitive factors, personality for example responsible for high academic performance. Personality is now a relevant factor studied in relationship with academic performance. For some researchers another major factor that is believed to be responsible for academic performance in students is their personality traits.

There is some evidence that personality intricately tied with individual differences in learning styles, and it is recommended that educators go beyond the current emphasis on cognition and include this variables (type A and type B personalities) in understanding academic behaviour (Komarraju, Karau, Schmeck, & Alen 2011).

Personality is the sum total of the behavioural and mental characteristics that are distinctive of an individual (Colamn, 2009). It refers to individuals’ unique and relatively stable patterns of behaviour, thoughts and feelings (Baron, 2006). The nature of individuals varies, the personality of the individuals too varies and this is the law of nature and this varying nature has a tremendous impact on making life a success or a failure, including the life of the students.

Academic performance criteria differ substantially and may have conflicting relationships with the independent variable, personality types (Trapmann et al., 2007, Clark and Schroth, 2010; Komarraju & Karau, 2005). Extraversion (type A personality) and introversion (type B personality) factors may relate in different ways to performance, given different aspects of it (Komarraju & Karau, 2005). Extraversion-Introversion (EI) represents the process through which a person is energized. Is the individual’s primary interest in the outer world of people and things or the inner world of ideas and concepts?

The multitude of individuals’ personality may be classified as introverts and extroverts, a classification originally made by Carl Jung, and reinforced by Eysenck. Although Eyesenck believes that the concepts of Introversion-Extroversion did not originate in Jung but had a 2000 years history in Philosophy and Medicine of Hippocrates and Galden that combined Biological Constitution and Psychology (Dandapandi, 2006). The theory of person-situation interaction predicts that the extrovert will adapt best when he is asked to collaborate with others and that the introvert will adapt best when she is asked to carry out tasks independently (Santrock, 2006). Extroverted individuals are outgoing, sociable and assertive; introverts are quiet and shy (Robbins, 2005). Extraverts prefer to be in the company of others while the introverts in being alone or with a chosen few. John Bearden places ‘extroversion and introversion’ as the first dimension, considering its significance and value.

Empirical studies confirm that personality contributes to personal achievement to at least some degree in education (e.g. Neuenschwander et al., 2013, Laidra et al., 2007), to decisions about the choice of academic major and profession (e.g. Borges & Gibson, 2005, Cano & Garton, 1994, Hartung et al., 2005, Dunning, 2001, Hinton & Stockburger, 1991, Sears et al., 1997, Ditiberio & Hammer, 1993, Borges & Savickas, 2002), to performance in vocational, professional and higher education (e.g. Borg & Shapiro, 1996, Borg & Stranahan, 2002a, Borg & Stranahan, 2002b, Ziegert, 2000, Ditiberio & Hammer, 1993).

The present study is aimed at studying the influence of personality type on academic performance of students. The study would yield findings, based on which academic performance of students could be improved in tune with their personality types as ‘research is directed towards the solution of a problem (Best & Kahn, 2001).

Personality can be defined as organized patterns of thoughts, feelings and behaviors. It is consistency in a person’s way of being, that is his particular ways of perceiving, thinking, acting and reacting as a person (Hofstee, & Willem, 1994) accounted for this negative relationship; in other words, highly extroverted students are more likely to spend their time on social and extra-curricular activities in comparison to less extroverted students.

Some studies have indicated that academic performance is positively associated with extroversion (Laidra et al. 2007; Lounsbury et al. 2003a). According to Duckworth and Seligman (2005) extroversion is one of the Personality factors having the most interesting relationship with academic performance. Although Melissa, Sampo & Panonon (2007) found a negative relationship between these two variables, Chomoro & Furnham (2003a) reporting the reverse. Based on previous studies, Dunsmore (2005) relates higher levels of extroversion to higher academic performance among students (especially at lower academic levels), and to lower academic performance at higher educational levels. Such model of results might reflect transition from informal, interactional and class-oriented environment at elementary schools to a more academic, study-oriented and knowledge-based environment at high schools and college settings. Furnham, Zhang, & Chamoro, (2006) found a negative relationship between extroversion and achievement at higher education; they believed students' interpersonal as well as intrapersonal skills accounted for this negative relationship; in other words, highly extroverted students are more likely to spend their time on social and extra-curricular activities in comparison to less extroverted students.

Although results of studies trying to predict academic performance have yielded different results, they have consistently pointed out the role of personality characteristics in academic performance (Paunonen & Ashton, 2001). Educators have always asked whether people’s personality characteristics can help them attain higher academic achievement.

Elements of personality type can influence outcomes on aptitude tests, which measure a student’s ability to learn (ie, future performance), as well as achievement tests, which identify what a student has learned. The correlation with the overall grade of the final academic year reveals that there is no significant relationship between extraversion and the performance during the entire final academic year. Hence, the relationship between extraversion and academic performance is controversial. Several studies have concluded that there is no reason to talk about a relationship between extraversion and academic performance (Heaven, Mak, Barry & Ciarrochi 2002; Ackerman & Heggestad 1997). Others suggest that extraversion is not clearly linked with academic performance or whether the correlation between these two variables is positive or negative. Studies have found both positive and negative correlations between this personality factors and academic performance. The inconsistency of extraversion can be explained by two ideas. First, extraversion can be a predictor of high academic performance because extraverts are more active, ask more questions, which can help them learn more effectively (Chamorro-Premuzic & Furnham 2005). Secondly, extraverts often have an active social life, and this can interfere with activities devoted to studying because the time spent for learning or documentation is reduced. For this reason, extraverts tend to have a higher number of absences in school. Introverts, by failing emphasis on socialization, have more time for themselves, time they can spend on studying (Chamorro-Premuzic & Furnham 2003, 2005]).

**STATEMENT OF THE PROBLEM**

The problem of underperformance/achievement has assumed a worrisome dimension in the Nigerian educational system. Desperate to make it anyhow, students have devised various illegal means to succeed in examinations, and academic activities even when they are not academically competent. And unfortunately, the system has buckled under the pressure. Examination malpractice has risen steadily to become a seemingly untameable monster. It is increasingly becoming difficult to equate competence of people with supposed academic performance as represented in their certificates. Many candidates are unable to defend the result they supposedly acquired honourably. And of course this has consistently led to inability to compete effectively in the job market which has become a serious issue. Several factors have been researched into in the past as to the cause of this social malaise, but there seem to be indications that some hidden factors may be responsible that needs unravelling. This desire to see this problem curbed gave rise to this study and the researchers’ aim is to see if there is a way in which the personality traits can help, especially from the perspective of the analytical and scientific approach of measurement and evaluation. The researcher has consequently chosen to explore this problem among the students. Academic performance among students has become crucial and can be very beneficial in career pursuit after school as well in repositioning the life of students. Over there have been stories of Nigerian students who performed excellently in various disciplines. But the percentage of these excellent performing students is still far compared to the teeming population of students in our country. Hence, one could imagine if these excellent students are of different personality. Therefore, the present study is aimed at examining the impact of personality traits on academic performance of students.

**PURPOSE OF THE STUDY**  
The purpose of the study is to find out whether; extrovert personality type and introvert personality type will significantly impact on academic performance of students.

**OPERATIONAL DEFINITION OF TERMS**

**Personality:** This is defined in this study as the combination of characteristics or qualities that form an individual's distinctive character which can be extroverted or introverted as measured by type A behaviour scale developed by (Omoluabi 1997).  
**Academic Performance:** This is operationalized as the extent to which a student has achieved in his/her educational goals for the period of the study as indicated by the student’s cumulative grade point.

**CHAPTER TWO**

**LITERATURE REVIEW**

**Introduction**

The review of literature is examined from two perspectives – theoretical and empirical reviews

**Theoretical Review**

This section reviews 85% of theory and 15% of empirical studies

Theory of Academic Performance

Walberg's Theory of Educational Productivity

Motivational Systems Theory and Academic Performance

Type A Personality Theory

Big Five Personality Dimensions

Trait theory

[Cognitive-affective personality system](https://en.wikipedia.org/wiki/Cognitive-affective_personality_system)

**Theory of Academic Performance**

The theory of academic performance (ToP) was developed by Elger (2007). The theory emphasizes six foundational concepts to form a framework that can be used to explain performance as well as performance improvements. To perform is to produce valued results. A performer can be an individual or a group of people engaging in a collaborative effort. Developing performance is a journey, and level of performance describes location in the journey. Current level of performance depends holistically on six components: context, level of knowledge, levels of skills, level of identity, personal factors, and fixed factors. Three axioms are proposed for effective performance improvements. These involve a performer’s mindset, immersion in an enriching environment, and engagement in reflective practice.

The theory of performance is a challenge to educators: by improving our own performance, we empower ourselves to help others learn and grow. As advocated by Harvard’s Project Zero, performance is closely related to learning-for-understanding (Wiske, 1998). When people learn and grow, they are empowered to create results that make a difference. Working and learning together in ways that make the world better has been a primary goal of higher education throughout the ages.

**Rationale for a Theory of Performance**

Humans are capable of extraordinary accomplishments. Wonderful accomplishments also occur in day-to-day practice in higher education. An advisor inspires students to follow their dreams. A teacher magically connects with students. A researcher continually asks the quintessential questions that lead to revolutions in thinking. A dean inspires an entire college to collaborate and attain wonderful outcomes. Since worthy accomplishments are produced from high-level performances, a theory of performance (ToP) is useful in many learning contexts.

Traditional Contexts: A ToP informs learning in classrooms, workshops, and other venues that are traditionally associated with learning.

Non-Traditional Contexts:A ToP informs learning in contexts that are not traditionally conceptualized as learning environments. Examples of these contexts include academic advising, self development, departments, academic committees, professional research groups, and colleges.

Organizational Learning: A ToP informs learning by organizations through the idea of examining the “level of performance” of the organization.

To perform is to take a complex series of actions that integrate skills and knowledge to produce a valuable result. In some instances, the performer is an individual; in other instances, the performer is a collection of people who are collaborating, such as an academic department, research team, committee, student team, or a university. Performance, as the adage goes, is a “journey not a destination.” The location in the journey is labeled as the level of performance. Each level characterizes the effectiveness or quality of a performance.

As an academic department improves its level of performance, the members of the department are able to produce more effective student learning, more effective research, and a more effective culture. As a teacher advances his levels of performance, he is able to produce deeper levels of learning, improved levels of skill development, and more connection with the discipline for larger classes while spending less time doing this. Performing at a higher level produces results that can be classified into categories:

*Quality increases*—results or products are more effective in meeting or exceeding the expectations of stakeholders

*Cost decreases*—amount of effort or financial resources to produce a result goes down; amount of waste goes down

*Capability increases*—ability to tackle more challenging performances or projects increases

*Capacity increases*—ability to generate more throughout increases

*Knowledge increases*—depth and breadth of knowledge increases

*Skills increase*—abilities to set goals, persist, maintain a positive outlook, etc. increase in breadth of application and in effectiveness

*Identity and motivation increases*—individuals develop more sense of who they are as professionals; organizations develop their essence

**Improving Performance:** While some factors that influence improving performance are immutable, other factors can be influenced by the performer or by others. The factors that can be varied fall into three categories. Performer’s Mindset.Performer’s mindset includes actions that engage positive emotions. Examples include setting challenging goals, allowing failure as a natural part of attaining high performance, and providing conditions in which the performer feels an appropriate degree of safety.

Immersion - Immersion in a physical, social, and intellectual environment can elevate performance and stimulate personal as well as professional development. Elements include social interactions, disciplinary knowledge, active learning, emotions (both positive and negative), and spiritual alignment.

Reflective Practice -Reflective practice involves actions that help people pay attention to and learn from experiences. Examples include observing the present level of performance, noting accomplishments, analyzing strengths and areas for improvements, analyzing and developing identity, and improving levels of knowledge.

The ToP presented here is similar to other constructs in the literature. The Parallel Curriculum, advocated by Tomlinson et al. (2002), advocates four parallel curriculums that reinforce the four adjustable components. The core curriculum and the curriculum of connections focus on knowledge construction. The curriculum of practices emphasizes context and promotes skill development. The curriculum of identity focuses on development of the individual as a member of a professional community.

Additional support for the axioms can be found in the work of Bransford et al. (2000). Their model for effective teaching and learning includes knowledge-centred, learner-centred, assessment-centred, and community-centred components. The learner-centred component involves the performer’s mindset. The knowledge-centred and community-centred components connote immersion in an enriching environment, while the assessment-centred component embraces elements of reflective practice. The importance of having a well-founded conceptual model, appropriate methods for data collection, and reliable and robust system for making inferences about observations is well-established in the work of Pellegrino and Glaser (2001), and this undergirds reflective practice in organizational contexts.

**Walberg's theory of educational productivity**

Walberg's (1981) theory of educational productivity, is one of the few empirically tested theories of school learning based on an extensive review and integration of over 3,000 studies (DiPerna, Volpe & Stephen, 2002).   Wang, Haertel, and Walberg (1997) analyzed the content of 179 handbook chapters and reviews and 91 research syntheses and surveyed educational researchers in an effort to achieve some consensus regarding the most significant influences on learning (Greenberg et al.,  2003).  Using a variety of methods, Wang, et al. (1977) identified 28 categories of learning influence.  Of the 11 most influential domains of variables, eight involved social-emotional influences:  classroom management, parental support, student- teacher interactions, social- behavioral attributes, motivational- effective attributes, the peer group, school culture, and classroom climate (Greenberg et al., 2003).  Distant background influences (e.g., state, district, or school policies, organizational characteristics, curriculum, and instruction) were less influential. Wang et al. (1997) concluded that "the direct intervention in the psychological determinants of learning promise the most effective avenues for reform" (p. 210).

Wang et al.’s research review targeted student learning characteristics (i.e., social, behavioral, motivational, affective, cognitive, and metacognitive) as the set of variables with the most potential for modification that could, in turn, significantly and positively affect student outcomes (DiPerna et al., 2002).

More recently, Zins, Weissberg, Wang and Walberg, (2004) demonstrated the importance of the domains of motivational orientations, self-regulated learning strategies, and social/interpersonal abilities in facilitating academic performance.  Zins et al. reported, based on the large-scale implementation of a social-emotional learning (SEL) program, that students who became more self-aware and confident regarding their learning abilities, who were more motivated, who set learning goals, and who were organized in their approach to work (self- regulated learning) performed better in school.  According to Greenberg, Weissberg, O'Brien, Zins, Fredericks, Resnick, & Elias, (2003), Zins et al. (2004) research linking social, emotional, and academic factors are sufficiently strong to advance the new term social, emotional, and academic learning (SEAL).  A central challenge for researchers, educators, and policymakers is to strengthen this connection through coordinated multiyear programming.

Walberg and associates’ conclusions resonate with findings from other fields.  For example, the "resilience" literature (Garmezy, 1993) grew from the observation that despite living in disadvantaged and risky environments, certain children overcame and attain high levels of achievement, motivation, and performance (Gutman, Sameroff & Eccles, 2002)**.** Wach’s (2000) review of biological, social, and psychological factors suggested that no single factor could explain “how” and “why” these resilient children had been inoculated from the deleterious effects of their day- to-day environments.  A variety of promotive (direct) and protective (interactive) variables were suggested, which included, aside from cognitive abilities, such conative characteristics as study habits, social abilities, and the absence of behaviour problems (Guttman et al., 2003).

Haertel, Walberg, and Weinstein (1983) identified eight major models of school learning that are either based on psychological learning theory (Glaser, 1976) or time-based models of learning (Bennett, 1978).   Despite variations in names of constructs, Haertel et al. (1983) found that most of the eight theories included variables representing ability, motivation, quality of instruction, and quantity of instruction.  Constructs less represented in the models were social environment of the classroom, home environment, peer influence, and mass media (Watson & Keith, 2002).  Haertel et al.’s (1983) review of theories, multiple quantitative syntheses of classroom research, and secondary data analyses of large- scale national surveys (Reynolds & Walberg, 1992), generally support Walberg's global model of educational productivity.  Walberg’s model specifies that:

Classroom learning is a multiplicative, diminishing-returns function of four essential factors—student ability and motivation, and quality and quantity of instruction—and possibly four supplementary or supportive factors—the social psychological environment of the classroom, education-stimulating conditions in the home and peer group, and exposure to mass media.  Each of the essential factors appears to be necessary but insufficient by itself for classroom learning; that is, all four of these factors appear required at least at minimum level (Haertel et al., 1983).

 An important finding of the Walberg et al. (1986) large scale causal modelling research was that nine different educational productivity factors were hypothesized to operate vis- à-vis a complex set of interactions to account for school learning. Additionally, some student characteristic variables (motivation, prior achievement, attitudes) had indirect effects (e.g., the influence of the variable “went through” or was mediated via another variable).

The importance of the Walberg et al. group’s findings cannot be overstated. Walberg’s (1981) theory of educational productivity is one of the few empirically tested theories of school learning and is based on the review and integration of over 3,000 studies (DiPerna et al., 2002).  Walberg et al. (1986) have identified key variables that effect student outcomes:  student ability/prior achievement, motivation, age/developmental level, quantity of instruction, quality of instruction, classroom climate, home environment, peer group, and exposure to mass media outside of school (Walberg, Fraser & Welch, 1986).  In the current context, the first three variables (ability, motivation, and age) reflect characteristics of the student.  The fourth and fifth variables reflect instruction (quantity and quality), and the final four variables (classroom climate, home environment, peer group, and exposure to media) represent aspects of the psychological environment (DiPerna et al., 2002).  More recently, Wang, Haertel, and Walberg (1993) organized the relevant school learning knowledge base into major construct domains (State & District Governance &Organization, Home & Community Contexts, School Demographics, Culture, Climate, Policies &Practices, Design & Delivery of Curriculum & Instruction, Classroom Practices, Learner Characteristics) and attempted to establish the relative importance of 228 variables in predicting academic domains.  Using a variety of methods, the authors concluded that psychological, instructional, and home environment characteristics (“proximal” variables) have a more significant impact on achievement than variables such as state-, district-, or school-level policy and demographics (“distal”variables).  More importantly, in the context of the current document, student characteristics (i.e., social, behavioural, motivational, affective, cognitive, metacognitive) were the set of proximal variables with the most significant impact on learner outcomes (DiPerna et al., 2002).

**Motivational Systems Theory and Academic Performance**

A direct offspring or subset of Sigmund Freud’s theory is Martin Ford’s motivational systems theory (MST). This framework focuses on the individual as the unit of analysis, but embeds the individual in the biological, social, and environmental contexts that are crucial to development. MST attempts to describe the development of the whole person-in-context, in much the same way a biologist might describe an individual plant and its relation to its immediate ecological niche, as well as the larger ecosystems in which it resides (Pintrich & Schunk, 1996). Ford proposed a simple mathematical formula that attempts to represent all these factors in one model. The formula for effective person-in-context functioning is:

*Achievement = (Motivation x Skill ) x Responsive Environment*

Biological Structure

The formula proposes that actual “achievement and competence are the results of a motivated, skilful, and biologically capable person interacting with a responsive environment” (Ford, 1992, p.70). The motivational systems theory does not attempt to replace or supersede any of the existing theories. Instead, it attempts to organize the various motivational constructs from different theories into one model. The main constructs are self-efficacy beliefs, the role of expectancy, and goal orientation. The formula suggests that in any behavior episode, there are four major prerequisites for effective functioning:

1. The person must have the motivation needed to initiate and maintain the activity until the goal directing the episode is attained.

2. The person must have the skill necessary to construct and execute a pattern of activity that will produce the desired result.

3. The person’s biological structure and functioning must be able to support the operation of the motivation and skill components.

4. The person must have the cooperation of a *responsive environment* that will facilitate progress towards the goal (Ford, 1992).

This model attempts to provide a comprehensive theory of motivation and proposes that actual achievement and competence are the results of a motivated, skilful, and biologically capable person interacting within a responsive environment.

From available research on motivation and academic performance, it became quite evident that motivational constructs do in fact impact the academic performance of students. There are studies documenting the correlation of the Scholastic Aptitude Test, American College Testing (Ward, 1993), Mathematics (Carpenter, 1993; Ward, 1993; Gist, 1996), High School Grade Point Average (Price and Kim, 1976; Carpenter, 1993) and College Entrance Examination (Price and Kim, 1976) scores and the performance of college students. Also well documented are studies in the areas of arts and sciences, psychology, philosophy, and natural sciences. Studies documenting the correlation of motivational behaviour and the performance of students in a college business environment appear to be nonexistent

**Type A Personality Theory (Friedman & Rosenman 1974)**

The Type A behaviour pattern originally described by Friedman and Rosenman (1974) has received considerable attention in the literature. According to Watson, Minzenmayer, and Bowler (2006), type A personality continues to be associated with three particular personality characteristics which includes: highly competitive attitudes toward achievement, a strong sense of time urgency, and the use of aggression and hostility to cope with a frustrating situation (Watson et al., 2006). Glass (1977) further hypothesized that these three components are all indicative of the Type A individual’s strong desire to exert control over the environment. Type A individuals generally demonstrate a more ambitious orientation to life (Watson et al., 2006). They are characterized as aggressive, competitive, always in a hurry, impatient, ambitious, forceful, work-oriented, preoccupied with deadlines, hard-working, and highly involved with their jobs (Mahajan &Rastogi, 2011; Rastogi & Dave, 2004; Watson et al., 2006). Type A individuals are action-oriented, constantly struggle for the highest amount of achievement in the least amount of time, and set higher performance standards for themselves (Nahavandi, Mizzi, & Malekzadeh, 1992). They set high career goals for themselves and putting in longer hours to achieve those (Watson et al., 2006).

# Big Five personality traits Dimensions

# In psychology, the Big Five personality traits are five broad domains or dimensions of personality that are used to describe human personality. The theory based on the Big Five factors is called the Five Factor Model (FFM) (Costa & McCrae, 1992). The Big Five factors are openness, conscientiousness, extraversion, agreeableness, and neuroticism. Beneath each global factor, a cluster of correlated and more specific primary factors are found; for example, extraversion includes such related qualities as gregariousness, assertiveness, excitement seeking, warmth, activity, and positive emotions (Matthews Deary & Whiteman, 2003).

# The Big Five model is able to account for different traits in personality without overlapping. During studies, the Big Five personality traits show consistency in interviews, self-descriptions and observations. Moreover, this five-factor structure seems to be found across a wide range of participants of different ages and of different cultures (Schacter, Gilbert & Wegner, 2011). The Big Five Model was defined by several independent sets of researchers (Digman, 1990). These researchers began by studying known personality traits and then factor-analyzing hundreds of measures of these traits (in self-report and questionnaire data, peer ratings, and objective measures from experimental settings) in order to find the underlying factors of personality (Atkinson, Atkinson, Smith, Daryl & Susan, 2000; Allport & Odbert, 1936; Cattell, Marshall & Georgiades, 1957; Tupes & Christal, 1961 & Norman, 1963).

# The Big five personality traits were the model to comprehend the relationship between personality and academic behaviours (Poropat, 2009). The initial model was advanced by Tupes and Christal (1961) but failed to reach an academic audience until the 1980s. In 1990, Digman advanced his five factor model of personality, which Goldberg extended to the highest level of organization (Goldberg, 1993). These five overarching domains have been found to contain and subsume most known personality traits and are assumed to represent the basic structure behind all personality traits (O'Connor, 2002). These five factors provide a rich conceptual framework for integrating all the research findings and theory in personality psychology.

# However, all have been found to be highly inter-correlated and factor-analytically aligned (International Personality Item Pool. 2001; Carnivez & Allen, 2005., Conn & Rieke, 1994, Cattell, 1996; Grucza & Goldberg, 2007). Because the Big Five traits are broad and comprehensive, they are not nearly as powerful in predicting and explaining actual behaviour as are the more numerous lower-level traits. Many studies have confirmed that in predicting actual behaviour the more numerous facet or primary level traits are far more effective (e.g., Mershon & Gorsuch, 1988; Paunonon & Ashton, 2001).

Each of the Big Five personality traits contains two separate, but correlated, aspects reflecting a level of personality below the broad domains but above the many facet scales that also comprise the Big Five (Mershon & Gorsuch, 1988). The aspects are labelled as follows: Volatility and Withdrawal for Neuroticism; Enthusiasm and Assertiveness for Extraversion; Intellect and Openness for Openness/Intellect; Industriousness and Orderliness for Conscientiousness; and Compassion and Politeness for Agreeableness (Mershon & Gorsuch, 1988).

### Openness to experience: Openness is a general appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience. People who are open to experience are intellectually curious, appreciative of art, and sensitive to beauty. They tend to be, when compared to closed people, more creative and more aware of their feelings. They are more likely to hold unconventional beliefs. There is a strong connection between liberal ethics and openness to experience such as support for policies endorsing racial tolerance (Boileau, 2008). Closed people prefer familiarity over novelty; they are conservative and resistant to change (McCrae & Costa, 1987).

### Conscientiousness: Conscientiousness is a tendency to show self-discipline, act dutifully, and aim for achievement against measures or outside expectations. It is related to the way in which people control, regulate, and direct their impulses. High scores on conscientiousness indicate a preference for planned rather than spontaneous behaviour (Costa & McCrae, 1992). The average level of conscientiousness rises among young adults and then declines among older adults.

### Extroversion: Extroversion is characterized by breadth of activities urgency from external activity/situations, and energy creation from external means Laney, (Marti Olsen 2002). The type A trait is marked by pronounced engagement with the external world. Extroverts enjoy interacting with people, and are often perceived as full of energy. They tend to be enthusiastic, action-oriented individuals. Introverts need less stimulation than extroverts and more time alone. This does not mean that they are unfriendly or antisocial; rather, they are reserved in social situations (Rothmann & Coetzer, 2003).

### Agreeableness: The agreeableness trait reflects individual differences in general concern for social harmony. Agreeable individuals value getting along with others. They are generally considerate, kind, generous, trusting and trustworthy, helpful, and willing to compromise their interests with others (Rothmann & Coetzer, 2003). Agreeable people also have an optimistic view of human nature. Because agreeableness is a social trait, Rothmann and Coetzer (2003) maintained that research findings indicated that one's agreeableness positively correlates with the quality of relationships with one's team members. However, the same study showed no predictive power of leadership effectiveness as evaluated by the leader's direct supervisor (Judge, & Bono 2000). Agreeableness, however, has been found to be negatively related to transactional leadership in the military. A study of Asian military units showed leaders with a high level of agreeableness to be more likely to receive a low rating for transformational leadership skills (Lim, & Ployhart 2004). Neuroticism: Neuroticism is the tendency to experience negative emotions, such as anger, anxiety, or depression. It is sometimes called emotional instability, or is reversed and referred to as emotional stability. According to Eysenck's (1967) theory of personality, neuroticism is interlinked with low tolerance for stress or aversive stimuli (Norris, Larsen, & Cacioppo 2007). 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 frustrations as hopelessly difficult. Furthermore, those who score high on neuroticism may display more skin conductance reactivity than those who score low on neuroticism (Norris, Larsen & Cacioppo, 2007).

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 persistent negative feelings. Freedom from negative feelings does not mean that low scorers experience a lot of positive feelings (Dolan, 2006). Research suggests extraversion and neuroticism are negatively correlated (Norris, Larsen, & Cacioppo 2007). In many studies, the five factors are not fully orthogonal to one another; that is, the five factors are not independent (Musek, 2007; van der Linden, teNijenhuis, & Bakker 2010). Orthogonality is viewed as desirable by some researchers because it minimizes redundancy between the dimensions. This is particularly important when the goal of a study is to provide a comprehensive description of personality with as few variables as possible.

**Trait Theories of Personality**

**Carl Jung and the Myers-Briggs:** One of the earliest trait theories was introduced by a colleague of Sigmund Freud's called Carl Jung.  Jung was never completely sold on Freud's ideas, and soon left his circle to develop his own theory. Jung's theory named Myers and Briggs - mother and daughter - developed a personality test based on Jung's temperaments called the Myers-Briggs Type Inventory, or MBTI.  It has become the most famous personality test of all time.

The traits are seen as opposites, and the first set is introversion and extraversion.  Introversion refers to a tendency to prefer the world inside oneself.  The more obvious aspects of introversion are shyness, distaste for social functions, and a love of privacy.

There is the contrast between sensing people and intuiting people.  Sensing types, as the name implies, get all their information about life from their senses.  They tend to be realistic, down-to-earth people, but they tend to see everything in rather simplistic, concrete, black-or-white terms.

Intuiting people tend to get their information from intuition.  This means that they tend to be a little out of touch with the more solid aspects of reality - a little "flakey", you might say - but may see "the big picture" behind the details better.  Intuiting people are often artistic and can be rather philosophical. Again, the majority of people are sensing, and that can make intuiters feel rather lonely and under-appreciated.  Our society tends to be distrustful of dreamers, artists, and intellectuals - but other societies may be more appreciative. Next, there's the contrast between thinkers and feelers.  Thinking people make their decisions on the basis of thinking - reasoning, logic, step-by-step problem solving. This works very well for physical problems, but can leave something to be desired when dealing with something as complex as people.

Feeling people make their decisions based on their feelings.  While this doesn't work so well when trying to fix your car or your computer, feelings are a kind of intuition that works very well when dealing with people. Half of all people are thinking and half are feeling, but the proportions differ when we start looking at gender:  The majority of men are thinkers and the majority of women are feelers.  This goes along well with old stereotypes as well as recent research:  Men tend to do better with step-by-step problem solving, especially involving mechanical things; Women tend to do better in social situations.  Some people have criticized Jung for this apparent sexism, but we should note that a good third of men are feelers, and a good third of women are thinkers, so it is not a simple "men vs. women" kind of thing.  Plus, Jung said that there is no reason to value thinking over feeling - each has its strengths and weaknesses.  Note also that feeling men may feel odd, as may thinking women.  Stereotypes do the greatest harm when they prevent individuals from being what they in fact are! The last contrast is judging versus perceiving.  Judging people tend to be more like Freud's anal retentive types - neat, orderly, hardworking, always on time, scheduling things very carefully.  College professors tend to be judging!

**Perceiving** people are more spontaneous.  They prefer to do things as the spirit moves them.  They are probably more fun than the judging types but, as you can imagine, they tend not to get things done. It often seems to us college professors that college students are all perceiving. Actually, the distribution of judging and perceiving people is pretty even - 50-50. When you take the Myers-Briggs or similar tests like the Keirsey, you get a set of four letters:  I for introvert or E for extravert, S for sensing or N for intuiting, T for thinking or F for feeling, and J for judging or P for perceiving.  I, for example, am an INFP, which is in fact quite accurate.  My wife is an ISFJ -- she is more down-to-earth and organized than I will ever be.  That's why she controls the family finances!  On the other hand, we are both introverted and feeling, which means that you are more likely to find us crying over a rented movie than out at some wild party!

**Hans Eysenck:** Hans Eysenck was the first psychologist to make this trait or temperament business into something more mathematical:  He gave long lists of adjectives to hundreds of thousands of people and used a special statistics called **factor analysis** to figure out what **factors** - trait dimensions - carry the most weight.  He took the results of this work and created a test called the Eysenck Personality Questionnaire (EPQ).

Instead of making these traits either-or, like Jung did, he saw them as dimensions.  His first trait dimension was, like Jung, **extraversion-introversion**.  But rather than say you were one or the other (an I or an E), he gave you a score on extraversion-introversion:  A low score meant you were introverted, a high score extraverted.  Of course, this meant you could be halfway in-between - as in fact most people are!

His second trait dimension he called **neuroticism**.  If you scored high on this scale, that meant you tended to be a very nervous, emotional sort of person.  While it doesn't mean you are necessarily a neurotic, it does mean you are more likely to develop neurotic problems such as phobias, obsessions, compulsions, and depression than someone who scores low.  Low neuroticism is nowadays often called **emotional stability**.

The third dimension is called **psychoticism**.  He added this later in his research, after he had gotten more data from people who were in mental institutions.  As the name implies, these are people with tendencies to psychosis, meaning that they are more likely to have problems dealing with reality.  Psychotic people sometimes have hallucinations and often have delusions such as odd beliefs about being watched, perhaps by the CIA or even by creatures from other planets.  A middle score on psychoticism might mean that you are a bit eccentric or that you take risks that other people aren't as likely to take.  A low score means that you are pretty normal in this regard. Eysenck's research gets a great deal of respect, and most psychologists see his theory as on the right track.

**Cognitive-Affective Personality System**

The cognitive-affective personality system or cognitive-affective processing system (CAPS) is a contribution to the psychology of personality proposed by [Walter Mischel](https://en.wikipedia.org/wiki/Walter_Mischel) and [Yuichi Shoda](https://en.wikipedia.org/wiki/Yuichi_Shoda) in 1995. According to the cognitive-affective model, behaviour is best predicted from a comprehensive understanding of the person, the situation, and the interaction between person and situation.[[1]](https://en.wikipedia.org/wiki/Cognitive-affective_personality_system#cite_note-rfs-1) Cognitive-affective theorists argue that behavior is not the result of some global personality trait; instead, it arises from individual's perceptions of themselves in a particular situation. However, inconsistencies in behaviour are not due solely to the situation; inconsistent behaviours reflect stable patterns of variation within the person. These stable variations in behaviour present themselves in the following framework: If A, then X; but if B, then Y. People's pattern of variability is the behavioural signature of their personality, or their stable pattern of behaving differently in various situations. According to this model, personality depends on situation variables, and consists of cognitive-affective units (all those psychological, social, and physiological aspects of people that allow them to interact with their environment in a relatively stable manner).

The authors identified five cognitive-affective units:

* Encoding strategies, or people's individualized manner of categorizing information from external stimuli;
* Competencies and self-regulatory strategies: intelligence, self-regulatory strategies, self-formulated goals, and self-produced consequences;
* Expectancies and beliefs, or people's predictions about the consequences of each of the different behavioural possibilities;
* Goals and values, which provide behaviour consistency;
* Affective responses, including emotions, feelings, and the affects accompanying physiological reactions.

The cognitive-affective processing system theory provides a comprehensive view that accounts for both the variability of behaviour and the stability in the personality system that generates it. Rather than dichotomizing personality research into the study of dispositions or processes, the theory allows the pursuit of both - structure and dynamics - as aspects of the same unitary system.

**Empirical Review**

**Personality Type and Academic Performance**

Sahinidis, Frangos, and Fragkos (2013) looked at the relationship between personality type and academic performance: the case of greek university's students. Findings of the literature on the predictive power of the Big Five personality model on academic and training success vary to a large extent, according to several researchers. One of the reasons for the diverging conclusions may be attributed to cultural factors. Data were collected from 962 university students from a population of about 3000, who completed a structured questionnaire, including the variables of the Big Five model and the Dependent Variables of student performance measured by the student Grade Point Average(GPA), and the GPA the student believed she/he deserved, as well as the percentage of the modules passed out of those required. The results were analyzed with the use of  Statistical Package for the Social Sciences (SPSS) using confirmatory factor analysis and Regression analysis. The Independent Variables include, Extraversion, Neuroticism, Openness to experiences, Agreeableness and Conscientiousness. Findings: In accordance with prior studies on personality and performance (both academic and work) Academic Performance correlated with extraversion, conscientiousness and emotional stability. Also, Perceived Academic performance related to extraversion and conscientiousness. Finally, Academic performance according to percentage of modules passed was related to age, agreeableness and conscientiousness. The Originality of the study lies in its being the first of its kind in Greece, addressing this issue at the university level. With the changes in the educational and socio political environment it is expected that the new knowledge produced by this study will be helpful to academic institution recruitment policies. Implications: There are serious implications for tertiary education administrations, who can select their prospective students based not only on their past (high-school) performance, but also on the additional information provided by the personality tests of the candidates, increasing thus the chance of their completing their studies in a timely fashion.

Arul and John (2014) examined personality type and academic achievement of secondary school students. The successful living of an individual, as a man, depends to a large extent on the academic achievement of that individual, as a student. The article attempts to find out personality type, academic achievement of secondary school students and relationship between them by selecting a sample of 300 secondary school students from Tirunelveli. Survey method was used. The collected data, using Multidimensional Personality Inventory and quarterly examination marks were analyzed statistically and the results show that the personality type of secondary students is ambient, their academic achievement is average and there exists relationship between personality type and academic achievement of secondary school students with reference to some factors and there is no relationship with regard to some other variables, suggesting that there could be some other factors that influence their academic achievement.

Mohammed (2006) studied Students’ Personality Traits and Academic Performance: A Five-Factor Model Perspective. All personality traits except extraversion positively and significantly predicted students’ overall grade. Extraversion was positively related (r =. 140) but not statistically significant. Openness (r =. 279) and Neuroticism (r = .341) were positively related to students’ academic achievement and were more important predictors of overall grade of the students than agreeableness (r = .245) and conscientiousness (.237).

Redhwan, Muhamed, Zaliha, Yuri, Muhammad, and Manuel (2015) examined a study to determine the relationship between types of personality and level of academic performance among health sciences students in Malaysia. A total number of 246 students were participated in this study. Data were entered and analyzed. The study revealed that the most dominant personality trait was openness and the least dominant was neuroticism. Spearman’s correlation analysis showed that there was correlation between cumulative grade point average and the following types of personality: openness, conscientiousness, extroversion. The result further showed that openness and conscientiousness personalities were positively associated with academic performance respectively). Openness and conscientiousness personalities were found to be positively associated with academic performance.

**Summary of Literature Review**

As stated earlier in the study, academic performances of students have created huge international concern. Hence, for a country like Nigeria improving the quality of education and investment on educational and human resources are effective factors paving the way for a country’s pervasive development. Therefore, it is remarkable that improvement of students’ academic performance is also among the basic goals of educational planning; since it’s through academic performance that students can fully actualize their talents and capabilities in line with educational goals. Ordinarily, it is postulated that because of individual differences, academic performances of students would always differ. Review of literature on personality type showed that student’s personality type impacts their academic performance. Also that personality type paves way for students with high academic ability to succeed in environments they found themselves. This poses a gap that this study intends to fill; how student’s personality can moderated and enhanced to influence them to achieve higher in academic performance. According to type A personality theory people with type A personality continues to be associated with the particular personality characteristics of highly competitive attitudes toward achievement, and a strong sense of time urgency (Watson et al., 2006). Performance theory maintained that as people learn and grow, they are empowered to create results that make a difference and that working and learning together in ways that make the world better has been a primary goal of higher education throughout the ages.

**Research Questions**

1. Will extrovert personality type significantly impact academic performance of students?

2. Will introvert personality type significantly impact academic performance of students?

**Hypotheses**

The study employed null hypotheses in answering the research questions for the study

The present study seeks to find solutions to problem of whether personality type could have impact on academic performance of secondary school students. Review on theories and some previous studies showed relationships. However, the questions raised earlier in the study are answered here. Therefore, the following hypotheses were tested in this study:

1. Extrovert personality type will not significantly impact academic performance of students

2. Introvert personality type will not significantly impact academic performance of students

**CHAPTER THREE**

**METHOD**

**Participants**

One hundred and twenty one (121) secondary school students participated in the study. Using cross sectional sampling technique, the students were selected from senior secondary three (SS 3) class from University of Nigeria, Secondary School, Enugu Campus. Participants comprised 72 male and 49 female students in the senior secondary three classes. Participant’s ages ranged from 14 years to 18 years with a mean age of 16.16 years (SD = .90). Information about participants’ demographics on age, religion, and ethnic group showed that; 2 students indicated their age to be 14 years, 32 students indicated 15 years, 33 students indicated 16 years, 51 students indicated 17 years, 2 students indicated 18 years, while 1 student failed to indicate the age. For religion, 114 students indicated their religion to be Christianity, 4 students indicated theirs to be Islam, while remaining three students indicted theirs as ATR. For ethnic group, 115 students indicated their ethnic group as Igbo, while 3 students each indicated Yoruba or Hausa.

**Instruments**

A questionnaire comprising one instrument was used in the study. The instrument is, Type A Behavior Scale by Omoluabi (1997).

**Type A Behavior Scale (Omoluabi, 1997)**

The type A behaviour scale developed by Omoluabi (1997) is a 28- item inventory designed to assess the personality trait called Type A behaviour pattern or Type A personality which is characterized by, aggressiveness, competitiveness, impatience, muscle tension, rapid speech, irritation, hostility, and anger. The items TABS have been from two main sources. The first is the 21 – item short version of the 48 – item Jenkins Activity Survey (JAS) by Jenkins, Rosenman and Friedman (1967). The second source is the 10 – item Framingham Type A scale (FTAS) by Haynes, et al. (1978). The items from the two sources were combined in order to enhance the sensitivity and the validity of the scale. The TABS was adapted for the use of professionals in Nigeria after several years of researches at restandardizing it in order to enhance its suitability and relevance for Nigerians. the instrument is measured using 4 points response option. The response options are; 1 = Never true, 2 = occasionally true, 3 = Often true, and 4 = Always true. Direct scoring is used for all the items. The Nigerian norms of 51.01 for males, 54.98 for females and 53.00 for both sexes are the basis for interpreting the scores of participants. Scores higher than the norms indicate that the participant manifests Type A behavior pattern, while scores lower than the norms indicate that the participant manifest Type B behavior pattern. The Test-retest reliability coefficients of JAS range from .60 to .70. Omegu (2017) realized Cronbach’s alpha reliability coefficient of.763

**Procedure**

The researcher introduced herself; and with a letter of identification from the Department of Sociology/Psychology, Godfrey Okoye University, obtained permission from the Management of the school. Afterwards, the researcher was given permission to administer the questionnaires to the students in their various class rooms. The administration of the questionnaire was done with the help of a teacher recruited as researcher assistant. Participants were assured that their responses will be treated with utmost confidentiality and that participation in the study is voluntary. The questionnaires were collected back after the participants had filled them correctly. Out of 130 questionnaires administered to the participants, 127 questionnaires were returned, while only 121 questionnaires were properly completed while 6 questionnaires were discarded due to improper completion. The properly completed questionnaires were used for data analysis.

**Design/statistics**

The design of the study is s between subject design (two levels of personality i.e., Extroverts vs Introverts). Analysis of data was done using Analysis of variance (ANOVA). Statistical package for the Social Sciences (SPSS) version 20 was employed in the data analyses.

**CHAPTER FOUR**

**RESULTS**

To determine whether personality would have significant impact in academic performance of students, analysis of variance (ANOVA) was conducted. Prior to analysis, data were crosschecked for abnormalities. Specifically, data were checked for outliers and errors in coding. No error was found. Afterwards, data were analyzed with the Statistical Packages for the Social Sciences (SPSS) version 20. Below is the descriptive statistics table for the independent variables.

**Table 1:** **Table of Mean (M) and standard deviation (SD) of personality**

|  |
| --- |
| **Independent Levels Mean(M) SD N**  **Variable** |
| Personality Extroverts 63.07 17.22 55  Introverts 61.40 15.93 64 |

Result of mean table as shown in table 1 shows that participants who have extrovert personality had higher mean (M = 63.07, SD = 17.22) than participants who have introvert personality (M = 61.40, SD = 15.93) on academic performance.

**Table 1:** **ANOVA summary table showing impact of personality on** **academic performance of students**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 82.503 | 1 | 82.503 | .302 | .584**NS** |
| Within Groups | 31992.920 | 117 | 273.444 |  |  |
| Total | 32075.423 | 118 |  |  |  |

Note: NS = Not Significant, P = >.05

Result of table 2 showed that the mean difference between extroverts and introverts is not statistically significant, F (1, 117) = 82.50, p>.05, therefore, the null hypothesis which states that disparities in personality trait will not significantly impact academic performance of students was accepted. This finding implies that academic performance among students is not truly a function of been extrovert personality or introvert personality.

**CHAPTER FIVE**

**Discussion**

This study examined impact of personality type on academic performance of secondary school students. The result of the finding showed that personality type did have significant impact on academic performance of secondary school students. Although table of mean indicated that participants with extrovert personality had higher mean score than participants with introvert personality with a mean difference of 1.67. The finding however implies that although an individual with extrovert personality may do better than an individual with introvert personality on academic performance; the mean difference is not significant. The hypothesis which stated that extrovert personality will not significantly impact academic performance more than introvert personality was accepted. This finding is consistent with relatively recent empirical research finding by Mohamed (2006) indicating that extraversion personality was positively related to academic performance but not statistically significant. But the finding is inconsistent with some extant previous findings (e.g Redhwan, Muhamed, Zaliha, Yuri, Muhammad, & Manuel 2015; Arul & John, 2014; Sahindis, Frangos, & Fragkos, 201) that academic performance was significantly related to dimensions of personality; that personality type of secondary school students has significant relationship with their academic achievement; and that dimensions of personality significantly predicted academic performance of students.

According to Friedman and Rosenman (1974) type A personality theory, type A individuals (extroverted persons) generally demonstrate more ambitious orientation to life; constantly struggle for the highest amount of achievement in the least amount of time, and set higher performance standards for themselves (Nahavandi, Mizzi, & Malekzadeh, 1992). Although the main finding of the present study did not give total support to the postulation of this theory, the higher mean score of extroverts indicates supports to the theory. According to Poropat (2009) in big five personality traits dimensions, the five personality traits are related to academic behaviors, with the extroverts known to be full of energy.

**Implications of the Study**

Although personality type did not significantly impact academic performance of secondary school students, the study however have some practical implications. Extroverts were found to have higher mean than introverts on academic performance. The practical implication of this is that students who are extroverts are more likely to be high achievers academically therefore training students to posses more extrovert personality characteristics makes the society to record more academic success. Hence, this study advocates for inclusion of personality disposition training in our secondary schools in order to make young persons who are known to be future leaders to posses more of extrovert personality; which has been indicated to be more closely related to higher achievement.

**Limitations of the Study**

This research work is not without limitations. The sample size for this study was limited. Larger sample size may be necessary to allow for more generalization and possible conclusions. Another limitation is the choice of using only students of University of Nigeria secondary school, Enugu Campus out of numerous secondary school students in our country. Although they are participants of interest for the study; the use of secondary school students from other locations especially other regions of our country may be efficient. The researcher also encountered difficulties accessing the students because of their busy engagements in WAEC examination.

**Suggestions for Further Study**

In view of these limitations given above, the researcher makes the following suggestions for further or future research. Future researchers interested in this dependent variable (academic performance) should look at other variables like moral reasoning, self-efficacy, Parental style and goal orientation as factors of and their link with academic performance.

The inclusion of larger sample size is necessary to give room for more generalization and conclusion. Samples sizes involving secondary school students of other geographical regions in Nigeria can be used for better generalization of findings.

**Summary and Conclusion**

Improving the quality of education and investment on educational and human resources are regarded as effective factors paving the way for a country’s pervasive development. Improvement of students’ academic performance is also among the basic goals of educational planning. And it’s through academic performance that students can fully actualize their talents and capabilities in line with educational goals. Notably, academic performance is considered as one important criteria of educational quality. Result of the study showed that extroverts possess higher on academic performance more than introverts. . Hence, there is urgent need for inclusion of personality disposition training in the education of our secondary schools in order to make younger persons posses more of extrovert personality; which has been indicated to be more closely related to higher achievement.

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**APPENDIX A**

**Consent to Participate in Research**

Good day,

My name is Ukpaka Sochima Kanyinulia; A 400 Level student of Godfrey Okoye University. I am conducting a research on impact of personality type on academic performance of students. I would be grateful for your assistance in responding to some questions.

*How much time will this take?*

This study will take about twenty minutes of your time.

*What will I be asked to do if I agree to participate in this study?*

If you agree to be in this study, you will be asked to complete a questionnaire with information about personality and spousal support in anxiety among primigravida.

*What are the risks involved in participating in this study?*

Being in this study involves minimal risks of spending some of your time completing the questionnaire.

*What are the benefits of my participation in this study?*

Your participation in this study may contribute to the understanding of link between personality type and spousal support in anxiety among primigravida.

*Can I decide not to participate? If so, are there other options?*

Yes, you can choose not to participate. There will be no negative consequence if you decide not to participate or change your mind later.

*How will the confidentiality of the research records be protected?*

The records of this study will be kept confidential. In any report we may publish, we will not include any information that will identify you. Research records will be stored securely and only the researchers will have access to the records that identify you by name. Some people may review our records in order to make sure we are doing what we are supposed to. For example, the Godfrey Okoye University Institutional Research Board and the Faculty of Management and Social Sciences Ethics Board, may review your information. If they look at our records, they will keep your information confidential.

*Whom can I contact for more information?*

If you have questions about this study, please contact Prof. Mary Gloria Njoku at 0806 561 3687. If you have question about your rights as a research participant, you may contact, Godfrey Okoye University’s Director of Research.

Statement of Consent:

I have read the above information. I have all my questions answered (check one)

I consent to be in this study. **I DO NOT** consent to be in this study

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Department of Sociology/Psychology

Faculty of Manag. and Social Sciences

Godfrey Okoye University,

Enugu.

**Dear Respondent,**

The researcher is a student of the above mentioned institution/department. She is undertaking a research as part of her project work for the award of Bachelor of Science (Bsc) in Psychology. The research is purely an academic exercise. Please kindly respond to the questionnaire as **truthfully** and **sincerely** as possible by **ticking the appropriate box** of your choice. There is no right or wrong answer. Your response will be treated with utmost confidentiality.

Thank you for your participation.

Yours sincerely,

Ukpaka Sochima Kanyinulia

**SECTION A**

**Please Give the Needed Information about Yourself, by ticking the appropriate box or filling the blank spaces.**

1. Gender: \_\_\_\_ 2. Age: \_\_\_\_\_ 3. Class -------------------- 4. Birth position \_\_\_\_\_\_ 5. Religion ---------------------- 6. Ethnic Group-------------------

**INSTRUCTION**: The following are statements which describe many people’s daily patterns of behaviour. Please **SHADE** one of the numbers in front of each statement to indicate the extent to which the statement is true or describes your typical behaviour. This is not a test, so there is no right or wrong answers. The response options are: **1 = Never True, 2 = Occasionally True, 3 = Often True, 4 = Always True.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S/N | Items | **1** | **2** | **3** | **4** |
| 1 | I hate to wait in lines | 1 | 2 | 3 | 4 |
| 2 | I often find myself “racing” against the clock to save time | 1 | 2 | 3 | 4 |
| 3 | I become upset if I think something is taking too long | 1 | 2 | 3 | 4 |
| 4 | When under pressure I tend to lose my temper | 1 | 2 | 3 | 4 |
| 5 | My friends tell me that I tend to get irritated easily | 1 | 2 | 3 | 4 |
| 6 | I seldom like to do anything unless I can make it competitive | 1 | 2 | 3 | 4 |
| 7 | When something needs to be done, I’m the first to begin even though the details may still need to be worked out | 1 | 2 | 3 | 4 |
| 8 | When I make a mistake it is usually because I’ve rushed into something without giving it enough thought and planning | 1 | 2 | 3 | 4 |
| 9 | Whenever possible I will try to do two things at once, like eating while working, or planning while driving or bathing | 1 | 2 | 3 | 4 |
| 10 | I find myself feeling guilty when I am not actively working on something | 1 | 2 | 3 | 4 |
| 11 | I find it always difficult to refrain from talking about or bringing the theme of any conversation around to those subjects which especially interest me | 1 | 2 | 3 | 4 |
| 12 | I no longer observe the more important, interesting, or lovely objects I encounter | 1 | 2 | 3 | 4 |
| 13 | I don’t have any time to spare to become the thongs worth being because I am so preoccupied with getting the things worth having | 1 | 2 | 3 | 4 |
| 14 | I attempt to schedule more and more in less and less time | 1 | 2 | 3 | 4 |
| 15 | I am always rushed | 1 | 2 | 3 | 4 |
| 16 | When meeting another aggressive, competitive person I feel a need to challenge that person | 1 | 2 | 3 | 4 |
| 17 | In conversations, I frequently clench my fist, or bang on the table, or pound one fist into the palm of another for emphasis | 1 | 2 | 3 | 4 |
| 18 | I habitually clench my jaw, grind my teeth, or jerk back the corners of my mouth exposing my teeth | 1 | 2 | 3 | 4 |
| 19 | I believe that whatever success I enjoy is due in good part to my ability to get things done faster than others | 1 | 2 | 3 | 4 |
| 20 | I find myself increasingly committed to translating and evaluating not my own but also the activities of others in terms of “numbers” | 1 | 2 | 3 | 4 |
| 21 | I explosively accentuate key words during ordinary speech | 1 | 2 | 3 | 4 |
| 22 | I utter the last few words of a sentence more rapidly than the opening words | 1 | 2 | 3 | 4 |
| 23 | I always move, walk, and eat rapidly | 1 | 2 | 3 | 4 |
| 24 | I feel an impatience with the rate at which most events take place | 1 | 2 | 3 | 4 |
| 25 | I hurry the speech of others by saying “Uh huh or Yes”, or by finishing their sentences for them | 1 | 2 | 3 | 4 |
| 26 | I become enraged when a car ahead of me runs at a pace I consider too slow | 1 | 2 | 3 | 4 |
| 27 | I find it intolerable to watch others perform tasks I know I can do faster | 1 | 2 | 3 | 4 |
| 28 | I find myself hurrying my reading or attempting to obtain condensations or summaries of truly interesting and worthwhile literature | 1 | 2 | 3 | 4 |

**APPENDIX B**

**Frequencies**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Statistics** | | | | | | |
|  | | Gender | Age | Class | Religion | Ethnic\_Group |
| N | Valid | 121 | 120 | 121 | 121 | 121 |
| Missing | 0 | 1 | 0 | 0 | 0 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Gender** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | male | 72 | 59.5 | 59.5 | 59.5 |
| female | 49 | 40.5 | 40.5 | 100.0 |
| Total | 121 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Age** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 14.00 | 2 | 1.7 | 1.7 | 1.7 |
| 15.00 | 32 | 26.4 | 26.7 | 28.3 |
| 16.00 | 33 | 27.3 | 27.5 | 55.8 |
| 17.00 | 51 | 42.1 | 42.5 | 98.3 |
| 18.00 | 2 | 1.7 | 1.7 | 100.0 |
| Total | 120 | 99.2 | 100.0 |  |
| Missing | System | 1 | .8 |  |  |
| Total | | 121 | 100.0 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Class** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 3.00 | 121 | 100.0 | 100.0 | 100.0 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Religion** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | christian | 114 | 94.2 | 94.2 | 94.2 |
| Islam | 4 | 3.3 | 3.3 | 97.5 |
| ATR | 3 | 2.5 | 2.5 | 100.0 |
| Total | 121 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ethnic\_Group** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Igbo | 115 | 95.0 | 95.0 | 95.0 |
| Yoruba | 3 | 2.5 | 2.5 | 97.5 |
| Hausa | 3 | 2.5 | 2.5 | 100.0 |
| Total | 121 | 100.0 | 100.0 |  |

**Descriptives**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Descriptive Statistics** | | | | | |
|  | N | Minimum | Maximum | Mean | Std. Deviation |
| Age | 120 | 14.00 | 18.00 | 16.1583 | .89814 |
| Valid N (listwise) | 120 |  |  |  |  |

**Frequencies**

|  |  |  |
| --- | --- | --- |
| **Statistics** | | |
| VAR00029 | | |
| N | Valid | 121 |
| Missing | 0 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **VAR00029** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1.00 | 56 | 46.3 | 46.3 | 46.3 |
| 2.00 | 65 | 53.7 | 53.7 | 100.0 |
| Total | 121 | 100.0 | 100.0 |  |

**Oneway**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Descriptives** | | | | | | | | | | |
| Aca\_perfomance | | | | | | | | | | |
|  | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum | Between- Component Variance |
| Lower Bound | Upper Bound |
| Extroverts | | 55 | 63.0684 | 17.21598 | 2.32140 | 58.4142 | 67.7225 | 31.00 | 95.20 |  |
| Introverts | | 64 | 61.3983 | 15.93034 | 1.99129 | 57.4190 | 65.3776 | 29.20 | 99.05 |  |
| Total | | 119 | 62.1702 | 16.48714 | 1.51137 | 59.1772 | 65.1631 | 29.20 | 99.05 |  |
| Model | Fixed Effects |  |  | 16.53614 | 1.51587 | 59.1681 | 65.1723 |  |  |  |
| Random Effects |  |  |  | 1.51587a | 42.9093a | 81.4311a |  |  | -3.22754 |
| a. Warning: Between-component variance is negative. It was replaced by 0.0 in computing this random effects measure. | | | | | | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | |
| Aca\_perfomance | | | |
| Levene Statistic | df1 | df2 | Sig. |
| 1.007 | 1 | 117 | .318 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | |
| Aca\_perfomance | | | | | |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 82.503 | 1 | 82.503 | .302 | .584 |
| Within Groups | 31992.920 | 117 | 273.444 |  |  |
| Total | 32075.423 | 118 |  |  |  |