Exploring the Relationship between Personality Traits and English Language Achievement of Students at the Secondary Level in Bangladesh

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Institute of Education and Research University of Dhaka December, 2017

Exploring the Relationship between Personality Traits and English Language Achievement of Students at the Secondary Level in Bangladesh

Thesis submitted in partial fulfillment of the requirements for the degree of Master of Philosophy in Education

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Institute of Education and Research University of Dhaka December, 2017 •••••

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Date of Examination: December, 2017

Certificate

I am pleased to certify that the thesis entitled Exploring the Relationship between Personality Traits and English Language Achievement of Students at the Secondary Level in Bangladesh submitted to University of Dhaka, Dhaka, Bangladesh in partial fulfillment of the requirement for the award of the Master of Philosophy in Education degree is a record of the original study done by Mr. Rajib Ahmed Faisal under my supervision and guidance. This thesis has not formed the basis for the award of any degree/diploma/associateship/ fellowship or other similar title to any candidate of any university.

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December, 2017

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I state that the thesis "Exploring the Relationship between Personality Traits and English Language Achievement of Students at the Secondary Level in Bangladesh" submitted for the degree of Master of Philosophy in Education, embodies of my own work and effort, but to whom I acknowledged and that it has been composed and done by myself alone. To my concern, it bears no earlier published material except where due references are made in this thesis itself.

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December, 2017

Exploring the Relationship between Personality Traits and English Language Achievement of Students at the Secondary Level in Bangladesh

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ABSTRACT

Exploring the Relationship between Personality Traits and English Language Achievement of Students at the Secondary Level in Bangladesh

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In this era of globalization, English has established itself as a global language which is recognized in every country. In Bangladesh, English is treated as a foreign language (EFL). Acquiring foreign language like English is an immense challenge for the students of all age when their first or second language is not English. Accomplishments are measured through performances like real life usability or academic performance. However, the question "how people learn?" leads to an immense amount of research to explore how learning occurs and how it is affected by some other factors. Factors that affect learning should be addressed to ensure a learning friendly environment, thus it is the most important question to consider.

At present, indeed, teaching and learning process have been more scientific. Consequently, having a clear notion on psychology as well as educational psychology is fortified for the people whose exertion is for children and young people include appraising their learning and emotional needs. However, many studies showed that there lies a strong relationship between personality traits and academic performance. Personality traits affect academic achievement in students, either positively or negatively.

This cross sectional quantitative study was designed with the aim of showing that how personality and individual learning styles affected the academic performance of the EFL learners of Bangladesh. A number of 536 EFL learners from secondary level were participated in this study. Participants were randomly picked from two districts (Comilla and Chittagong) of Bangladesh.

Considering the time and budget Class X was selected as a representative of secondary level. Two inventories and an achievement test were executed in the field for getting relevant data from the respondents. Both Personality and Learning Style inventory were adopted from different sources and translated in Bangla before carrying out. Achievement tests were adapted from past papers of Secondary School Certificate (S.S.C) exams prepared by the education boards of Bangladesh. However, instruments were finalized after doing a piloting in the field and the validity and reliability were statistically tested. After getting the data from the fields the responses were coded and inserted in a data template for further analysis. SPSS 23.0 were used for analyzing the data. Both descriptive and inferential statistical test were done for getting the answer of the predetermined research questions.

The study found that the relation between achievement and personality traits is strongly significant (P<0.05). Highest rate of respondent from three categories of achievements (high, moderate and low) belonged to the trait Agreeableness whereas the lowest rate from three categories of achievements belonged to the trait Neuroticism. The study revealed that, considering the achievement highest rate of respondent from three categories (high, moderate and low) were belong to the learning style Multimodal whereas the lowest rate from three categories belonged to Visual. The study also revealed that, at 95% level of CI there is strong significant relation between the academic achievements with the learning styles. Again, at the same CI level, for all the learning styles except Visual, a strong significance difference was found between male and female EFL learners with these learning styles.

The study suggested that awareness program for the parents and proper training for the teachers would be helpful for their better understanding on personality traits and learning styles of the learners and its role in academic excellences. It will also help them to play their role in personality development of the learners and contribute in enhancing the students' learning potential and their attitudes toward learning. Further study can be done for exploring the learning styles and personality traits of the teachers in both primary and secondary level of education in Bangladesh.

Dedicated to

My Beloved Parents

ABDUL MATIN

&

MILON AKTAR

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Chapter One: Introduction

1.1. Introduction

The focus of my research interest is how personality and learning style influence the academic achievement of the secondary school students of Bangladesh who learn English as a Foreign Language (EFL). As ample amount of literature suggest that there are significant relation among the traits, styles and achievement. This research fills a coffer, because, to the best of my knowledge, there exists no other published work investigating the relationship between academic achievements of EFL learners with their personality traits and learning styles.

Probably the shortest question that has an immense answer is "How do people learn?" Some learn thoughtfully whilst others process information more superficially and they differ in how they process, encode, recall, organize, and apply the information they learn (Komarraju M., Karau, Schmeck, & Avdic, 2011). Educational psychology, a branch of science, devoted to study of psychological and educational advancement of people within the context of homes, school and community helps to answer this question.

However, at present, teaching and learning process have been more scientific whereas having a clear notion on psychology as well as educational psychology is fortified for the people whose exertion is for children and young people include appraising their learning and emotional needs. Psychology contended with emotion, attitude and behavioral response patterns of an individual, which become reckoned for having their significant impact on teaching-learning process. And the particular combination of emotion, attitude and behavioral response patterns of an individual is defined as personality.

1.2. Role of Personality in Education

Among the many reasons, Cook, (1991) listed three reasons for being interested in personality; first, to gain scientific understanding, second, to access people and third, to change people. For Cook (1991), the first one is theoretical while the second and the third ones are applicable. Psychologists determined that there are five major personality traits and that everyone falls into at least one of them (Ibrahimoglu, Unaldi, Samancioglu, & Baglibel, 2013). The five major personality traits are called the Big Five Personality Traits. Goldberg (as cited in Pornsakulvanich, et al., 2012) defined the Five Personality Traits and they are popularly known as the 'Big Five' include conscientiousness, agreeableness, openness to experience, extraversion and locus of control. The acronym OCEAN is used to describe them.

Pornsakulvanich, et al., (2012) acknowledged that many studies showed that there lies a strong relationship between personality traits and academic performance. Personality traits affect academic achievement in students, either positively or negatively (Eyong, David, & Umoh, 2014). Nye et al (2013) investigated interrelations between psychological peculiarities, measured by Big Five model and their academic performances. The study found positive and significant correlation between the five personality traits (Neuroticism, agreeableness, openness, extraversion and consciousness) and students' educational achievements. Personality traits were found to be better predictors on cognitive and affective academic performance (Pornsakulvanich, et al., 2012). Lounsbury, Welsh, Gibson, & Sundstrom (2005) also found that all the personality traits were significantly correlated with cognitive ability in both the middle and high school students. Busato, Prins, Elshout, & Hamaker (2000) also found that the Big Five Personality Traits were positively correlated with academic success. These research examples prove that there is strong

connection between personality traits and academic achievement. Al-Qaisy & Khuffash (2012) said that education is a unique investment and academic achievement is a vital aspect of it. Academic achievements or academic performances of the students are always been the major concerned of the teachers, students and parents. That is why personality traits should be considered in the education arena.

1.3. Role of Learning Styles in Education

Students learn in many ways- by seeing and hearing; reflecting and acting; reasoning logically and intuitively; memorizing, visualizing and drawing analogies and building mathematical model (Felder and Silverman, 1988). Each of us develops a unique learning style (Kolb, 1981), where the term learning style refer to the methods of gathering, processing, interpreting, organizing and thinking about information (Marcy, 2001). The common learning styles are visual, aural, read/write and kinesthetic. According to Marcy (2001) a student may have a preference for one modality or be multimodal (have preferences in more than one mode).

Dunn, Beaudry and Klavas (2002) said that every person has a learning styleit's as individual as signature. They further explained that, knowing students learning styles will allow the teachers to organize their teaching styles like class room management, responding to individual's need, mobilizing or grouping students etc. Teachers can easily recognize the patterns by which the individual students learn or gather information. This research showed how important the learning styles were. Therefore, learning styles should be considered in Education arena. There is general acceptance that the manner in which individual chooses to or is inclined to approach a learning situation has an impact on performance and achievements of learning outcomes (Cassidy, 2004). But Busato, Prins, Elshout and Hamaker (2000) found no significant relation between learning styles and over all academic performances of students. Komarraju, Karau, Schmeck and Avdic (2011) found that learning styles were significantly related with GPA of the students. Pornsakulvanich et al (2012) found that learning styles were not strong predictor of academic achievement. The researchers found only active-reflective dimension significantly predicted students' GPA.

According to Fatemi and Pishghadam (2012)

"EFL learners have certain perceptions of their learning and these beliefs are under the influence of many factors such as individual differences and specifically personality traits.

Sadeghi, Kasim, Tan and Abdullah (2012) said that personality traits and learning styles are interwoven and operate on a continuum so that personality forms an important dimension of learning styles. Many researchers have found a strong connection between personality traits and learning styles. Busato et al., Furnham et al and Stoddard (as cited in Yanardonar, Kiziltepe, Seggie and Sekerler, 2014) reported significant correlation between personality traits and learning styles.

1.4. English Language Teaching and Learning

In this era of globalization, English has established itself as a global language as it able to develop a special role that is recognized in every country. English has achieved this global status as because of the countries either making it an official language or giving special priority to learning it as a foreign language (Crystal, 1997). According to Crystal (1997), an estimate of a total of 337 million people have learned English as a first language (L1) and an estimate of a total

of 235 million people have learned English as a second language (L2). English is the most frequently studied modern language across the world (Graddol, 1997). In 1990, the government of Bangladesh took a decision to introduce English as a compulsory subject from class I. It was implemented in 1992 with the new syllabus and new books. Afterwards, in Bangladesh, English has been taught as a compulsory language subject in schools, colleges and madrasahs from the primary to the tertiary level (Bachelor degree).

In Bangladesh, Secondary Education involves the education of grades 6 through 12 or the second stage of education that commences after primary education and continues up to beginning of higher education. English is a major foreign language course in every grades of secondary level of education in the country. The country has moved from long term-practiced Grammar Translation Method to Communicative Language Teaching (CLT) Method for teaching foreign language, particularly English. However, efforts in ELT seem relatively lacking and not sufficient while considering the demand of time and motion going on throughout the world. It is greatly expected that the findings of this research will give some notion for the educators to improve the scenario of the country in terms of English language teaching and learning not only in Bangladesh but also in other non-English countries.

1.5. Significance of the study

De Raad and Schouwenburg (1996) suggested that Big Five factors of Extraversion, Conscientiousness and Openness to Experience are most relevant in educational setting and each of these factors were positively correlated with academic success and contrast to Neuroticism. This was supported by Duff et al. (2004) study on the relationship between personalities, approach to learning

and academic performance measured as a composite measure, a grade point average (GPA) achieved over the course of an academic year.

According to Fatemi and Pishghadam (2012)-

"Personality characteristics and their relationship to success in different activities and tasks has been an interesting area under study in the past half century (Brown, 2007). In this domain many researchers (Busato, Prins, Elshout & Hamaker, 1999; Chamorro-Premuzic & Furnham, 2008; Chamorro-Premuzic, Furnham & Lewis, 2007; Chen & Zhang, 2011; Duff, Boyle, Dunleavy & Ferguson, 2004; Furnham, Monsen & Ahmetoglu, 2009; Karamana, Dogana, & Cobana, 2010; Lee & Klein, 2002; Müller, Palekčić, Beck, & Wanninger, 2006) have studied the relationship between the Big Five Personality Factor Theory and different variables such as personality traits, human resources, risk-taking, psychopathology, cultural diversity, age, gender, and academic achievement."

Since 1990s, there has been a growing interest on how personality correlates to the academic performance and there are a lot of studies are conducted on personality traits, learning style and English language achievement in different country context. Chamorro-Premuzic & Furnham (2003) conducted a study to investigate the relationship between personality traits and academic performance in three longitudinal studies of two British university samples and found a significant relation between personality and the academic performance.

Researchers think now it is necessary to look at personality traits and English language achievement in the context of Bangladesh. This study primarily concentrates on establishing the relationship between personality and foreign language learning as well as the fact that personality seems to be a dominant factor in achieving the educational goals for the students learning a foreign language. This study will generate a significant body of empirical data, which will lead to greater understanding of how personality traits relate to the academic achievement of EFL learner's academic achievement.

1.6. Purpose of the study

Over the past two decades, few topics, have yielded as much research and theoretical interest in contemporary psychology as the Five-Factor Model (FFM) of personality. However, FFM has been encompassed not only by personality psychologists but by researchers in clinical, industrial/organizational, development (Paunonen & Jackson, 2000) and educational psychology as well.

The present study is an attempt to explore the relationship between the personality traits, approaches to foreign language learning and academic achievement of students at the secondary level of education in Bangladesh. Teachers' and learners' lack of awareness of this probable relationship can lead to discouragement of language learners' further perseverance.

In order to understand the learning needs and define the individual learning style as well as to develop strategies for learning and teaching purposes, personality should be studied by the policy makers, teachers and parents to provide a more fruitful learning and teaching environment for the learners. Teacher educators, student teachers and current teachers of Bangladesh can gain valuable direction from the findings of this research to ameliorate their own teaching styles. Additionally, findings will reveal an opportunity to the teachers to analyze themselves about his/her role in the learning process, to reflect on their own teaching styles, giving them valuable insight that could make them even better teachers in the future. Finally, teacher development programs such as Secondary Education Quality Improvement Project (SEQIP), Teachers Quality Improvement (TQI) project and the activities of English in Action (EIA) can be revised up on the basis of the result of this research.

1.7. Statement of the Problem

Development of self-concept among the students could affect their academic achievement but it is quite worrying that at present most of them have low selfconcept and they are so passive and negative as well (Ibrahim, Yusof, Razzak, & Norshahidi, 2014). Hence, it is pertinent for educator researchers to explore the factors that can affect the student achievement. Research found that cognitive ability is not solely adequate for student to succed in academics (Chamorro-Premuzic & Furnam, 2006). This findings extended the interest of the researchers to identify the non-cognitive predictors of academic achievement, including variables related to personality dispositions. Somewhat, their concern is with the most recent theoretical approach to study of personality traits and academic achievement (Costa & McCrae, 2006). Considering this study's findings, this study sought to explore the effect of one non-cognitive predictor of academic achievement which is personality and how students having different personality traits use different learning styles for foreign language achievement at the secondary level. This research focus more on the Big Five personality traits on student's academic achievement. This research aims to present which learning styles these five personality traits use in for foreign language achievement and to show whether there is a meaningful relationship between the personality traits and the learning styles in foreign language achievement for the Bangladeshi students studying English at the secondary level.

1.8. Research questions

The following hypothesized issues will be investigated through this study -

Q1: What types of personality traits and learning styles exist among secondary level students of Bangladesh?

Q2: Is there any significant relationship between EFL learners' English language achievement with their personality traits and learning styles?

1.9. Definitions of Terms Used in Thesis

Communicative Language Teaching: This is concerned with the needs of students to communicate outside the classroom; teaching techniques reflect this in the choice of language content and materials, with emphasis on role play, pair and group work

Foreign Language: A language which is not normally used for communication in a particular society. English is a foreign language in Bangladesh; and Spanish is a foreign language in Germany.

Grammar Translation Method: A method based upon memorizing the rules and logic of a language and the practice of translation.

Learning: The internalization of rules and formulas which can be used to communicate in the L2. Krashen uses this term for formal learning in classroom.

Learning Styles: The way(s) particular learners prefer to learn a language. Some have a preference for hearing the language (auditory learners), some for seeing it written down (visual learners), some for learning it in discrete bits (analytic learners), some for experiencing it in large chunks (global or holistic or experiential learners) and many prefer to do something physical whilst experiencing the language (kinesthetic learners).

Personality Traits: The term reflects people's characteristic patterns of thoughts, feelings, and behaviors.

Second Language: The term is used to refer to a language which is not a mother tongue but which is used for certain communicative functions in a society. Thus English is a second language in Nigeria, Sri Lanka and Singapore. French is a second language in Senegal, Cameroon and Tahiti.

1.10. Research Framework

This study consists of five chapters including this Introduction. It has outlined the major themes of this research. Chapter two is the theoretical background to this study. It provides a review of previous work relevant to the present research as well. The chapter describes the personality traits, learning style and their relation with academic achievement of EFL learners and examines critical discourse analysis, as a useful theoretical framework. Chapter three presents the major themes of the study then it describes the methodology used in the research. Next, it explain the procedures of choosing subjects, the instruments and the way the data was collected. Chapter four presents the analysis of data collected from the survey. Chapter five concludes the thesis by outlining findings and implications in this research. Aspects of the contribution of this research, limitations of this research and suggestions for future research are discussed at the end of the chapter.

Chapter Two: Review of related literature and studies

2.1. Introduction

This chapter presents the related literature and studies after the thorough and in-depth search done by the researchers. This will also present the synthesis of the art, theoretical and conceptual framework to fully understand the research to be done and lastly the definition of terms for better comprehension of the study. In this chapter, the history of the Big Five is reviewed first, including the discovery of the five dimensions, research replicating and extending the model, its convergence with research in the questionnaire tradition. A number of critical issues, including how the Big Five taxonomy is structured hierarchically, how the five dimensions develop, whether they predict important life outcomes, how they combine into personality types, and whether they are descriptive or explanatory concepts. Moreover, this chapter focuses on trait, biological and genetic, and social–cognitive approaches, providing a representative account of current research activity.

2.2. Personality

We often talk about personality. Before dealing with personality, it is matter to understand three word: person, persona and personality, which are pertained to each other. The word person refers to individual whereas the word persona refers to public image and it is derived from the Latin word for Mask. Hence persona can be defined as the mask that we put on before we show ourselves to outside world. It can be just the "good impression" or be the "false impression" we exercise to manipulate people's opinion and behavior. On the other hand, the word personality pertains to what makes individual who he/she are as a person. It induces a person unlike the other one. Again, it is the aggregation of the physical, mental, emotional and social characteristics of an

individual or the personal identity as a whole. Personality is made up the characteristic patterns of thoughts, feelings, and behaviors that make a person unique (Cherry, 2016). It remains fairly consistent throughout life.

Personality of a person is something that can attract or disgust other people. A personality trait is a characteristic that is distinct to an individual. Personality can also be defined as the indispensable characteristics of the visible aspect of individual character. According to the APA, adapted from the *Encyclopedia of Psychology*, personality refers to individual difference in characteristics pattern of thinking, feeling and behaving. This set of individual differences are affected by the socio cultural development of an individual's: values, attitudes, personal memories, social relationships, habits and skills (Mischel, Shoda, & Smith, 2004). Personality is a socio-cultural concept as well which can be outlined as the set of emotional or incarnation of a collection of attractive qualities (e.g. energy, friendliness, humor etc.) or the organized pattern of behavioral characteristics of an individual that makes a person different as well as interesting or pleasant from other.

Hippocrates and Galon suggested the concept of temperament and after that the theory of individual differences taking place though there is disputations between personality and temperament researchers (Storm Paula, 2006). Besides, yet there are incertitude among the researchers from both personality and temperament regarding the biologically-based differences that define a concept of temperament or a part of personality. However, Personality is a socio-cultural concept and existence of biologically-based differences in precultural individuals indicate that they belong to temperament. Again, personality is a product of socialization (possessing sex, age, mental illness and temperament) or a psycho-social construct comprising the content

characteristics of human behavior (such as values, attitudes, habits, preferences, personal history, self-image) whereas temperament refers to dynamical features of behavior (energetic, tempo, sensitivity and emotionality-related) interact with social-cultural factors that cannot be controlled or easily changed by these factors (Rusalov, VM, 1989; Strelau, 1998; Rusalov & Trofimova, 2007; Trofimova, 2016).

Besides, confusion does exist among some psychologist who conflate personality with temperament though temperament traits are based on weak neurochemical imbalances within much more stable neurotransmitter systems whereas personality traits and features are the product of the socio-cultural development of humans and can be learned and/or changed. Hence, temperament should be studied individually rather conflated with personality.

Theory suggest that personality traits are imparted by the anatomical structures that located in brain and studies revealed that the expression of a personality trait depends on the volume of the brain cortex it is associated with (DeYoung, 2010).

In 400 BC, Hippocrates, a physician and a very acute observer, claimed that different personality types are caused by the balance of bodily fluids. The terms he developed are still sometimes used today in describing personality. Phlegmatic (or calm) people were thought to have a higher concentration of phlegm; sanguine (or optimistic) people had more blood; melancholic (or depressed) people had high levels of black bile; and irritable people had high levels of yellow bile.

Hippocrates' views about the biological basis of personality are echoed in contemporary theories that link the presence of brain chemicals such as noradrenaline and serotonin to mood and behavior (Houston, June 6, 2005) Personality could be defined as a unique and stable ways people think, feel, and behave.

2.3. Personality theory

Several theories have emerged in a bid to explain why people behave the way they do. As a branch of psychology, personality theory dates back to the beginning of the twentieth century and the psychoanalytic approach of Sigmund Freud, however, during the last century a number of different approaches have developed (Houston, June 6, 2005):

- Trait approaches (G.W. Allport, 1937; Cattell, 1943; Eysenck, 1947);
- Biological and genetic approaches (Eysenck, 1967, 1990; Plomin, 1986;
 Plomin et al., 1997);
- Phenomenological approaches (Kelly, 1955; Rogers 1951);
- Behavioural and social learning approaches (Bandura, 1971; Skinner, 1953); and
- Social-cognitive approaches (Bandura, 1986; Mischel & Shoda, 1995; Mischel, 1973).

A major theory of personality was reviewed in addition to the trait theories. The following theories were reviewed.

- Sigmund Freud's Psychoanalytic Theory
- Trait theories of Personality

2.3.1. Sigmund Freud's Psychoanalytic Theory

Psychoanalysts believe man's behavior is triggered mostly by powerful hidden forces within the personality. These forces are shaped by childhood experiences and they play an important role in energizing and directing our everyday behavior. Sigmund Freud, an Australian physician was the originator of this theory in the early nineties He says much of people's everyday behavior is motivated by unconscious forces about which they know little. In order to fully understand personality then one need to illuminate and expose what is in the unconscious. According to Freud's model of personality, there are three major components: the id, the ego and the superego, which although are separate components, interact within the individual. The id, which is the raw, untamed, unorganized, uncultured and inherited part of personality whose function is to reduce the tension created by biological drives such as hunger, sex, aggressiveness and irrational impulses. It operates according to the pleasure principle which goal is the immediate reduction of tension and maximization of pleasure. However harsh realities of life prevent the satisfaction of the demands of the pleasure principle in most cases by presenting constraints. The ego acts as buffer and helps cushion the effects of reality. The ego operates according to the reality principle in which instinctual energy is retrained in order to maintain the safety of the individual and help to integrate him into the society. The ego makes decisions controls actions and allows thinking and problem solving of a higher order than the id is capable of. The superego acts the final component, which represents rights and wrongs of society as handed down by one's parents, teachers and other important figures. It becomes part of personality when children learn rights from wrongs and continue to develop as people in the society in which they live begin to incorporate their own standards into them. These are the components of adult personality. Whenever the demands of the id or the super ego threaten to overwhelm the ego, anxiety is the result. Ego defense mechanisms such as regression, denial, repression etc.

are therefore used to reduce to reduce anxiety by distorting either thoughts or reality. Although Freud's conception faced a lot of criticisms due to dearth of scientific evidence to support it, nevertheless it had gained a lot of impact in the field of psychology.

2.3.2. Trait theories of Personality

The quest to know why people behave the way they do, has been on, it has attracted so many researches. In order to answer some of these questions, personality psychologists have developed a sophisticated model of personality known as trait theory. (Michel, 1978 in Daminabo, 2008) defined a trait as a "continuous dimension on which individual differences may be arranged quantitatively in terms of the amount of the characteristics the individual has". Chauham, 1978 in Chowdhnry (2006), defined trait as "a property within the individual that accounts for his unique but relatively stable reactions to the environment". Other personality theorists emphasize the role of biological, cognitive and environmental forces in shaping personality. Personality description is not the central goal of these theorists; instead their goal is to explain personality and behavior in terms of their underlying causes.

According to Hockenbugh and Hockenbugh (1997), trait theory of personality is one that focuses on identifying, describing and measuring individual differences. Feldman (1994) said that trait theories do not assume that some people have a trait and others do not; rather they propose that all people have certain trait, but that the degree to which the trait applies to a specific person varies and can be quantified. For instance, a person might be extremely shy, somewhat shy, or not shy at all. Hence a trait is typically described in terms of a range from one extreme to its opposite. The first attempt to identify and describe these characteristics was to develop a system to discover how many

types of individuals there are and identify each person's type. The ancient Greek psychologists divided people into four types: this was made popular by Galen, who in his own opinion also spoke of four types of individuals in Lefrancois (1983) they are sanguine (optimistic and happy). Melancholic (Unhappy, depressed). Choleric (violent tempered) the Phlegmatic (apathetic), not really moved to excesses of emotion.

2.4. Personality traits

According to American Psychological Association (APA) the study of personality focuses on two broad areas, one is, understanding individual differences in particular personality characteristics, such as sociability or irritability and the other is, understanding how the various parts of a person come together as a whole. However, many psychologists believe that personality could be best understood through examining the individual's traits (Feshbach , Weiner, & Bohart, 1996), a durable disposition to behave in a particular way in a variety of situations.

Personality traits is a durable disposition to behave in a particular way in a variety of situations. In personality psychology, the concept of trait has been used to denote consistent patterns of behavior, especially expressive or stylistic behavior (see Winter et al., 1998). Theorizing and research about traits have focused most on questions regarding the number, nature, and organization of "basic" traits, using three different strategies. In approximate order of popularity, they are (1) factor analysis and related mathematical techniques, typically used in nomothetic research to identify trait dimensions applicable to people in general; (2) rational or a priori theorizing, often involving the construction of typologies applicable to subgroups of people; and (3) the idiographic approach, which essentially rejects the attempt to identify "basic"

traits, focusing instead on an individual's unique traits or pattern of traits (Barenbaum & Winter, 2008).

Over the past few decades, interest in research on personality has been increased, hence, personality psychologists developed a measuring tool called Five Factor Personality Inventory (Five-Factor Model: FFM) by using factor analyses based on adjective-driven questions.. In the late 1980s, researchers decided to use a common language so they described personality by a fivefactor model which was referred to as the "Big Five" (Mynatt & Doherty, 2002). This model is based on adjectives which describe the personality of an individual. The five components of the Big Five which are referred to as primary traits are: Openness to Experience, Conscientiousness, Extraversion-Introversion, Agreeableness, and Neuroticism-Emotional Stability (Dörnyei, 2005). Over the past 50 years, evidence of research has been growing which started with the research of Fiske (1949) and then widespread by other researchers including Norman (1967), Goldberg (1981), and McCrae & Costa (1987) (Maghsoudi, Fatemeh, & Fatemeh, 2013). The Big Five are the ingredients that make up each individual's personality. A person might have a dash of openness, a lot of conscientiousness, an average amount of extraversion, plenty of agreeableness and almost no neuroticism at all. Or someone could be disagreeable, neurotic, introverted, conscientious and hardly open at all.

Big-Five framework is a hierarchical model of personality traits with five broad factors, which represent personality at the broadest level of abstraction. (Gosling, Rentfrow, & Swann, 2003). Each bipolar factor of Big-Five framework (e.g., Extraversion vs. Introversion) summarizes several more specific facets (e.g., Sociability), which, in turn, subsume a large number of even more specific

traits (e.g., talkative, outgoing) (Maghsoudi, Fatemeh, & Fatemeh, 2013). Hence the most individual differences in human personality can be classified into five broad, empirically derived domains.

Goldberg (as cited in Pornsakulvanich, et al., 2012) defined the Five Personality Traits. According to Goldberg, neuroticism (emotional stability) refers to those who are self-reliant, stable and adaptable to new situations. Extraversion refers to those who are cheerful, assertive, gregarious and sociable. In addition, openness to experience refers to those who are curious, unconventional and imaginative. Agreeableness indicates those people who are generous, altruistic, and warm and have tendency to be cooperative. Conscientiousness is defined as those who are dependable, organized, persistent, and goal-oriented. Here's what each trait entails:

Openness to experience: (inventive/curious vs. consistent/cautious):

Openness to experience is the personality trait of seeking new experience and intellectual pursuits. High scores may day dream a lot. 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, open to emotion, sensitive to beauty and willing to try new things. They tend to be, when compared to closed people, more creative and more aware of their feelings. They are also more likely to hold unconventional beliefs.

A particular individual, however, may have a high overall openness score and be interested in learning and exploring new cultures but have no great interest in art or poetry. There is a strong connection between liberal ethics and openness to experience such as support for policies endorsing racial tolerance (Sean, 2008). Another characteristic of the open cognitive style is a facility for Page 19 of 111

thinking in symbols and abstractions far removed from concrete experience. People with low scores on openness tend to have more conventional, traditional interests. They prefer the plain, straightforward, and obvious over the complex, ambiguous, and subtle. They may regard the arts and sciences with suspicion or view these endeavors as uninteresting. Closed people prefer familiarity over novelty; they are conservative and resistant to change (McCrae, R. R.; Costa, P.T. Jr, 1987)

Low scorers may be very down to earth. People who are high in openness enjoy art, emotion, adventure, unusual ideas, curiosity, and variety of experiencing new things whereas people low in openness are just the opposite (Atkinson, Richard, Edward, Daryl, & Susan, 2000). Openness can be abbreviate for "openness to experience new things" where a person has preference for novelty and variety. It is also reflects the degree of an individual's imagination or independence for personal preference for a variety of activities. Openness reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety a person has. It is also described as the extent to which a person is imaginative or independent, and depicts a personal preference for a variety of activities over a strict routine. Some disagreement remains about how to interpret the openness factor, which is sometimes called "intellect" rather than openness to experience. Though the changing personality is usually considered a tough process, but this trait has been shown to be subject to change in adulthood.

Conscientiousness: (efficient/organized vs. easy-going/careless):

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 behavior. The average level of conscientiousness rises among young adults and then declines among older adults.

Conscientiousness is the personality trait of being honest and hardworking. A tendency to be organized and dependable, show self-discipline, act dutifully, aim for achievement, and prefer planned rather than spontaneous behavior. People who are conscientious have a tendency to be organized and dependable, show self-discipline, act dutifully, aim for achievement, and prefer planned rather than spontaneous behavior (Atkinson, Richard, Edward, Daryl, & Susan, 2000). High scorers tend to follow rules and prefer clean homes. In contrast, people low in conscientiousness are more spontaneous and freewheeling or tend toward carelessness. Low scorers may be messy and cheat others as well. This trait has been linked to achievement in both academic and job sector.

Extraversion: (outgoing/energetic vs. solitary/reserved):

Extraversion refers to energy, positive emotions, urgency, assertiveness, sociability and the tendency to seek stimulation in the company of others, and talkativeness. Possibly the most recognizable personality trait of the Big Five whilst the individual have energy, positive emotions, urgency, assertiveness, sociability and tendency to seek stimulation in the company of others, and talkativeness (Atkinson, Richard , Edward , Daryl , & Susan , 2000). Extraversion (or positive emotionality) is the personality trait of seeking fulfillment from sources outside the self or in community. High scorers tend to be very social while low scorers prefer to work on their projects alone. They are tend to be garrulous, friendly, self-confident and cheerful in their social

interactions as well. On the other hand, people who are low in extravert need plenty of alone time or incompetent in perform social interactions.

Extraversion is characterized by breadth of activities (as opposed to depth), surgency from external activity/situations, and energy creation from external means (Laney, 2002). The trait is marked by pronounced engagement with the external world. Extraverts enjoy interacting with people, and are often perceived as full of energy. They tend to be enthusiastic, action-oriented individuals. They possess high group visibility, like to talk, and assert themselves.

Introverts have lower social engagement and energy levels than extraverts. They tend to seem quiet, low-key, deliberate, and less involved in the social world. Their lack of social involvement should not be interpreted as shyness or depression; instead they are more independent of their social world than extraverts. Introverts need less stimulation than extraverts 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: (friendly/compassionate vs. analytical/detached):

Refers to having a tendency to be compassionate, warmth, kind and cooperative rather than cold, suspicious and antagonistic towards others (Atkinson, Richard, Edward, Daryl, & Susan, 2000). Individual's trusting and helpful nature and temperedness are measured as well.

The agreeableness trait reflects individual differences in general concern for social harmony. Agreeable individual's 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, research has shown that one's agreeableness positively correlates with the quality of relationships with one's team members. Agreeableness also positively predicts transformational leadership skills. In a study conducted among 169 participants in leadership positions in a variety of professions, individuals were asked to take a personality test and have two evaluations completed by directly supervised subordinates. Leaders with high levels of agreeableness were more likely to be considered transformational rather than transactional. Although the relationship was not strong, (r=0.32, β =0.28, p<0.01) it was the strongest of the Big Five traits. However, the same study showed no predictive power of leadership effectiveness as evaluated by the leader's direct supervisor (Judge & Bono, JE, 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). Therefore, with further research organizations may be able to determine an individual's potential for performance based on their personality traits.

Disagreeable individuals place self-interest above getting along with others. They are generally unconcerned with others' well-being, and are less likely to extend themselves for other people. Sometimes their skepticism about others' motives causes them to be suspicious, unfriendly, and uncooperative.

Neuroticism: (sensitive/nervous vs. secure/confident):

Neuroticism is the tendency to experience negative emotions, such as anger, anxiety, or depression (Jeronimus, Riese, Sanderman, & Ormel, 2014). It is sometimes called emotional instability, or is reversed and referred to as emotional stability. 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. Their negative emotional reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. For instance, neuroticism is connected to a pessimistic approach toward work, confidence that work impedes personal relationships, and apparent anxiety linked with work (Fiske, Gilbert, & Lindzey, 2009). These problems in emotional regulation can diminish the ability of a person scoring high on neuroticism to think clearly, make decisions, and cope effectively with stress. Lacking contentment in one's life achievements can correlate with high neuroticism scores and increase one's likelihood of falling into clinical depression.[48] Moreover, individuals high on neuroticism tend to experience more negative life events (Jeronimus, Riese, Sanderman, & Ormel, 2014) but neuroticism also changes in response to positive and negative life experiences.

Neurotic people have tendency to experience unpleasant emotions easily, such as anger, anxiety, depression, and vulnerability (Atkinson, Richard , Edward , Daryl , & Susan , 2000). When all is going well, they find things to worry about and can easily slip into anxiety and depression. Neuroticism also refers to the degree of emotional stability and impulse control and is sometimes referred to by its low pole, "emotional stability" (Atkinson, Richard , Edward , Daryl , & Susan , 2000). In contrast, unneurotic, tend to be emotionally stable. Neurotic

people turn to tobacco and alcohol to ease their nerves which cause bad health outcomes or even die early.

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.

Neuroticism is similar but not identical to being neurotic in the Freudian sense. Some psychologists prefer to call neuroticism by the term emotional stability to differentiate it from the term neurotic in a career test.

Saucier and Goldberg (1998) have done a commendable job of identifying clusters of personality adjectives that appear, at least at face value, not to have a strong relation to any of the Big Five factors. But their analysis led them to the conclusion that almost all of those personality variables are, in fact, related to the Big Five nontrivially. However, an individual's personality can have an effect on to what extent he/she is able to achieve information (Murray & Mount, 1996) and that effect individual's academic achievement as well.

2.5. Personality and language

The discovery of the Big Five factors of personality in linguistic data has subsequently led to the structural evaluation of questionnaires and other personality instruments, instruments that may or may not be purposely designed to measure those factors. Sometimes, however, the lexical and nonlexical (i.e., questionnaire) factors have differed in morphology (Paunonen & Jackson, 2000). For example, whereas the lexical studies typically find a factor

(the smallest) called Intellect, questionnaire-based measures have tended to focus on a dimension (also the smallest) called Openness to Experience (e.g., see Costa & McCrae, 1992).

2.6. Relation between Personality and Learning

The source of the relationship between personality and learning styles is based on the Theory of Personality Types Carl Jung (1927) (Ekici, 2013). Personality traits and learning styles are so intertwined with each other that personality shapes an important aspect of learning style.

Learning strategies do not work on their own but are directly dependent on the learner's learning style and other personality variables (Cohen, 1996; Sadeghi, November, Tan & Abdullah, 2012). According to Schmeck (1988), learning styles should be considered and evaluated in the context of the overall personality factors such as introversion-extraversion, mindfulness-thoughtlessness, self-esteem, self-competence, productivity, anxiety and motivation (Schmeck, 1988). Studies in the literature (Busato, Prins, Elshout & Hamaker, 1998; Fallan, 2006; Furnham, Jackson & Miller, 1999; Kolb, 1984) showed that personality types have effects on learning styles.

Research on the role of personality in the learning process has increased rapidly especially in the last 20 years (Sadeghi et al., 2012; Threeton & Walter, 2009). For example, in a study conducted by Furnham (1992), statistically significant relationships were found between Kolb's learning style scores and psychoticism, neuroticism and extroversion (Furnham, 1992). This shows that the main factors of personality are closely related to learning styles.

In another study, Highhouse & Doverspike (1987) examined the relationship between college students' learning styles and personality types. In this study, Kolb's learning styles scale was used, and a significant relationship between learning styles and personality types was found (Highhouse & Doverspike, 1987). Furnham and his colleagues (1999) have also addressed the relationship between personality and learning styles. In this study, learning styles are classified as, active (flexible, openminded, optimistic), thoughtful (careful, thorough, thought-filled), theorist (logical, rational, objective) and pragmatic (practical, realistic, system), and the relationship between certain personality types and learning styles is also examined. The results of this study indicated that extroverted personalities have active, persistent and a relatively honest personality; and thoughtful, introspective and theorist personality types appeared to have low levels of psychosis. On the other hand, participants with pragmatic learning styles were found to be extroverted. As a result, a strong correlation was observed between personality types and learning styles (Furnham et al., 1999).

In another study, a positive relationship between open and extroverted personality traits and active-minded and responsive-intuitively learning styles was found. Specifically, a positive interdependent relationship was found between the extraversion and active-cautiousness and openness and sensitive-intuitive features (Sottilare, 2006).

In another study conducted by Rashid (2012), the participants were divided into four groups based on their learning styles as accommodating, converging, assimilating and diverging and the relationship between assimilating learning style and personality traits was examined. In the study, it was concluded that agreeable personality trait was associated with assimilating type of learning

style (Rashid et al., 2012). Kamarulzaman (2012) examined the relationship between personality-learning styles in the related literature and came to the conclusion that personality has effects on learning styles. He stated that extroverted individuals are particularly suitable for accommodating learning style.

Relationships between Honey and Mumford's "Learning Styles Scale" (LSQ) and Whetten and Cameron's "Cognitive Style Scale" (CST), and Kolb's "Learning Styles Inventory" (LSI) in relation with extrovert and neurotic personality traits were also detected. A positive relationship between Kolb's converger and accommodator learning styles and extraversion personality trait was observed. In addition, neuroticism was found to be negatively correlated with learning styles like assimilation and accommodation (Busato et al., 1998). Furham (1992) examined the relationship between Kolb's Learning Styles Inventory (LSI) and the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) and detected statistically significant relationships between LSI and psychotism, neuroticism and extraversion.

These results revealed that the dimensions of LSI are directly related to the basic personality traits. Kolb's dimensions themselves are derived in part from Jung's theory of psychological types and partly from the Myers–Briggs Type Indicator (MBTI) which is one of the most widely used scales. Accordingly, Furham (1996) found statistically significant relationships between the big-five personality traits and MBTI personality factors (NEO Personality Inventory, Costa & McCrae, 1995). Other similar studies also show an overlap of the relationships between learning styles and personality traits. For example, it has been indicated that personality traits counts for a range of variance from 20% to 45%, in terms of learning behaviors. Accordingly, while openness affects

deep learning, being focused on learning achievement is associated with responsibility (Chamorro-Premuzic & Furnham, 2008; De Raad & Schouwenburg, 1998).

2.7. Personality and academic achievement

Academic achievement is a major issue among students, teachers, parents, school administrators, and the community at large. Attempts have been made by researchers to unravel the complexities surrounding academic achievement. Psychologists have put forward a lot of reasons why these disparities in achievement exist. Many psychologists have consistently attempted to identify the major predictors of individual academic achievement. Factors such as intelligence, self concept, gender, study habit, maturation, home background, amongst others, just to mention a few, have been extensively explored as being responsible for academic achievement, especially in secondary school students. Other factors that have been researched into in the past include: child rearing patterns, peer group influence, socio-economic background and learning environment. Another major factor that is believed to be responsible for academic achievement in students is their personality traits. Traits Theorists have tried to identify the major traits that characterize personality. Notable among these are Sigmund Freud in the early 1900's, Gordon All port (1961), Cattell (1967), Hans Eysenck (1985) Feldman (1994), McCrae and Costa (1987) and a host of others. Personality has been defined in many ways by many psychologists who wrote on the concept.

Pornsakulvanich, et al., (2012) acknowledged that many studies showed that there lies a strong relationship between personality traits and academic performance. Poropat, Trapmann, O' Connor et al (as cited in Nye, Orel, & Kochergina, 2013)showed that academic success of university students is

significantly related with two Big Five Traits: conscientious and openness to experience. Though Hakimi, et al (2011) found that neuroticism and extraversion are two significant predictors and both of them have negative influence on academic performance. Furnham, et al (2009) showed the significance of agreeableness for academic performance along with neuroticism and extraversion. Nye et al (2013) investigated interrelations between psychological peculiarities, measured by Big Five model and their academic performances. The study found positive and significant correlation between the five personality traits (Neuroticism, agreeableness, openness, extraversion and consciousness) and students' educational achievements. The researchers also found a weak relation between personality traits and educational achievements in consider of gender. This study found that, the correlation between neuroticism/agreeableness and academic performances remain significant only for women subsamples. On the other hand, positive correlation between openness to experience and academic performance and a negative relationship between extraversion and academic performance were found in the study. Personality traits were found to be better predictors on cognitive and affective academic performance (Pornsakulvanich, et al., 2012) The researchers also found that among five personality traits conscientiousness, openness and agreeableness were the main predictors of GPA, whereas four personality traits including conscientiousness, openness, agreeableness and neuroticism were the contributors of course satisfaction. But according to Nye et al (2013) personality significantly did not influenced students GPA. Lounsbury, Welsh, Gibson, & Sundstrom (2005) also found that all the personality traits were significantly correlated with cognitive ability in both the middle and high school students. Busato, Prins, Elshout, & Hamaker (2000) also found that the Big Five Personality Traits were positively correlated with academic success. These research examples prove that there is strong connection between personality traits and academic achievement. Al-Qaisy & Khuffash (2012) said that education is a unique investment and academic achievement is a vital aspect of it. Academic achievements or academic performances of the students are always been the major concerned of the teachers, students and the parents. That is why personality traits should be considered in education arena.

Personality traits also influence academic achievement. For instance, conscientiousness has consistently emerged as a stable predictor of exam performance (Chamorro-Premuzic & Furnham, 2003) and GPA (Conard, 2006). Combinations of Big Five traits have also been found to predict various educational outcomes. Namely, conscientiousness and openness predict course performance (Paunonen & Ashton, 2001), and agreeableness, conscientiousness, and openness predict overall academic performance (Farsides & Woodfield, 2003; Poropat, 2009). Extraversion, openness, and conscientiousness have also been found to predict GPA, especially when students apply previously accumulated knowledge to real life settings (Lievens, Ones, & Dilchert, 2009). In contrast, neuroticism or emotional instability is negatively associated with academic achievement (Chamorro-Premuzic & Furnham, 2003). In addition to the Big Five, other traits such as grit or perseverance (Duckworth, Peterson, Matthews, & Kelly, 2007) are also predictive of academic performance. Although these findings confirm the general significance of personality traits, there remains a need to examine other individual level factors such as students' learning styles (Komarraju M., Karau, Schmeck, & Avdic, 2011).

Personality plays an important role that affects academic achievement. A study conducted with 308 undergraduates who completed the Five Factor Inventory Processes and offered their GPA suggested that conscientiousness and

agreeableness have a positive relationship with all types of learning styles (synthesis analysis, methodical study, fact retention, and elaborative processing), whereas neuroticism has an inverse relationship with them all. Moreover, extraversion and openness were proportional to elaborative processing. The Big Five personality traits accounted for 14% of the variance in GPA, suggesting that personality traits make great contributions to academic performance. Furthermore, reflective learning styles (synthesis-analysis and elaborative processing) were able to mediate the relationship between openness and GPA. These results indicate that intellectual curiousness has significant enhancement in academic performance if students can combine their scholarly interest with thoughtful information processing (Komarraju M., Karau, Schmeck, & Avdic, 2011).

Studies conducted on college students have concluded that hope, which is linked to agreeableness, has a positive effect on psychological well-being. Individuals high in neurotic tendencies are less likely to display hopeful tendencies and are negatively associated with well-being (Singh, 2012). Personality can sometimes be flexible and measuring the big five personality for individuals as they enter certain stages of life may predict their educational identity. Recent studies have suggested the likelihood of an individual's personality affecting their educational identity (Klimstra, 2012).

2.8. Learning Styles

Learning strategies can be define as which students use during learning and also the behavior and thoughts for influencing the process of encoding information. Again, it is a plan that requires the knowledge of a variety of and effectively fulfill them. It is a techniques which transfer the senses to short-and

long-term memory and stimulate these senses in long-term memory of the individuals while learning.

Cano, Garten and Raven (as cited in Kamarulzaman, 2012) defined learning styles as the process that the learners use to sort and process information. Tabrizi, Alizadeh and Koshavar (2013) defined that Learning styles are beliefs, preferences and behaviors that can be used by people to help their learning in unique position. The researchers also added that learning styles are not individual's abilities but the preference of a person in receiving information. Kolb (as cited in Tabrizi et al., 2013) described that learning styles are formed under the influence of heredity factors, prior experiences of life and the environment needs rooted in the neural and personality structures. Riding and Cheema (as cited in Cassidy, 2004) defined that learning style is adopted to reflect a concern with the application of cognitive style in a learning situation.

Kolb (1981) said that each of us develops a unique learning style. He identified four learning styles and named them- The Converger (likes active experimentation), The Diverger (likes reflective observation), The Assimilator (likes inductive reasoning and theoretical models) and The Accommodator (likes doing new things). Students learn in many ways- by seeing and hearing; reflecting and acting; reasoning logically and intuitively; memorizing, visualizing and drawing analogies and building mathematical model (Felder and Silverman, 1988). Felder and Solomon (2000) classified four dimensions of learning styles very specifically. The dimensions are- 1) sensing-intuitive 2) visual-verbal 3) active-reflective and 4) sequential-global. Felder and Silverman added that Sensing learners like to observe facts, gather data and prefer to solve problem using standard methods whereas Intuitive learners are innovative, prefer theories and dislike repetition. Visual learners prefer Visual acts like

diagrams, pictures, flowcharts whereas Verbal learners remember best when they hear and like written or spoken explanation. Active learners like experimentation to try things out, like to work in groups, and dislike being passive but Reflective learners prefer to spend time examining and thinking, like to work alone. Sequential learners learn through linear steps whereas Global learners follow holistic thinking.

The concept of learning styles has been explored by various educationist, psychologists and researchers. There are many models of learning styles in education, for instance Howard Gardners Multiple intelligences Theory(1999), David Kolb's Learning styles, Albert Bandura's Theory (1977), Carl Jung's Theory.

There are many methods available for assessing learning styles, with each method offering a distinctly different view of learning style preferences. The method used in this study defines the preference in learning style based on the sensory modality in which a student prefers to take in new information. The three major sensory modalities are defined by the neural system that is preferred when receiving information: visual (V), aural (A), and kinesthetic (K), collectively known as VAK. In other words, VAK categorizes student learning based on the sensory preference of the individual. This classification system was recently expanded by Fleming to VARK to include another category: readwrite (R, a mixed sensory modality that is not assessed under VAK).

Fleming (2001) defines learning style as "an individual's characteristics and preferred ways of gathering, organizing, and thinking about information.

VARK is in the category of instructional preference because it deals with

perceptual modes. VARK stands for Visual (V), Aural (A), Read/Write (R) and Kinesthetic (K).

According to Fleming (2001) Visual learners prefer maps, charts, graphs, diagrams, highlighters, different colors, pictures, word pictures, and different spatial arrangements. Aural learners like to explain new ideas to others, discuss topics with other students and their teachers, use a tape recorder, attend lectures, and discussion groups use jokes. Read/Write learners prefer lists, essays, reports, textbooks, definitions, printed handouts, readings, web-pages and taking notes. Kinesthetic learners like field trips, trial and error, doing things to understand them, laboratories, recipes and solutions to problems, hands-on approaches, using their senses and collections and samples. And therefore the term "learning styles" speaks to the understanding that every student learns differently. Technically, an individual's learning style refers to the preferential way in which the student absorbs processes, comprehends and retains information.

The VARK model acknowledges that students have different approaches to how they process information, referred to as "preferred learning modes". Students' preferred learning modes have significant influence on their behavior and learning. Students' preferred learning modes should be matched with appropriate learning strategies. Information that is accessed through students' use of their modality preferences shows an increase in their levels of comprehension, motivation and meta-cognition. By understanding what kind of learner you and/or your students are, you can now gain a better perspective on how to implement these learning styles into your lesson plans and study techniques.

According to the VARK learning styles theory, every individual is predisposed to a preferred learning style, instinctively favoring one of the four styles that the theory describes. Some students process information most effectively by using a visual learning style, just as others rely more heavily on either an auditory style, read/write learning style or kinesthetic style of learning.

Identifying students as visual, auditory, reading/writing or kinesthetic learners, and aligning the overall curriculum with these learning styles, will prove to be beneficial for the entire classroom. Allowing students to access information the way they are comfortable with will increase their academic confidence.

2.9. Learning style and personality traits

Sadeghi, Kasim, Tan and Abdullah (2012) said that personality traits and learning styles are interwoven and operate on a continuum so that personality forms an important dimension of learning styles. Many researchers have found a strong connection between personality traits and learning styles. Busato et al., Furnham et al and Stoddard (as cited in Yanardonar, Kiziltepe, Seggie and Sekerler, 2014) reported significant correlation between personality traits and learning styles. Komarraju et al., (2011) investigated the correlation between personality traits, learning styles and academic performance.

2.10. Learning style and EFL learning

Learning styles is a term used to refer to the methods of gathering, processing, interpreting, organizing and thinking about information. Students have different learning styles, which is the reason for the diversity seen in classrooms in regards to how students acquire foreign language such as English. In Bangladesh, students come from a cultural background whose educational

system emphasizes rote memorization. They have highly developed memory strategies, but less developed comprehension strategies for problem-solving. The characteristics of the Bangladeshi teaching and learning styles are memorizing and modeling. The traditional classroom English teaching techniques often leave students struggling with concepts and unable to make progress. Many students feel frustrated with their English language acquisition.

However, students as well as EFL language learners do not take in new information in the same way. Just as we are different in the way we look, act and feel, we are also different in the way we learn. Each of us has a learning style. Many EFL teachers experience student resistance when they introduce an instructional activity in the classroom. Some students want more opportunities to participate in free conversation, expressing their wishes towards a more communicatively oriented approach. On the other hand, there are those who would prefer more emphasis on grammar teaching. It is thought that the teacher, in making decisions regarding the type of activities to conduct in a language classroom, should take into account such learner diversities. Learning style is a consistent way of functioning that reflects the underlying causes of learning behavior. Learning styles are internally based characteristics of individuals for the intake or understanding of new information. All learners have individual attributes relating to their learning processes. Some students may rely heavily on visual presentation; others may prefer spoken language; still others may respond better to movement activities. It is evident that students learn differently and at different paces because of their biological and psychological differences. Therefore, EFL teachers need to recognize the conflict and difference between teaching and learning to enhance the learning process. An English teaching that explicitly combines different learning styles and strategic vocabulary teaching activities with everyday classroom language instruction can help a teacher to ease the burden. Thus the classroom teacher can perform a key role in this effort as learner trainer. Students can learn English effectively and efficiently.

2.11. Learning style and academic performance

There is general acceptance that the manner in which individual chooses to or is inclined to approach a learning situation has an impact of performance and achievements of learning outcomes (Cassidy, 2004). But Busato, Prins, Elshout and Hamaker (2000) found no significant relation between learning styles and over all academic performances of students. Komarraju, Karau, Schmeck and Avdic (2011) found that learning styles were significantly related with GPA of the students. Pornsakulvanich et al (2012) found that learning styles were not strong predictor of academic achievement. The researchers found only active-reflective dimension significantly predicted students' GPA.

Dunn, Beaudry and Klavas (2002) said that every person has a learning styleit's as individual as signature. They further explained that, knowing students learning styles will allow the teachers to organize their teaching styles like class room managing, responding to individual's need, mobilizing or grouping students etc. The teachers can easily recognize the patterns by which the individual students learn or gather information. This research showed that how important the learning styles were. Learning styles should be considered in Education arena.

According to Fatemi and Pishghadam (2012)

"EFL learners have certain perceptions of their learning and these beliefs are under the influence of many factors such as individual differences and specifically personality traits. A number of different personality theories have emerged to explain different aspects of personality whereas some are focused on explaining how personality develops while others are concerned with individual differences in personality.

2.12. Researcher's Opinion

There is a close connection between the personality of the student, the learning style and the strategy that the student develops in order to learn and flourish their academic achievement. An individual's personality can have an effect on to what extent he/she is able to achieve information (Murray and Mount, 1996). However, there has been an increasing interest in the big five personality traits and the role they play as regards academic achievement of students. Of particular interest is the role that these traits play in the academic achievement of secondary school students.

Moreover, personality should be studied by the language teachers to provide an elated teaching-learning environment through developing strategies for well-disposed teaching-learning process. Previous literature shows that personality is significantly related to the academic performance. Notably, there are ample studies to indicate the relationship between personality traits, learning styles and academic success. There are numerous reasons for the language teachers to understand the logic of studying the learning styles. Everyone has a learning style. Our style of learning, if accommodated, can result in improved attitudes toward learning and an increase in productivity, academic achievement, and creativity. In addition, the teachers should develop their own teaching styles and strategies in a way to meet the various needs of the learners.

Chapter Three: Methodology of the Study

3.1.Introduction

Methodology refers to a systematic, theoretical analysis of the methods applied to a field of study, which comprises of the theoretical analysis of the body of methods and principles associated with a branch of knowledge as well as the paradigm, theoretical model, phases and quantitative or qualitative techniques (Irny & Rose, 2005). In short, research methodology refers to the way the research has been designed. Moreover, it gives a justification for the approach a researcher takes and demonstrates that the researcher is not just doing things because it is convenient, cheap, or because they don't want to do anything else (Methodology, n.d.). The following sections of this study will describe the samples used, the instruments utilized, and the data analysis procedures.

3.2.Study Design

A descriptive research design was adopted for this study, where descriptive research includes surveys and fact findings enquires of different kinds (Kothari, 2006). Descriptive research can be either quantitative or qualitative therefore observational and survey methods are frequently used to collect descriptive data (Malhotra, 2008). Survey method was used for this study to collect primary data from the secondary level teachers.

3.3.Study Area:

On the basis of availability of time, financial supports and communication system the Researcher selected two district from Chittagong divisions for the study to fulfill its purpose.

3.4.Study period

The overall study was conducted within twelve months starting from January 2015 and ending in June 2017.

3.5. Rationale for Quantitative Approach

Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon (Muijs, 2010). In this study, the researcher wanted to investigate the relationship between personality traits and learning styles with English language achievement of students from secondary level of education in Bangladesh. Methods of data collection and analysis in research studies conducted on personality are more quantitative in nature rather than qualitative. Quantitative research approach has been chosen by the researcher for this study consequently. To attain the objectives, the researcher applied a variety of data collection tactics and finally collected data was analyzed and presented in chapter four.

3.6.Research Design

Research is a systematic way of data collection by a researcher so as to answer a well-defined problem. At the same time, conducting research differs from informal gathering of information in that researchers collect data systematically, and the research is systematic if data are collected in strict accordance with a predetermined plan or design (Chow, 2002). Non-experimental, experimental, and quasi-experimental, these three methods are available to psychological researchers, and choosing the research methods depends on the meta-theoretical assumptions and theoretical foundation of the research. However, one who use non-experimental methods have to decide on a research plan and to choose the measuring instrument such as interviewing, observation and the construction and use of psychological tests and measures. (Chow, 2002). Likewise, this study is a quantitative research followed the

correlational study designs. To attain the goal of this study, the researcher followed the steeps shown in Figure 3.1 which can be considered the research design of this study.

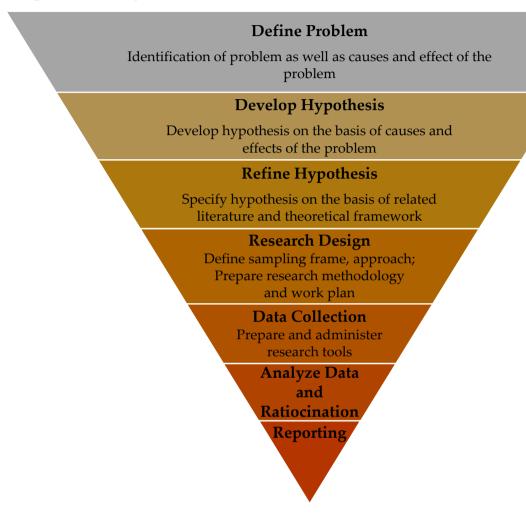


Figure 3.1.: Research design

3.7.Population

In the present research, the researcher intendeds to see the relation between personality traits and students English learning achievement at the secondary level of general educational streams of Bangladesh. Therefore, students of secondary level were considered as the population of this study. According to Bangladesh Bureau of Educational Information and Statistics-BANBEIS (2012) there are 19208 government and non-government secondary schools in Bangladesh where 7937235 students were enrolled in different

grades of secondary level. To collect data purposively, schools as well as students from different geographical location were selected.

3.8.The Participants

According to Best (2005), some populations are so large that their characteristics cannot be measured; before the measurement could be completed, the population would have changed. Thus researcher selected a sample that was to represent the population. In statistics, sampling is a procedure, concerned with the selection of a subset of individuals or elements whereby drawn from a sampling frame that represents an actual list of the possible elements in the population (Shaughnessy, Zechmeiste, & Zechmeister, 2014).

3.8.1. Sampling

The study followed the simple random sampling techniques

3.8.2. *Sample*

The overall study was conducted among secondary students of Bangladesh. Thus all the secondary students are in the sampling frame of the study. But with the limitations of time, budget and manpower the researcher need to be tentative in taking representative part from the total sum of students. The sample of this study were selected using purposive sampling technique. Class X was selected purposively to represent the secondary level. Two schools from each area were selected purposively. The students of Class X from these schools were the sample for this study.

3.6.1.2. Sample size and sampling technique

By using $\mathbf{n} = \mathbf{Z}^2 \mathbf{p} \mathbf{q} / \mathbf{d}^2$ formula of sample size was calculated. Using this formula the total of 384 students were selected by taking 50% prevalence (because the researcher found no reliable source for prevalence for secondary students

personality traits or learning styles from Bangladesh). By adding 40% non-respondent error the total respondent were (384+154) 538 and finally after rounding up the sample were 536. Finally, 536 students from selected four schools were participated chosen as respondents for this study and they were selected purposively during data collection.

3.9.Instruments

For a good thesis, a good tool is required for gathering of relevant data from field work. In order to collect data regarding the purpose of this study, the following two types of data collection- instruments were used:

3.9.1. Personality inventory

In psychology, a psychological test or measure may be viewed as a set of selfreport questions or items whose responses are then scored and aggregated in some way to obtain a composite score and it is to be noted that, in many psychological measures for instance attitudinal measures there are not "correct" or "incorrect" responses (Zumbo, Gelin, & Hubley, 2002). Again, a personality test or inventory describes aspects of a person's character that remain stable across situations by measuring non-cognitive traits such as achievement motivation, conscientiousness or interests (Standardized tests: Personality, 2014). However, in the history of personality research, most personality measures has been based on questionnaires with scales designed for specific practical applications or to measure constructs derived from personality theory (Goldbberg, 1971). However, the most important contribution of the questionnaire tradition was theoretical. Again, lexical approach was limited to an analysis of personality traits represented in ordinary language (McCrae & John, 1992). In this study, the Big Five Inventory (BFI) was used to find out about the personality traits of EFL learners for a robust measure of personality traits established by previous researchers John

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and Srivastava (1999). The BFI was adopted from John, Naumann, & Soto, (2008) (Appendix-B) consist of 46 items designed to assess the big five personality traits. It has 8 items for Extraversion and neuroticism, 9 for agreeableness and conscientiousness, 10 for openness domains in the form of statements. These statements are in the first person (for self-report) and scored according to a Likert-type scale of five points (strongly agree, agree, neutral, disagree and strongly disagree).

3.9.2. *Learning style inventory*

There are a number of learning styles inventory and for this study the VARK© inventory was used which was developed in 1987 by Neil D. Fleming, an educator for more than forty years (Appendix-D). The VARK® inventory was developed in an effort to improve faculty development and to help students become better learners. VARK®, an acronym for visual, aural, read/write and kinesthetic preference modalities, is a questionnaire that determines a person's sensory modality preferences. For this study, The VARK questionnaire version 7.1 has been used as a data collection tool.

The inventory is a self-reported questionnaire consisting of 16 multiple-choices questions having four options for each question where each option indicates a specific learning style. At first the inventory was translated in Bangla and for translation Back translation method was used. Going through a piloting process the validity and reliability of the inventory were measured.

3.9.3. Achievement test

Achievement tests is designed to efficiently measure to what extent a person has achieved or acquired something or knowledge and/or skill, certain information, or mastered certain skills - usually as a result of planned instruction (e.g. classroom instruction) or training, which is commonly used to Page 45 of 111

determine a person's academic level (Standardized tests: Mental ability, 2014). Moreover, an achievement test focuses specifically on how much a person knows about a specific topic or area such as math, geography, or science whereas an aptitude test measures a person's ability to learn something. Level of English language achievement of the students has been confirmed through an achievement test, which is a paper-and-pencil tests in pattern. The test was adapted from the S.S.C. examination, 2013 of Dhaka Education Board (See in Appendix-E). Moreover, the test was finalized with commendation of linguistics experts. The test comprise of 10 items including two free hand writing items. The test was marked out of 60. In addition, to measure the significance of the test, the researcher also collected the student's most recent marks from their half yearly school exams of both English papers.

3.10. Validation and reliability of the research instruments

To ensure the validity and reliability of the instruments in the preliminary stage, the following tasks were conducted.

First, the Big Five Inventory and VARK questionnaire were translated into Bangla (Appendix-A and Appendix-C respectively). For the purposes of this study, an expert who had proven experience in English translation for at least five years (See the names of the expert in Appendix-F.) was asked to consider the difficulty and suitability of the inventory text, as well as the language used. Based on her feedback, some Bangla wording were adjusted to help clarify the meaning of the inventory.

Second, both English I and II question papers of Dhaka Board S.S.C. examination, 2013 were collected and adapted. Then English experts were asked to consider the face validity, content validity and the difficulty and

suitability of the achievement test. For this task, experts were defined as qualified linguistics expert, one of them had taught English as compulsory subject in IER and another one had at least five years' experience of teaching English at secondary level. (See the names of the experts in Appendix-F).

Third, to test the validity and reliability of the instruments and the feasibility of research design and data collection procedures, a pilot project was launched in two schools from Dhaka district. Forty students of Class X, twenty from each school, who learn English as a compulsory subject under national curriculum, agreed to take part in the pilot project. They were requested to complete each questionnaire and task and to give feedback on the brevity and clarity of the wording and instructions as well as the appropriateness of the time requirement. These students were not included among the research subjects.

For most psychological research, statistics is an essential research tool whose utility differs in different types of research, however, Psychometricians use correlation to establish the validity and reliability of psychometric tests (Chow, 2002). Cronbach's α coefficient was used to examine the reliability of this inventory and the reported alpha values of this study for each subscale's internal consistency were as follows: .81 (extraversion), .76 (agreeableness), .82 (conscientiousness), .85 (neuroticism) and .73 (openness). The reliability of the achievement was assessed using Cronbach's alpha coefficient in SPSS 23 for Windows and the correlation was 0.72. The reliability of the learning style inventory was assessed using Cronbach's alpha coefficient in SPSS 23 for Windows and the correlation was 0.86. Therefore, the instruments were deemed consistent and reliable.

3.11. Coding and Categorizing the Data

Data collected from BFI and achievement test were processed into separate

spreadsheets and analyzed using SPSS version 20 for Windows.

To score the BFI, first, all negatively-keyed items were reversely scored

according to the instruction from the inventory developer:

Extraversion: 6, 21, 31

Agreeableness: 2, 12, 27, 37

Conscientiousness: 8, 18, 23, 43

Neuroticism: 9, 24, 34

Openness: 35, 41

To recode these items, the researcher subtracted his score for all reverse-scored

items from 6. For example, if initial score was 5, compute 6 minus 5 and the

recoded score is 1. That is, a score of 1 becomes 5, 2 becomes 4, 3 remains 3, 4

becomes 2, and 5 becomes 1.

After that, scale scores were created by averaging the following items for each

B5 domain (where R indicates using the reverse-scored item).

Extraversion: 1, 6R 11, 16, 21R, 26, 31R, 36

Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42

Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R

Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39

Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44

3.12. Procedure

To ensure that the different data collection approaches would not affect each

other, a sequence of approaches was determined. First, a consent letter duly

signed by the honorable supervisor of this study was forwarded to the

respected schools authority for seeking permission to collect data for this study.

The researcher informed them of all aspects of the research project, i.e., its

purposes, usefulness, nature, methods and the anticipated application of the

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results through the consent letter. Prior to starting the questionnaire and attempting the achievement test each students were reminded that their participation in the study is voluntary, that all of their responses would be anonymous and that they have the right not to answer any question they felt uncomfortable in answering. All of the students were informed that they could withdraw their participation at any time. To create a suitable atmosphere for taking test, the sitting arrangement was rearranged like the examination hall. After that, the researcher distributed the BFI inventory and the first five minutes was spent on making informants feel relaxed and giving instructions on how to respond the BFI. Respondent were given 25 minutes to respond to BFI after which the researcher collected it from them. Second, the achievement test papers designed so that answered could be written in them were distributed among the respondents. For this task, the respondent were given 90 minutes.

3.13. Data analysis

Raw data from field were edited and coded perfectly. In analyzing the data, scores from the questionnaire and the test had been statistically interpreted for mean, standard deviation, correlation and presented in tables with analysis. Ztest (when sample size is higher than 30) was used to determine whether the differences between two categories are significant or not. The data was analyzed with the help of SPSS, MS Excel and manual methods.

3.14. Delimitations of the study

The limitations of the study are-

a. According to BANBEIS (2015) there are 20197 secondary schools in Bangladesh and only 14 of them are taken purposively for the study to make this study researchable.

- b. The total sample size was only 536 (170 boys and 366 girls) but in such a study sample size should be larger in proportion to the vast population.
- c. Only mainstream secondary schools were chosen for the proposed study. Other junior secondary level institution such as Madrasah, English medium and vocational institutions were not taken under the preview of this study.
- d. Being an outsider may also limit what is revealed to the researcher.

3.15. Ethical Considerations

The following ethical decisive factors were taken under consideration throughout the research-

- i. Through approaches used in this research, people's lives were interrupted so permission for the study was sought from the proper authority at various levels.
- ii. The researcher was liable for the confidentiality of data and to ensure that the data will not be used for any purpose other than that which was agreed to by the participants.
- iii. During data collection the researcher was concerned about not causing any inconveniences to the scheduled classes.
- iv. The researcher was physically present during the administration of the research tools.
- v. Report writing was bottomed on the actual data that was collected.
- vi. The researcher was overt about the nature of research process from the beginning, including all personal biases and interests.

3.16. Researcher's Opinion

This chapter has described the research methodology including the design, participants, instruments, data collection or procedures in gathering data and Page 50 of 111

data analysis. The validity and reliability of the instruments and credibility of the study were also addressed. This study is a quantitative study. As source of data, inventory of personality traits and learning styles along with an achievement test were administered. The research was conducted in five main phases. At first the inventories were translated with the help of experts, then the adapted achievement tests were prepared for the study. In analyzing the data both descriptive and inferential statistical analysis techniques were taken into consideration. Moreover, trustworthiness and ethical considerations of the research are included in this chapter.

Chapter Four: Data analysis

4.1.Introduction

The study was aimed to explore the personality traits, learning styles of the secondary EFL learners of Bangladesh and the relationship between this two variables with their English language achievement. Corresponding to this goal, 356 secondary students were asked to respond in a self-reported questionnaire including an achievement test. The collected data were analyzed with the SPSS 23.0. This chapter will demonstrate the findings of the study based on the responses of the respondent.

4.2. Demographic characteristics of Sample

Table-4.2.1: Distribution of variables

Variables	M	SD	Minimum	Maximum
School Type	2.013	0.771	1.00	3.00
School Location	1.412	0.694	1.00	3.00
Student Gender (1=Male)	1.683	0.466	1.00	2.00
Achievement Test Score	50.952	19.079	2.00	93.00
Openness	3.679	0.553	1.70	4.90
Conscientiousness	3.695	0.627	1.78	5.00
Extraversion	3.417	0.581	1.13	4.88
Agreeableness	3.852	0.492	2.11	5.00
Neuroticism	2.581	0.747	1.00	4.88
Visual	2.198	1.569	0.00	8.00
Auditory	3.922	2.112	0.00	11.00
Read/ Write	2.879	1.949	0.00	8.00
Kinesthetic	3.743	1.958	0.00	9.00
Multimodal	3.248	4.562	0.00	16.00

Both independent and dependent variables of this study are distributed in the Table-4.2.1 along with their mean value, standard deviation (SD), maximum and minimum values. However, the independent variables are respondents' school type, school location, respondents gender, the big five personality traits

(Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism), VARK Learning styles (Visual, Auditory, Read/ Write, Kinesthetic and Multimodal) and the dependent variable is achievement score. Here school type, school location, respondents' gender are three categories variable except the gender school type and location have three category each. The variable gender is a dichotomous variable coded 1 if the student was male and 2 if female. The mean and SD of school type, school location, respondents gender are 2.013±0.771, 1.412±0.694 and 1.683±0.466 respectively. Achievement scores mean and SD are 50.952±19.079 with maximum of 93.0 and minimum of 2.0.

Table-4.2.2: Distribution of respondents schools by types

School Type	Number	Percent
Government	156	29.1
Semi-government	163	30.4
Non-government	217	40.5
Total	536	100.0

Distribution of respondents' schools by types is presented in the Table-4.2.2. The 29.1% respondents were from government schools where as the rate of semi-government and non-government were 30.4% and 40.5% respectively.

Table-4.2.3: Distribution of respondents schools by location

School Location	Number	Percent
Urban	379	70.7
Semi-urban	93	17.4
Rural	64	11.9
Total	536	100.0

The above Table reveal the Distribution of respondents schools by location (Table-4.2.3) whereas most of the (70.7%) schools were located in urban area. The semi-urban and rural schools percentage were 17.4 and 11.9 respectively.

Table-4.2.4: Distribution of respondents by gender

Gender	Number	Percent
Male	170	31.7
Female	366	68.3
Total	536	100.0

The Table-4.2.4 is the distribution of respondents by their gender. Among the respondents the highest percent (68.3%) of respondent were female and the rest (31.7%) were male.

Table-4.2.5: Distribution of respondents by their personality traits

Personality Traits	Number	Percent
Openness (O)	118	22.0
Conscientiousness (C)	154	28.7
Extraversion (E)	66	12.3
Agreeableness (A)	173	32.3
Neuroticism (N)	25	4.7
Total	536	100.0

Distribution of respondents personality has been presented in the Table-4.2.5. Among the respondents the highest portion (32.3%) were belong to Agreeableness and the lowest portion 4.7% were to Neuroticism. Again, the rest are belong to Conscientiousness, Openness and Extraversion, the rate were 22.0%, 12.3% and 4.7% respectively.

Table-4.2.6.: Distribution of respondents by their learning styles

Learning Style	Number	Percent
Visual	18	3.4
Auditory	122	22.8
Read/Write	53	9.9
Kinesthetic	112	20.9
Multimodal	231	43.1
Total	536	100.0

Distribution of respondents learning styles has been presented in the Table-4.2.6. Among the respondents the highest portion (43.1%) preferred to learn through Multimodal learning and the lowest portion 3.4% preferred to learn through Visual learning. Besides, the rest of the respondent preferred to learn through Auditory, Read/Write and Kinesthetic, the rate were 22.8%, 9.9% and 20.9% respectively.

Table-4.2.7.: Distribution of respondents by their achievement score

Achievement Rank/ Grade	Number	Percent
Low Achiever	175	32.6
Moderate Achiever	179	33.4
High Achiever	182	34.0
Total	536	100.0

According to the Table-4.2.7, 32.6% of the respondent were low achiever whereas the highest portion (34.0%) were high achiever. Besides, 33.4% were modest achiever among the respondents.

4.3. Result according to Personality traits variables

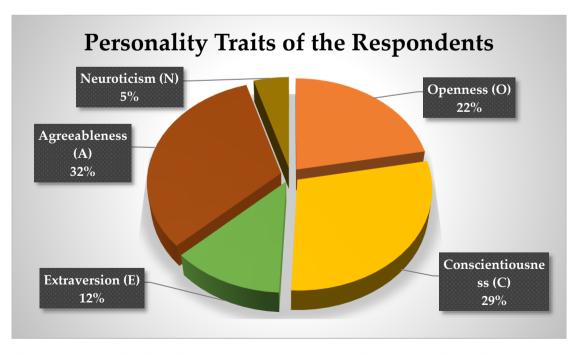


Figure -4.3.1: Distribution of respondents by their personality traits

The Figure-4.3.1 shows the proportion of different personality traits of the respondents. Among them the highest rate was observed for the trait Agreeableness and the lowest to Neuroticism, rates were approximately 32% and 5% respectively. Conscientiousness reported to the second highest (29% approximately) whilst Openness and Extraversion rates were approximately 22% and 12% respectively.

Table-4.3.1: Distribution of respondents by their gender and personality traits

Personality Traits		P-Value			
	N	Male		male	•
	n	%	n	%	_
Openness (O)	50	29.4%	68	18.6%	•
Conscientiousness (C)	40	23.5%	114	31.1%	
Extraversion (E)	19	11.2%	47	12.8%	0.056
Agreeableness (A)	52	30.6%	121	33.1%	•
Neuroticism (N)	9	5.3%	16	4.4%	•
Total	170	31.7%	366	68.3%	•

The above Table shows the proportion of the five personality traits with gender of the respondents. It is measured in percentages. As is observed in the given Table (Table-4.3.1), in all cased, it can be seen that the both male and female respondents rate were high for the trait Agreeableness, the rates were 30.6% and 33.1%.

For the trait Neuroticism, the difference of proportion among male and female is very neighboring and the percentage were 5.3% and 4.4% respectively. In contrast, the proportion among boys and girls for Conscientiousness were approximately 24% and 31% respectively.

Again for the traits Openness and Extraversion, the rates of males were approximately 29% and 11% respectively whereas the proportion of female were approximately 19% and 13% respectively.

Since P>0.05 there is no significant relation is found between the gender and personality traits.

Table-4.3.2: Distribution of respondents by schools types and personality traits

Personality Traits		School Type					
	Gove	overnment Non-govt			Sen	ni-govt	
	n	%	n	%	n	%	
Openness	42	26.9%	43	19.8%	33	20.2%	
Conscientiousness	39	25.0%	68	31.3%	47	28.8%	
Extraversion	21	13.5%	24	11.1%	21	12.9%	0.666
Agreeableness	47	30.1%	74	34.1%	52	31.9%	
Neuroticism	7	4.5%	8	3.7%	10	6.1%	-
Total	156	29.1%	217	40.5%	163	30.4%	•

The above Table (Table-4.3.2) shows the proportion of different school types within the five personality traits. It is measured in percentages. As is observed in the Table, in all cased, it can be seen in all three school types government, non-government and semi-government the respondents rate were high for the trait Agreeableness, the rates were approximately 30%, 34% and 32% respectively. Besides, the lowest rate of respondents were belong to the trait Neuroticism and the rates were approximately 5%, 4% and 6%.

For the traits Openness, Conscientiousness and Extraversion, the rates of the government schools were approximately 27%, 25% and 14% respectively whereas the proportion of non-government were approximately 20%, 31% and 11% respectively. Again for the earlier reported three traits, the rates of the semi-government schools were approximately 20%, 29% and 13% respectively.

Since P>0.05 there is no significant relation is found between the school types and personality traits.

Table-4.3.3: Distribution of respondents by schools location and personality traits

Personality Traits		Schools location					
	U	rban Semi-urban			I	Rural	
	n	%	n	%	n	%	_
Openness	95	25.1%	13	14.0%	10	15.6%	
Conscientiousness	93	24.5%	36	38.7%	25	39.1%	
Extraversion	50	13.2%	10	10.8%	6	9.4%	0.042
Agreeableness	121	31.9%	32	34.4%	20	31.3%	
Neuroticism	20	5.3%	2	2.2%	3	4.7%	-
Total	379	70.7%	93	17.4%	64	11.9%	•

The above Table (Table-4.3.3) shows the proportion of different personality traits with the respondents' schools location. It is measured in percentages. As is observed in the given Table, except the urban schools highest rate of semi-urban and rural schools respondent belong to the trait Conscientiousness and the rates were approximately 39% whereas the highest rate (31.9%) of urban school respondent belong to the trait Agreeableness. Besides, the lowest rate of respondents were belong to the trait Neuroticism and the rates were approximately 5%, 2% and 5% respectively.

Since P<0.05 there is significant relation is found between the school location and personality traits.

Table-4.3.4: Distribution of respondents by achievement rank and personality traits

Personality Traits		Ad	chieve	ment Ra	nk		P-Value
	I	High		derate	I	_ow	
	n	n %		%	n	%	_
Openness	23	13.1%	41	22.9%	54	29.7%	
Conscientiousness	64	36.6%	53	29.6%	37	20.3%	
Extraversion	19	10.9%	22	12.3%	25	13.7%	0.000
Agreeableness	65	37.1%	57	31.8%	51	28.0%	
Neuroticism	4 2.3%		6	3.4%	15	8.2%	-
Total	175	32.6%	179	33.4%	182	34.0%	-

(O = Openness, C = Conscientiousness, E = Extraversion, A = Agreeableness, N = Neuroticism)

The Table-4.3.4 shows the proportion of respondents by their achievement rank and personality traits. Respondent's achievement scores were classified in three categories i.e. high achiever, moderate achiever and low achiever. According to the respondent personality traits, highest rate of respondent from three categories were belong to the trait Agreeableness whereas the lowest rate from three categories were belong to the trait Neuroticism. Considering the traits Openness, Conscientiousness and Extraversion rate of high achiever were approximately 13%, 37% and 11% respectively whereas the rate for low achiever were approximately 30%, 20% and 14% respectively. Rate of moderate achiever who belong to the traits Openness, Conscientiousness and Extraversion were approximately 23%, 30% and 12% respectively.

Since P<0.05 there is strong significant relation is found between the achievement rank and personality traits.

Table-4.3.5: Descriptive statistics of big five personality traits on male and female bilingual learners

Group	O	С	E	A	N
Male EFL learner Mean	3.713	3.594	3.280	3.759	2.601
Male EFL learner SD	0.605	0.642	0.568	0.540	0.706
Female EFL learner Mean	3.664	3.743	3.481	3.896	2.572
Female EFL learner SD	0.527	0.616	0.578	0.462	0.766
P value	0.337	0.010	0.000	0.003	0.683
DF	535	535	535	535	535
F	0.923	6.630	14.123	9.116	0.167

(O = Openness, C = Conscientiousness, E = Extraversion, A = Agreeableness, N = Neuroticism)

The Table-4.3.5 shown the descriptive statistics of big five personality traits on male and female bilingual learners. From the Table it is observed that the highest mean (3.759±0.540) for male EFL learner was observed for the personality traits Agreeableness and the lowest (2.601±0.706) for the Neuroticism. As like as male EFL learners, also for the Female EFL learners the highest mean (3.896±0.462) was observed for the personality traits Agreeableness and the lowest (2.572±0.766) for the Neuroticism. Since P value is greater than .05 (significance level) for the personality traits Openness and Neuroticism thus no significance difference was found between male and female EFL learners with these personality traits. Besides, for the personality traits Conscientiousness, Extraversion and Agreeableness P value is less than .05 (significance level) for these personality traits, hence significance difference was found between male and female EFL learners with these personality traits.

4.4. Result according to learning styles variables

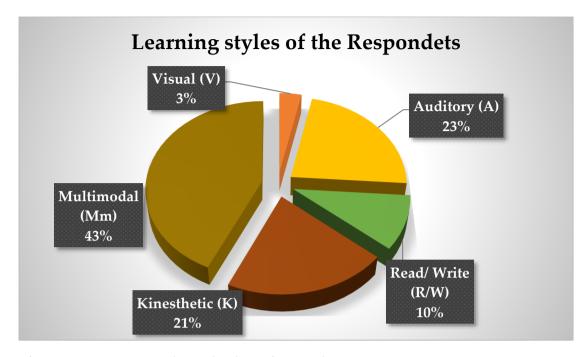


Figure-4.4.1: Respondents by learning styles

Above Figure (Figure-4.4.1.) shows the proportion of different learning styles of the respondents. Among them the highest rate was observed for the style Multimodal and the lowest to Visual, the rates were approximately 43% and 3% respectively. Auditory reported to the second highest (23% approximately) whilst Kinesthetic and Read/write rates were approximately 21% and 10% respectively.

Table-4.4.1: Distribution of respondents by their gender and Learning styles

Learning Style	<u> </u>	Gei	P-Value		
	N	Male		emale	
	n	%	n	%	_
Visual (V)	7	4.1%	11	3.0%	_
Auditory (A)	28	16.5%	94	25.7%	_
Read/ Write (R/W)	15	8.8%	38	10.4%	0.118
Kinesthetic (K)	36	21.2%	76	20.8%	_
Multimodal (Mm)	84	49.4%	147	40.2%	_
Total	170	31.7%	366	68 . 3%	-

The Table-4.4.1 shows the proportion of different learning styles with the gender of the respondents. It is measured in percentages. Both male and female respondents rate were high for the style Multimodal, the rates were approximately 49% and 40% respectively whereas the lowest rate for both gender belong to the style Visual, the rates were approximately 4% and 3% respectively.

For the style Auditory, the proportion among male and female were approximately 17% and 26% respectively. In contrast, the proportion among boys and girls for Read/write were approximately 9% and 10% respectively. Again for the style Kinesthetic, the rates of both males and females were approximately 21%.

Since P>0.05 there is no significant relation is found between the gender and learning styles.

Table-4.4.2: Distribution of respondents by school types and Learning styles

Learning Style			Schoo	ol Type			P-Value
	Gove	Government		n-govt	Sen	ni-govt	
	n	%	n	%	n	%	
Visual (V)	3	1.9%	10	4.6%	5	3.1%	
Auditory (A)	43	27.6%	54	24.9%	25	15.3%	
Read/ Write (R/W)	18	11.5%	22	10.1%	13	8.0%	0.000
Kinesthetic (K)	40	25.6%	54	24.9%	18	11.0%	
Multimodal (Mm)	52	33.3%	77	35.5%	102	62.6%	
Total	156	29.1%	217	40.5%	163	30.4%	•

The above Table shows the proportion of different learning styles with the respondents school types. It is measured in percentages. As is observed in the given table (Table-4.4.2), in all cased, it can be seen in all three school types government, non-government and semi-government the respondents rate were

high for the style Multimodal, the rates were approximately 33%, 36% and 67% respectively. Besides, the lowest rate of respondents were belong to the style Visual and the rates were approximately 2%, 5% and 3% respectively.

For the learning styles Auditory, Read/Write and Kinesthetic, the rates of the government schools were approximately 28%, 12% and 26% respectively whereas the proportion of non-government were approximately 25%, 10% and 25% respectively. Again for the earlier reported three learning styles, the rates of the semi-government schools were approximately 15%, 8% and 11% respectively.

Since P<0.05 there is strong significant relation is found between the school type with the learning styles.

Table-4.4.3: Distribution of respondents by schools location and Learning styles

Learning Style		S	chool	s location	1		P-Value
	U	rban	Semi-urban			Rural	
	n	%	n	%	n	%	
Visual (V)	11	2.9%	5	5.4%	2	3.1%	
Auditory (A)	87	23.0%	30	32.3%	5	7.8%	
Read/ Write (R/W)	39	10.3%	13	14.0%	1	1.6%	0.000
Kinesthetic (K)	78	20.6%	26	28.0%	8	12.5%	•
Multimodal (Mm)	164	43.3%	19	20.4%	48	75.0%	•
Total	379	70.7%	93	17.4%	64	11.9%	•

The above Table shows the proportion of different learning styles with the respondents school location. It is measured in percentages. According to the Table-4.4.3, except the semi-urban schools highest rate of urban and rural schools respondent belong to the style Multimodal and the rates were approximately 43% and 75% respectively, whereas the highest rate (32.3%) of semi-urban schools respondent belong to the style Auditory. Besides, the

lowest rate of respondents were belong to the style Visual and the rates were approximately 3%, 5% and 3% respectively.

Since P<0.05 there is strong significant relation is found between the schools location with the learning styles.

Table-4.4.4: Distribution of respondents by achievement and Learning styles

Learning Style		Ac	hieve	ment Ra	nk		P-Value
	I	ligh	Mo	derate	I	Low	
	n	%	n	%	n	%	
Visual (V)	9	5.1%	5	2.8%	4	2.2%	_
Auditory (A)	48	27.4%	33	18.4%	41	22.5%	-
Read/ Write (R/W)	22	12.6%	17	9.5%	14	7.7%	0.027
Kinesthetic (K)	41	23.4%	38	21.2%	33	18.1%	-
Multimodal (Mm)	55	31.4%	86	48.0%	90 49.0%		-
Total	175	33.4%	179	33.4%	182	34.0%	-

The above Table (Table-4.4.4) shows the proportion of respondents by their academic achievement and their learning styles. Respondent's achievement scores were classified in three categories i.e. high achiever, moderate achiever and low achiever. According to the respondent learning styles, highest rate of respondent from three categories were belong to the style Multimodal whereas the lowest rate from three categories were belong to the style Visual. Considering the learning styles Auditory, Read/Write and Kinesthetic rate of high achiever were approximately 27%, 13% and 23% respectively whereas the rate for low achiever were approximately 23%, 8% and 18% respectively. Rate of moderate achiever who belong to the learning styles Auditory, Read/Write and Kinesthetic were approximately 18%, 10% and 21% respectively.

Since P<0.05 there is strong significant relation is found between the academic achievement with the learning styles.

Table-4.4.5: Descriptive statistics of learning style on male and female bilingual learners

Group	V	A	R/W	K	Mm
Male EFL learner Mean	2.106	3.500	2.459	3.400	4.529
Male EFL learner SD	1.679	2.212	2.030	2.147	5.404
Female EFL learner Mean	2.240	4.117	3.074	3.902	2.653
Female EFL learner SD	1.516	2.038	1.882	1.845	4.134
P value	0.356	0.002	0.006	0.000	0.000
DF	535	535	535	535	535
F	0.853	10.090	11.784	7.717	19.537

(V=Visual, A=Auditory, R/W=Read/Write, K=Kinesthetic, Mm=Multimodal)

The Table-4.4.5 shown the descriptive statistics of Learning styles on male and female bilingual learners. From the table it is observed that the highest mean (4.529±5.404) for male EFL learner was observed for the learning styles Multimodal and the lowest (2.106±1.679) for the Visual. For the female EFL learners, the highest mean (4.117±2.038) was observed for the learning styles Auditory and the lowest (2.240±1.516) for the Visual, which is close to the learning style Multimodal (2.653±4.134).

Since P value is less than .05 (significance level) for all the learning styles except Visual thus strong significance difference was found between male and female EFL learners with these learning styles.

4.5. Result according to Achievement variables

Table-4.5.1: Descriptive Statistics of Personality Traits and Academic Achievement and Pearson correlation among the variables

Traits	Mean	SD	О	С	E	Α	N	Achievement
O	3.68	.55		.19**	.19**	.15**	12**	.09*
С	3.70	.63	.19**		.15**	.38**	56**	14**
Е	3.42	.58	.19**	.14**		.08	25**	.09*
A	3.85	.49	.15**	.38**	.08		23**	12**
N	2.58	.74	12**	52**	25**	23**		.01
Ach	50.95	19.08	.09*	14**	.09*	12**	.01	

⁽O = Openness, C = Conscientiousness, E = Extraversion, A = Agreeableness, N = Neuroticism)

The above Table (Table-4.5.1.) reveled that there is a weak positive correlation among the traits except Neuroticism. Neuroticism has week negative correlation with all other personality types. Academic achievement have week positive correlation with the traits Openness, Extraversion and Neuroticism.

Table-4.5.2: Descriptive Statistics of Learning Style and Grade (Academic Achievement) and Pearson correlation among the variables

Ls	Mean	SD	\mathbf{V}	A	R/W	K	Mm	Achievement
V	2.198	1.5690		.14**	.10*	.17**	52**	15**
A	3.922	2.1121	.14**		.12**	.17**	63**	13**
R/W	2.879	1.9494	.10*	.12**		.26**	62**	19**
K	3.743	1.9577	.17**	.17**	.26**		67**	13**
Mm	3.248	4.6524	52**	63**	62**	67**		.24**
Ach	50.95	19.08	15**	13**	19**	13**	.24**	

(V=Visual, A=Auditory, R/W=Read/Write, K=Kinesthetic, Mm=Multimodal)

The above Table (Table-4.5.2) reveled that there is a weak positive correlation among the learning styles except Multimodal. Multimodal has week negative correlation with all other learning styles. Academic achievement have week negative correlation with the learning styles except Multimodal.

^{*.} Correlation is significant at the 0.05 level (2-tailed).

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

^{**.} Correlation is significant at the 0.01 level (2-tailed

4.6.The result of Contrastive T-test Analysis of Personality Traits, Learning Styles and English Language Achievement

Table-4.6.1: T-test Analysis between High and low Openness and academic achievement

Groups	N	Mean	S.D	Df	Observed t- value	P-sig (2- tailed)
High Openness	263	1.437	0.497	534	-0.139	0.890
Low Openness	273	1.443	0.4977			

The Table-4.6.1 shows the statistical procedure between high and low Openness with academic achievement. The observed t-value is -0.139 which is lower than the critical value of 1.964. Also the observed probability is 0.890 which is greater than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievement of students of high and low openness is accepted. The influence of personality Trait on the Academic Performance of Secondary EFL learners in accepted. This means there is no significant difference between both sets of students.

Table-4.6.2: T-test Analysis between High and low Conscientiousness and academic achievement

deductific defile (chieff						
Groups	N	Mean	S.D	Df	Observed t-value	P-sig (2- tailed)
					t-varue	tarrea
High Conscientiousness	263	1.543	0.499	534	2.334	0.020
Low Conscientiousness	273	1.443	0.498			

The Table-4.6.2 shows the statistical procedure between high and low Conscientiousness with academic achievement. The mean value for higher Conscientiousness is higher than that of lower Conscientiousness and the rate are 1.543±0.499 and 1.443±0.498 respectively. The observed t-value is 2.334 which is higher than the critical value of 1.964. Also the observed probability is 0.020 which is less than 0.05 probabilities for a 2-tailed test. Hence the null

hypothesis that there is no significant difference between the academic achievement of students of high and low conscientiousness is rejected. The students of high conscientiousness outperformed their low conscientiousness counterparts. This means there is indeed strong significant difference between both sets of students.

Table-4.6.3: T-test Analysis between High and low Extraversion and academic achievement

Groups	N	Mean	S.D	Df	Observed t-value	P-sig (2- tailed)
High Extraversion	263	1.434	0.497	534	-2.355	0.019
Low Extraversion	273	1.535	0.498			

The Table-4.6.3 shows the statistical procedure between high and low Extraversion with academic achievement. The mean value for higher Extraversion is slightly lower than that of lower Extraversion and the rate are 1.434±0.497 and 1.535±0.498 respectively. The observed t-value is -2.355 which is lower than the critical value of 1.964. Also the observed probability is 0.019 which is less than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievement of students of high and low Extraversion is rejected. The students of high Extraversion perform better than their low conscientiousness counterparts. This means there is indeed strong significant difference between both sets of students.

Table-4.6.4: T-test Analysis between High and low Agreeableness and academic achievement

Groups	N	Mean	S.D	Df	Observed t- value	P-sig (2- tailed)
High Agreeableness	263	1.548	0.499	534	2.943	0.003
Low Agreeableness	273	1.421	0.495	_		

The Table-4.6.4. shows the statistical procedure between high and low Agreeableness with academic achievement. The mean value for higher Agreeableness was slightly higher than that of lower Agreeableness and the rate are 1.548±0.499 and 1.421±0.495 respectively. The observed t-value is 2.943 which is higher than the critical value of 1.964. Also the observed probability is 0.003 which is less than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievement of students of high and low Agreeableness is rejected. The students of high Agreeableness perform better than their low conscientiousness counterparts. This means there is indeed strong significant difference between both sets of students.

Table-4.6.5: T-test Analysis between High and low Neuroticism and academic achievement

Groups	N	Mean	S.D	Df	Observed t-value	P-sig (2- tailed)
High Neuroticism	263	1.510	0.500	534	-1.011	0.313
Low Neuroticism	273	1.553	0.498			

The Table-4.6.5 shows the statistical procedure between high and low Neuroticism with academic achievement. The mean value for higher Neuroticism was slightly lower than that of lower Neuroticism and the rates are 1.510±0.500 and 1.553±0.498 respectively. The observed t-value is -1.011 which is lower than the critical value of 1.964. Also the observed probability is 0.313 which is higher than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievement of students of high and low Agreeableness is accepted. The students of high Agreeableness may not perform better than their low Neuroticism counterparts. This means there is no significant difference between both sets of students.

Table-4.6.6: T-test Analysis between High and low Visual learning style and academic achievement

Groups	N	Mean	S.D	Df	Observed t-value	P-sig (2-tailed)
High Visual	263	1.670	0.471	534	2.253	0.025
Low Visual	273	1.575	0.495	="		

The Table-4.6.6. shows the statistical procedure between high and low Visual with academic achievement. The mean value for higher Visual is slightly higher than that of lower Visual and the rate are 1.670±0.471 and 1.575±0.495. The observed t-value is 2.253 which is higher than the critical value of 1.964. Also the observed probability is 0.025 which is less than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievements of students of high and low Visual is rejected. The students of high Visual perform better than their low Visual counterparts. This means there is indeed strong significant difference between both sets of students.

Table-4.6.7: T-test Analysis between High and low Auditory learning style and academic achievement

Groups	N	Mean	S.D	Df	Observed t- value	P-sig (2- tailed)
High Auditory	263	1.475	0.500	534	1.776	0.076
Low Auditory	273	1.575	0.495	_		

The Table-4.6.7 shows the statistical procedure between high and low Auditory with academic achievement. The mean value for higher Auditory is slightly lower than that of lower Auditory and the rates are 1.475±0.500 and 1.575±0.495 respectively. The observed t-value is 1.776 which is lower than the critical value of 1.964. Also the observed probability is 0.076 which is higher than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievements of students of high and low Auditory is accepted. The students of high Auditory may not perform

better than their low Auditory counterparts. This means there is no significant difference between both sets of students.

Table-4.6.8: T-test Analysis between High and low Read/Write learning style and academic achievement

Groups	N	Mean	S.D	Df	Observed t- value	P-sig (2- tailed)
High Read/Write	263	1.510	0.500	534	3.280	0.001
Low Read/Write	273	1.370	0.484	-		

The Table-4.6.8 shows the statistical procedure between high and low Read/Write with academic achievement. The mean value for higher Read/Write is quite higher than that of lower Read/Write and the rate are 1.510±0.500 and 1.370±0.484. The observed t-value is 3.280 which is higher than the critical value of 1.964. Also the observed probability is 0.001 which is less than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievement of students of high and low Read/Write is rejected. The students of high Read/Write perform better than their low Read/Write counterparts. This means there is indeed strong significant difference between both sets of students.

Table-4.6.9: T-test Analysis between High and low Kinesthetic learning style and academic achievement

Groups	N	Mean	S.D	Df	Observed t- value	P-sig (2- tailed)
High Kinesthetic	263	1.479	0.500	534	1.864	0.063
Low Kinesthetic	273	1.399	0.491	-		

The Table-4.6.9 shows the statistical procedure between high and low Kinesthetic with academic achievement. The mean value for higher Kinesthetic is slightly higher than that of lower Kinesthetic and the rates are 1.479±0.500 and 1.399±0.491. The observed t-value is 1.864 which is lower than the critical

value of 1.964. Also the observed probability is 0.063 which is higher than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievements of students of high and low kinesthetic is accepted. The students of high Kinesthetic may not perform better than their low kinesthetic counterparts. This means there is no significant difference between both sets of students.

Table-4.6.10: T-test Analysis between High and low kinesthetic learning style and academic achievement

Groups	N	Mean	S.D	Df	Observed t- value	P-sig (2- tailed)
High Multimodal	263	1.559	0.497	534	-4.662	0.000
Low Multimodal	273	1.747	0.435	-		

The Table-4.6.10 shows the statistical procedure between high and low Multimodal with academic achievement. The mean value for higher Multimodal is quite lower than that of lower Multimodal and the rates are 1.559±0.497 and 1.747±0.435 respectively. The observed t-value is -4.662 which is lower than the critical value of 1.964. Also the observed probability is 0.000 which is less than 0.05 probabilities for a 2-tailed test. Hence the null hypothesis that there is no significant difference between the academic achievements of students of high and low Multimodal is rejected. The students of high Multimodal perform better than their low Multimodal counterparts. This means there is indeed strong significant difference between both sets of students.

4.7. Prediction of Academic Achievement for Personality Traits

Table-4.7.1: Multiple Regression Analysis for Personality Traits Predicting Academic Achievement

Dependent Variable	Predictors	В	SE B	р			
	$R^2 = 0.054$						
	Adjuste	ed R ² =0.04	.5				
Academic Achievement	Openness	0.116	1.514	0.009			
	Conscientiousness	-0.168	1.588	0.001			
	Extraversion	0.088	1.454	0.049			
	Agreeableness	-0.099	1.777	0.031			
	Neuroticism	-0.062	1.288	0.218			

Here 5.4% of the total variation of Academic Achievement can be explained by openness, conscientiousness, extraversion, agreeableness, neuroticism. Hence, except neuroticism all the variables in the model are significant at 95% level of CI (Table-4.7.1). Again, P value is less than 5% so we can reject H₀. Hence, for 1 unit increases of openness the expected increase of academic achievement is .116 unit, keeping all other covariates at a fixed level. P value is less than 5% so we can reject H₀. Hence, for 1 unit increases of conscientiousness the expected decrease of academic achievement is .168 unit, keeping all other covariates at a fixed level. P value is less than 5% so we can reject H₀. Hence, for 1 unit increases of extraversion the expected increase of academic achievement is .088 unit, keeping all other covariates at a fixed level. P value is less than 5% so we can reject H₀. Hence, for 1 unit increases of agreeableness the expected decrease of academic achievement is .099 unit, keeping all other covariates at a fixed level.

4.8. Prediction of Academic Achievement for Learning Styles

Table-4.8.1: Multiple Regression Analysis for Learning Predicting Academic Achievement

Dependent Variable	Predictors	В	SE B	p			
	R ² = 0.080						
	Adjus	sted R ² =0.07	2				
Academic Achievement	Visual	1.573	7.602	0.012			
	Auditory	2.153	7.607	0.011			
	Read/Write	1.965	7.659	0.012			
	Kinesthetic	2.035	7.651	0.010			
	Multimodal	4.993	7.611	0.007			

Here 8% of the total variation of Academic Achievement can be explained by Visual, Auditory, Read/Write, Kinesthetic, and Multimodal (Table-4.8.1). Hence, all the variables in the model are significant at 95% level of CI. Since, P value is less than 5% so we can reject H₀. Hence, for 1 unit increases of Visual the expected increase of academic achievement is 1.573 unit, keeping all other covariates at a fixed level. P value is less than 5% so we can reject Ho. Therefore, for 1 unit increases of Auditory the expected increase of academic achievement is 2.153 unit, keeping all other covariates at a fixed level. P value is less than 5% so we can reject Ho. Thus, for 1 unit increases of Read/Write the expected increase of academic achievement is 1.965 unit, keeping all other covariates at a fixed level. P value is less than 5% so we can reject Ho. Hence, for 1 unit increases of Kinesthetic the expected increase of academic achievement is 2.035 unit, keeping all other covariates at a fixed level. P value is less than 5% so we can reject H₀. Hence, for 1 unit increases of Multimodal the expected increase of academic achievement is 4.993 unit, keeping all other covariates at a fixed level.

4.9. The Big Five regressed on Learning Styles

Table-4.9.1: Multiple regression analyses with the Big Five traits regressed on each of the five learning styles.

Factor	Predictor	Beta	\mathbb{R}^2	Adjusted R ²
Visual	Openness	-0.069		
	Consciousness	0.035	_	
	Extraversion	0.044	0.008	-0.002
	Agreeableness	-0.014	_	
	Neuroticism	0.059	-	
Auditory	Openness	-0.055	_	
	Consciousness	0.012	_	
	Extraversion	-0.010	0.004	-0.005
	Agreeableness	0.010	-	
	Neuroticism	0.033	-	
Read/Write	Openness	-0.014	_	
	Consciousness	0.121	_	
	Extraversion	-0.030	0.047	0.038
	Agreeableness	0.076	-	
	Neuroticism	-0.090	-	
Kinesthetic	Openness	-0.055	_	
	Consciousness	-0.023	_	
	Extraversion	0.088	0.012	0.002
	Agreeableness	0.016	_	
	Neuroticism	-0.041	-	
Multimodal	Openness	0.077		
	Consciousness	-0.059	_	
	Extraversion	-0.035	0.013	0.004
	Agreeableness	-0.039	-	
	Neuroticism	0.020	_	

According to the Table-4.9.1 0.8% of the total variation of Visual can be explained by openness, conscientiousness, extraversion, agreeableness, and neuroticism. Here none of the variables are significant at 95% level of CI. Again, 0.4% of the total variation of Auditory can be explained by openness, conscientiousness, extraversion, agreeableness, neuroticism. Here none of the variables are sig. at 5% level of significance. Here 4.7% of the total variation of

Read/Write can be explained by openness, conscientiousness, extraversion, agreeableness, neuroticism. Hence none of the variables are significant at 95% level of CI. Since 1.2% of the total variation of Kinesthetic can be explained by openness, conscientiousness, extraversion, agreeableness, neuroticism, thus none of the variables are sig. at 5% level of significance. Again, 1.3% of the total variation of Multimodal can be explained by openness, conscientiousness, extraversion, agreeableness, neuroticism, hence none of the variables are sig. at 5% level of significance.

4.10. Regression of Personality Traits and Learning Style on Achievement

Table-4.10.1: Hierarchical multiple regression analyses with the significant Big Five personality traits and five learning styles regressed on Achievement.

Factor		Predictor	Beta	\mathbb{R}^2	Adjusted R ²
Achievement	Step 1	Openness	0.115	_	
		Consciousness	-0.139	<u>-</u> ,	
		Extraversion	0.099	0.051	0.044
		Agreeableness	-0.096		
Achievement	Step 2	Multimodal	0.259	0.067	0.066
Achievement	Step 3	Openness	0.089	_,	
		Conscientiousness	-0.153	0.104	0.097
		Extraversion	0.107	_,	
		Multimodal	0.248		

The above Table (Table-4.10.1) represent the Hierarchical multiple regression analyses with the significant Big Five personality traits and five learning styles regressed on Achievement. At step 1, 5.1% of the total variation of Academic Achievement can be explained by openness, conscientiousness, extraversion, and agreeableness.

Hence, all the variables in the model are significant at 95% level of CI. Since P<0.05, for 1 unit increases of openness the expected increase of academic

achievement is .089 unit, keeping all other covariates at a fixed level. Again, at the same step and same condition, for 1 unit increases of conscientiousness the expected decrease of academic achievement is .139 unit, keeping all other covariates at a fixed level. Again, for 1 unit increases of extraversion the expected increase of academic achievement is .099 unit, keeping all other covariates at a fixed level and for 1 unit increases of agreeableness the expected decrease of academic achievement is .096 unit, keeping all other covariates at a fixed level.

At step 2, 6.7% of the total variation of Academic Achievement can be explained by Multimodal. Since P < 0.05 so we can reject H_0 and for 1 unit increases of Multimodal the expected increase of academic achievement is .259 unit, keeping all other covariates at a fixed level.

At step 3, 10.4% of the total variation of Academic Achievement can be explained by openness, conscientiousness, extraversion and multimodal. Since P <0.05 so we can reject H₀ and for 1 unit increases of openness the expected increase of academic achievement is .115 unit, keeping all other covariates at a fixed level. Again, Since P <0.05 so we can reject H₀ and for 1 unit increases of conscientiousness the expected decrease of academic achievement is .153 unit, keeping all other covariates at a fixed level. Moreover, for 1 unit increases of extraversion the expected increase of academic achievement is .107 unit, keeping all other covariates at a fixed level and for 1 unit increases of multimodal the expected increase of academic achievement is .248 unit, keeping all other covariates at a fixed level as Since P <0.05 so we can reject H₀.

4.11. Researcher's Opinion

Among the respondents of the study, near to third of the respondent were female and the rest were male. However, highest portion of them were belong Page 77 of 111

to the trait Agreeableness and the lowest to Neuroticism. Besides, most of the respondent preferred to learn through Multimodal learning and the lowest portion preferred to learn through Visual learning. No significant relations were found between the gender and personality traits as well as learning styles whilst strong significant relations were found between the academic achievements with personality traits and learning styles.

Chapter Five: Findings, Discussion and Conclusion

5.1. Introduction

The purpose of this cross-sectional quantitative study was to determine how individual difference pertains to academic achievement in EFL classrooms. Relation between Big Five personality traits and learning styles with academic achievement have been studied frequently. Studies reveled that personality traits are colligated with learning styles and academic achievement. However, this study has tested whether that relation is positive or negative. The respondents of this study were 536 secondary students from the two districts (Chittagong and Comilla) of Bangladesh. Self-reported questionnaire and an achievement test were used for collecting relevant data. The responses of students' are calculated on SPSS 23.0 software. However, this chapter carries the results in the previous chapter from the micro to the macro level starting off with a brief summative analysis of the main findings.

5.2. Discussion of the Major Findings

The results of gathered data were presented, interpreted and analyzed according to the instruments used in the previous chapters. The study had two broad research questions and the major findings for this study are discussed in this chapter centered on the research questions. The research questions were-

Q1: What types of personality traits and learning styles exist among secondary level students of Bangladesh?

Q2: Is there any significant relationship between EFL learners' English language achievement with their personality traits and learning styles?

Q1: What types of personality traits and learning styles exist among secondary level students of Bangladesh?

This cross sectional quantitative study was designed and accomplished to know the prevalence of the personality traits and learning style among Bangladeshi EFL learners from secondary level of education. In addition, in view of academic achievement in EFL learning, relationship between students gender with their personality traits and learning styles also been explored. The present study investigated the prevalence of personality traits for secondary level students and among the 536 respondents. Prevalence of the traits Agreeableness, Conscientiousness and Openness were approximately 32%, 29% and 22% respectively. Prevalence of the traits Extraversion and Neuroticism were approximately 12% and 5% respectively.

Exploratory study like personality is utilitarian in examining the psychological difference between gender and the differences are often characterized in terms of which gender has higher scores on that trait, on average (Weisberg, DeYoung, & Hirsh, 2011). Women are often found to be more agreeable than men (Feingold, 1994, Costa et al., 2001) This study also found that the highest mean (3.759±0.540) for male EFL learner was observed for the personality traits Agreeableness and the lowest (2.601±0.706) for the Neuroticism. For the female EFL learners the highest mean (3.896±0.462) was observed for the personality traits Agreeableness and the lowest (2.572±0.766) for the Neuroticism. The trait Agreeableness refers to more nurturing, tender-minded, and altruistic more often but gender differences do not imply that men and women only experience states on opposing ends of the trait spectrum; (Weisberg, DeYoung, & Hirsh, 2011).

According to Wehrwein, Lujan & DiCarlo (2007) study, where they used VARK learning style inventory, findings shows that maximum portion of male student's preferred multimodal instruction. Findings of the study shows that the highest mean (4.529±5.404) for male EFL learner was observed for the learning styles Multimodal and the lowest (2.106±1.679) for the Visual and previous studies have similar findings (Wehrwein et al., 2007 and). On the other hand, current study revealed that among the female EFL learners, the highest mean (4.117±2.038) was observed for the learning styles Auditory and the lowest (2.240±1.516) for the Visual, which is close to the learning style Multimodal (2.653±4.134). Marcus, (1999) and Pizzo, (1981) reported that females tend to be auditory and learn well when it is quiet. Moreover, this study found a significance difference (p<.05) among male and female students learning styles and previous study shows the similar findings (Wehrwein et al. 2007).

Since P value is less than .05 (95% CI level) for all the learning styles except Visual thus strong significance difference was found between male and female EFL learners with these learning styles. Strong relation was found among school types and school location with learning styles at the same level of confidence interval.

Q2: Is there any significant relationship between EFL learners' English language achievement with their personality traits and learning styles?

Pornsakulvanich, et al., (2012) acknowledged that many studies showed that there lies a strong relationship between personality traits and academic performance. This study also found the relation among the achievement and personality traits is strongly significant (P<0.05). Highest rate of respondent

from three categories of achievements (high, moderate and low) belonged to the trait Agreeableness whereas the lowest rate from three categories of achievements belonged to the trait Neuroticism. Furnham, et al (2009) showed the significance of agreeableness for academic performance along with neuroticism and extraversion. Nye et al (2013) investigated interrelations between psychological peculiarities, measured by Big Five model and their academic performances. The study found positive and significant correlation between the five personality traits (Neuroticism, agreeableness, openness, extraversion and consciousness) and students' educational achievements and present study has similar findings.

Since P value is greater than .05 (95% CI level) for the personality traits Openness and Neuroticism thus no significance difference was found between male and female EFL learners with these personality traits. Besides, for the personality traits Conscientiousness, Extraversion and Agreeableness P value is less than .05 (significance level) for these personality traits, hence significance difference was found between male and female EFL learners with these personality traits. However, significant relation was found among students area of belonging and personality traits (p<0.05).

The study conducted by Hakimi, et al (2011) also found that neuroticism and extraversion are two predictors and both of them have weak negative influence on academic performance. On the other hand, positive correlation between openness to experience was found in the study.

Personality traits were found to be better predictors on cognitive and affective academic performance (Pornsakulvanich, et al., 2012). The researchers also found that among five personality traits conscientiousness, openness and

agreeableness were the main predictors of GPA, where four personality traits including conscientiousness, openness, agreeableness and neuroticism were the contributors of course satisfaction. But according to Nye et al (2013) personality significantly did not influenced students GPA. Lounsbury, Welsh, Gibson, & Sundstrom (2005) also found that all the personality traits were significantly correlated with cognitive ability in both the middle and high school students. Busato, Prins, Elshout, & Hamaker (2000) also found that the Big Five Personality Traits were positively correlated with academic success. These research examples prove that there is strong connection between personality traits and academic achievement. Al-Qaisy & Khuffash (2012) said that education is a unique investment and academic achievement is a vital aspect of it. Academic achievements or academic performances of the students are always been the major concern of the teachers, students and the parents. That is why personality traits should be considered in education arena.

This study revealed that, considering the achievement highest rate of respondent from three categories (high, moderate and low) belonged to the learning style Multimodal whereas the lowest rate from three categories belonged to Visual. The study also revealed that, at 95% of CI there is strong significant relation between the academic achievements with the learning styles. At the same CI level, for all the learning styles except Visual, a strong significance difference was found between male and female EFL learners with these learning styles.

The null hypothesis that there is no significant difference between the academic achievement of students of high and low conscientiousness is rejected. The students of high conscientiousness outperformed their low conscientiousness counterparts. The null hypothesis that there is no significant difference between

the academic achievement of students of high and low Extraversion is rejected as well. Therefore the students of high Extraversion perform better than their low conscientiousness counterparts.

The study also found no significant difference between the academic achievements of students of high and low openness. The influence of personality Trait on the Academic Performance of Secondary EFL learners is accepted. This means there is no significant difference between high and low openness of students. On the other hand, this study revealed that there is significant difference between the academic achievements of students of high and low Agreeableness. The students of high Agreeableness perform better than their low conscientiousness counterparts. This means there is indeed strong significant difference between both sets of students. Moreover, there is no significant difference between the academic achievements of students of high and low Agreeableness. The students of high Agreeableness may not perform better than their low Neuroticism counterparts. This means there is no significant difference between both sets of students. However, the maximum increase of academic achievement for a single unit increases of personality traits was observed for the trait openness and the expected increase of academic achievement is .116 unit, keeping all other covariates at a fixed level and the maximum decrease of academic achievement for every unit of personality traits was observed for the trait conscientiousness where the expected decrease of academic achievement is .168 unit, keeping all other covariates at a fixed level.

Study findings shows that there is no significant difference between the academic achievements of students of high and low visual. The students of high Visual perform well than their low Visual counterparts, while, the students of high Auditory may not perform better than their low auditory counterparts.

Moreover, the students of high Read/Write perform better than their low Read/Write counterparts and the students of high Kinesthetic may not perform better than their low kinesthetic. The students of high Multimodal perform better than their low Multimodal counterparts as well. Keeping all other covariates at a fixed level, the maximum expected increase of academic achievement is 4.993 unit was found for the learning style Multimodal whilst the lowest expected increase of academic achievement is 1.965 unit was observed for learning through Read/write.

The multiple regression analysis shows that for every unit increases of conscientiousness the expected decrease of academic achievement is .139 unit and for every single unit increases of extraversion the expected increase of academic achievement is .099 unit, keeping all other covariates at a fixed level. At the second step, 6.7% of the total variation of Academic Achievement can be explained by Multimodal whilst for a single unit increases of Multimodal the expected increase of academic achievement is .259 unit. At third step, 10.4% of the total variation of Academic Achievement can be explained by openness, conscientiousness, extraversion and multimodal and for a single unit increases of multimodal the expected increase of academic achievement is .248 unit, keeping all other covariates at a fixed level.

5.3. Recommendations

Considering the methodology and findings of the present study, the following recommendations can be considered for further study-

Ample amount of training should be provided to the teachers, so that
they can easily define the personality traits and learning styles of
their students. It will help them to design an effective teachinglearning strategies for their students.

- EFL learners personality traits and learning styles should be considered during curriculum development process.
- Parents, teachers and schools authority have to work in concert for the proper development of personality of learners.
- EFL teachers should consider the students' personality traits to distinguish the individual differences so that they can design an effective motivational as well as teaching strategies.
- EFL teachers should consider the students' learning styles which will help them to contribute in enhancing the students' learning potential and their attitudes toward learning.
- Teachers should assess the learning styles of their students and adapt their classroom methods to best fit each student's learning style.
- EFL teachers instructional delivery should be matched with the preferred learning style of his/her students for effective learning.
- EFL teachers should make the students aware of their learning styles and try to harmonize them.
- EFL teachers and the school authority should make the parents aware about their children's learning style and personality trait so that they can provide more fruitful language learning environment at home for the learners.
- Further study can be done with larger sample and from both educational streams and more in-depth data can be collected for better understanding the situation.
- A study can be done for exploring importance of incorporating personality traits and learning styles issues in the education of teachers in Bangladesh.

 A study can be done for exploring the learning styles and personality traits of the teachers in both primary and secondary level of education in Bangladesh.

5.4. Conclusion

The present study is an attempt to explore the relationship between the personality traits, approaches to foreign language learning and academic achievement of students at the secondary level of education in Bangladesh. Acquisition of foreign language, like English is quite challenging for the students from different ages. Different factors such as age, gender, personality, learning styles are associated with it. Personality traits and success would provide language instructors valuable information about what the tendencies the students has towards learning a foreign language, how they prefer to learn and the success rates reflecting their preferences.

The study found that the highest portion of the respondents were belong to the Agreeableness which refers to having a tendency to be compassionate, warmth, kind and cooperative. This kind of personality would corroborate the social harmony and peace. Present study also found a significant positive correlation among this type of personality and English language achievement. On the other hand, this study findings indicate that the highest mean for male EFL learner was observed for the learning styles Multimodal whereas for the female it was Auditory. Learning style refers to the preferential way of an individual in which they absorbs, comprehends and retain information. This study also revealed the significance positive correlation among learning styles and academic performance of the EFL learners.

Teachers teaching strategies have a great impact on students learning as well. Teachers development program would be helpful for developing their capability to distinguish the individual differences so that they can design an effective motivational as well as teaching strategies. Moreover, teachers understanding about the learning styles of the learners would open the door to the possibilities for ameliorate the students' learning potential and their attitudes toward learning. Further study can be done for exploring the learning styles and personality traits of the teachers as it is observed in previous studies that these are significantly related with the academic excellence.

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	বিদ্যালয় কোড
	শিক্ষার্থী কোড
4	প্রিয় শিক্ষার্থী,
١	শুভেচ্ছা রইল। আমি "বাং লাদেশের মাধ্যমিক স্তরের শিক্ষার্থীদের ইংরেজি ভাষা শিক্ষা অর্জনের সাথে তাঁদের
,	ব্যক্তিত্বের ধরণের সম্পর্ক অনুসন্ধান" শীর্ষক একটি গবেষণা কার্যক্রম পরিচালনা করছি যাতে তোমার মতামত
	আমার প্রয়োজন। আমার গবেষণার ফলাফল তোমাদের শিখনকে আরো ফলপ্রসু করে তুলতে সহায়ক হবে বলে
	আমার বিশ্বাস। তোমার মতামত কেবলমাত্র গবেষণার জন্য ব্যবহৃত হবে। তোমার পরিচয় কোথাও প্রকাশ করা
	হবেনা এবং তুমি ইচ্ছে করলে যেকোন সময় গবেষণা থেকে নিজের অংশগ্রহণ প্রত্যাহার করে নিতে পারবে। গবেষণায় তথ্য প্রদানের জন্য তোমাকে আন্তরিক ধন্যবাদ। এছাড়াও তুমি তোমার মতামত বা পরামর্শও আমাকে
	গবেষণার তব্য এগাণের লগ্য তোমাণে আভারক বস্যবাদ। এহাড়াত তুমে তোমার মতামত বা শারাম ।ত আমাণে জানাতে পার আমার সাথে যোগাযোগের মাধ্যমে।
	রাজীব আহমেদ ফয়সাল, গবেষক, শিক্ষা ও গবেষণা ইনস্টিটিউট, ঢাকা বিশ্ববিদ্যালয়, +৮৮০১৭১১১১৯৭৯০, ই-মেইলঃ
1	rahmed.ier@gmail.com
	বিদ্যালয়ের নাম :
	—————————————————————————————————————
	প্রাক-প্রাথমিক প্রাথমিক মাধ্যমিক
	সরকারী বিসরকারী আধা–সরকারী
	বিদ্যালয়ের অবস্থান
	শহর উপশহর প্রত্যন্ত এলাকা / গ্রাম
	শিক্ষার্থীর নামঃ
	—————————————————————————————————————
	িছেলে িমেয়ে
	বয়স
	□ ১১-১২ বছর □ ১৩-১৪ বছর □ ১৫-১৬ বছর □ ১৭-১৮ বছর □ ১৯-২০ বছর
	যে শ্রেণীতে অধ্যয়নরত
	সপ্তম অষ্টম নবম-দশম
	বিদ্যালয়ের সর্বশেষ সাময়িক পরীক্ষায় প্রাপ্ত নম্বর ইংরেজি ১ম পত্র
	ইংরেজি ২য় পত্র
	অষ্টম শ্রেণী সমাপনি পরীক্ষায় প্রাপ্তি গ্রেড ইংরেজি ১ম পত্র
	ইংরেজি ২য় পত্র

۵	২	9	8	Œ
পুরোপুরি দ্বিমত	কিছুটা দ্বিমত	একমত নই, আবার দ্বিমতও নেই	কিছুটা একমত	পুরোপুরি একমত

উপরে একটি ছক/ক্ষেল ও নিচে কিছু বিবৃতি দেওয়া আছে। প্রতিটি বিবৃতির বামপাশে শূন্যস্থান দেওয়া আছে। বিবৃতিগুলো তোমার ক্ষেত্রে কতটুকু প্রযোজ্য অথবা এই বিবৃতির ক্ষেত্রে তোমার মতামত কী তা প্রদন্ত ক্ষেল অনুযায়ী শূন্যস্থানে লিখবে। যেমন— তুমি যদি কোনো বিবৃতির সাথে একেবারেই দ্বিমত পোষণ করো, তবে তার বামপাশের শূন্যস্থানে ১ লিখবে, অনুরূপ তুমি যদি কোনো বিবৃতির সাথে পুরোপুরি একমত হও, তবে তার বামপাশের শূন্যস্থানে ৫ লিখবে।

۵	আমি বেশি কথা বলতে পছন্দ করি
ર	আমি অন্যেও দোষ-ক্রটি খুঁজে বের করি
ు	আমি যেকোনো কাজ সতর্কতার সাথে সম্পন্ন করি
8	আমি হতাশ এবং দুঃখী
œ	আমি নতুন কিছু আবিষ্কার করতে পছন্দ করি
৬	আমি গম্ভীর ও আত্মকেন্দ্রিক
۹	আমি অন্যকে সাহায্য করতে পছন্দ করি
Ե.	আমি কোনো কোনো ক্ষেত্রে দায়িত্ব এড়িয়ে চলি
გ	আমি যেকোনো প্রতিকূল পরিবেশ ভালোভাবে নিয়ন্ত্রণ করতে পারি
٥٠	আমি বিভিন্ন বিষয়ের প্রতি আগ্রহী
۵۵	আমি সদা প্রাণোচ্ছল
১২	আমি অন্যের সাথে ঝগড়া শুরু করি
১৩	দায়িত্ব অর্পণে আমাকে বিশ্বাস করা যায়/আমাকে বিশ্বাস করে দায়িত্ব অর্পণ করা যায়
\$8	আমি কখনো কখনো উৎকণ্ঠিত/দুশ্চিন্তাগ্রন্ত (Tensed) হয়ে পড়ি
ኔ ৫	আমি চালাক এবং অনেক চিন্তা করি
১৬	আমি উদ্যমী/ প্রবল কৌতূহলী
১৭	আমি ক্ষমাশীল
> b	আমি অগোছালো/ বিশৃঙ্খল
აგ	আমি অনেক বেশি দুশ্চিন্তা করি
\$ 0.	আমার কল্পনাশক্তি আছে

২১	ু আমি শান্ত প্রকৃতির
રર.	আমি সাধারণত সবাইকে বিশ্বাস করি
২৩	আমি অলস প্রকৃতির
২৪	আমি সহজে হতাশ হই না , মানসিকভাবে দৃঢ়
২৫	ু আমি সৃজনশীল এবং আবিষ্কার করতে পারি
২৬	্রআমি দায়িত্ব নিতে পছন্দ করি
ર૧	আমি প্রয়োজনে অন্যের সাথে দূরত্ব বজায় রাখতে পারি
২৮	_ আমি যেকোনো কাজ শেষ পর্যন্ত চালিয়ে যাই
২৯	্আমি মনমরা / নিরাশ হয়ে যাই
೨೦	আমি সৃষ্টিশীল ও সৃজনশীল কাজ করতে পছন্দ করি
৩১	আমি কিছু কিছু ক্ষেত্ৰে লাজুক
৩২	ু আমি সবার প্রতি সহানুভূতিশীল ও সদয়/ দয়ালু
ు	আমি দক্ষতার সাথে কাজ সম্পন্ন করি (দ্রুত ও নির্ভুলভাবে)
৩8	ু দুশ্চিন্তার (Tensed) মাঝেও আমি নিজেকে শান্ত রাখতে পারি
૭૯	আমি গতানুগতিক / রুটিনমাফিক কাজ করতে পছন্দ করি
৩৬	্ আমি মিশুক
૭૧	আমি কখনো কখনো অন্যের প্রতি কঠোর হই/ দুর্ব্যবহার করি
Ob	আমি কর্ম পরিকল্পনা করি এবং এতে কোনো ব্যত্যয়/ পরিবর্তন করি না
৩৯	ু আমি অল্পতেই নার্ভাস হয়ে যাই/ হাল ছেড়ে দিই
80	আমি চিন্তা করতে এবং চিন্তা নিয়ে খেলা করতে পছন্দ করি
85	ু আমি সৃষ্টিশীল কাজ (গান, নাটক, ছবি) পছন্দ করি না
8২	ু আমি অন্যকে সহযোগিতা করতে ও অন্যের সাথে কাজ করতে পছন্দ করি
৪৩	আমি অল্পতেই বিভ্রান্ত হয়ে যাই এবং মনোযোগ দিতে সমস্যায় পড়ি
88	ু আমি শিল্প, সাহিত্য, বই সম্পর্কে অনেক জানি
8¢	আমি সকলের পছন্দ করার মত মানুষ
86	মান্য সত্যিকার অর্থে আমার সানিধ্য পছন্দ করে

Appendix-B: Big-Five Personality Inventory (English Version)

Here are some statements that may or may not describe what you are like. In the blank next to each statement, write the number that shows how much you agree or disagree that it describes you. For example, do you agree that you are someone who is bossy? Write a 5 if you agree strongly, a 4 if you agree a little, a 3 if you neither agree nor disagree, a 2 if you disagree a little, or a 1 if you disagree strongly. Ask if you don't know what a word means!

1	2	3	4	5
Disagree	Disagree	Neither agree	Agree	Agree
Strongly	a little	nor disagree	a little	strongly

I see myself as someone who...

- 1. ____ Is talkative
- 2. ____ Tends to find fault with others
- 3. ____ Does things carefully and completely
- 4. ____ Is depressed, blue
- 5. _____ Is original, comes up with new ideas
- 6. _____ Reserved; keeps thoughts and feelings to self
- 7. _____ Is helpful and unselfish with others
- 8. Can be somewhat careless
- 9. _____ Is relaxed, handles stress well.
- 10. ____ Is curious about many different things
- 11. _____ Is full of energy
- 12. ____ Starts quarrels with others
- 13. ____ Is a reliable worker
- 14. ____ Can be tense
- 15. _____ Is clever, thinks a lot
- 16. ____ Generates a lot of enthusiasm
- 17. ____ Has a forgiving nature
- 18. ____ Tends to be disorganized
- 19. _____ Worries a lot
- 20. ____ Has an active imagination
- 21. ____ Tends to be quiet
- 22. ____ Is generally trusting
- 23. ____ Tends to be lazy
- 24. ____ Doesn't get easily upset, emotionally stable

25	Is creative and inventive
26	Takes charge, has an assertive personality
27	Can be cold and distant with others
28	Keeps working until things are done
29	Can be moody
30	Likes artistic and creative experiences
31	Is sometimes shy, inhibited
32	Is considerate and kind to almost everyone
33	Does things efficiently (quickly and correctly)
34	Stays calm in tense situations
35	Likes work that is the same every time (routine)
36	Is outgoing, sociable
37	Is sometimes rude to others
38	Makes plans and sticks to them
39	Gets nervous easily
40	Likes to think and play with ideas
41	Doesn't like artistic things (plays, music)
42	Likes to cooperate; goes along with others
43	Is easily distracted; has trouble paying attention
44	Knows a lot about art, music, or books
45	Is the kind of person almost everyone likes
46	People really enjoy spending time with

Please check: Did you write a number in front of each statement?

Appendix-C: VARK Inventory (Bangla Version)

যে বক্তব্যটির সাথে তুমি সবচেয়ে বেশি সহমত পোষণ করো তার বাম পাশে টিক (√) চিহ্ন দাও-(তুমি যদি একাধিক মতের সাথে সহমত পোষণ করো তবে একাধিক মতের বাম পাশে টিক (√) চিহ্ন দাও)

- ১. আমি এমন ওয়েবসাইট (website) পছন্দ করি যেখানে-
 - K. আমি মাউসের সাহায্যে কাজ করতে পারি
 - A. যাতে গান শোনা, গল্প বা চ্যাট করার ব্যবস্থা আছে
 - R. যার মধ্যে মজাদার তথ্য ও নিবন্ধ প্রিন্ট ফরমেটে আছে
 - V. যাতে আকর্ষণীয় ডিজাইন ও গ্রাফিক্স আছে
- ২. এমন কোনো শব্দ যার সঠিক উচ্চারণ আমি জানি না, সেক্ষেত্রে আমি-
 - V. মনে মনে চিন্তা করে দেখি কীভাবে উচ্চারণ করলে ভালো লাগে
 - A. মনে মনে এবং জোরে জোরে উচ্চারণ করি
 - R. অভিধানে (Dictionary)খুঁজে দেখি
 - K. খাতায় লিখে যেটা ভালোলাগে তার একটি বেছে নিই
- ৩. আমার বন্ধুর জন্য সারপ্রাইজ (Surprise) পার্টি আয়োজন করতে চাইলে আমি
 - K. বন্ধুদের আমন্ত্রণ জানাই এবং পার্টি করে ফেলি
 - V. কল্পনা করি পার্টিটি হচ্ছে
 - R. কী কী করতে হবে এবং কী কী কিনতে হবে তার পরিকল্পনা করি
 - A. অন্যদের সাথে এই ব্যাপারে কথা বলি
- 8. আমার পরিবারের জন্য বিশেষ কিছুর আয়োজন করতে চাইলে আমি-
 - K. আগেও করেছি এমন কিছু করি
 - A. আমার বন্ধদের সাথে এ ব্যাপারে আলোচনা করি
 - V. বই বা পত্রিকা খুঁজি ধারণা (Idea)ও পরিকল্পনার জন্য
 - R. এমন কিছু খুজি যেখানে লিখিতভাবে বলা আছে এটা আমি কীভাবে তৈরি করবো
- ৫. আমি যদি ছুটিতে (Holiday) প্রোগ্রামের আয়োজক/ দলনেতা হই যা আমার বন্ধুদের জন্য আনন্দদায়ক, তখন আমি-
 - A. সেখানে কী কী করবো তা ব্যাখ্যা করি / বিশদভাবে বলি
 - V. এটা কোথায় হবে তা তাঁদের ম্যাপে দেখাই এবং এ সংক্রান্ত ছবি দেখাই
 - K. সখানে কী কী করবো তা প্র্যাকটিস করতে শুরু করি
 - R. প্রোগ্রামের কর্মসূচি তাঁদের দেখাই
- ৬. আমি একটি ক্যামেরা বা মোবাইল ফোন কিনতে চাই। দাম ব্যতীত যেসব বিষয় আমাকে সিদ্ধান্ত নিতে সহায়তা করবে–
 - K. ব্যবহার করে দেখে
 - R. এর ফিচার / বৈশিষ্ট্যগুলো পড়ে
 - V. এটা সর্বশেষ মডেল/সবচেয়ে আধুনিক কিনা এবং দেখতে আকর্ষণীয় কিনা তা যাচাই করে
 - A. বিক্রেতার কথা শুনে

৭. আমি কম্পিউটারে একটি গেমস খেলতে শিখেছিলাম। আমি শিখেছি-

- K. অন্য কাউকে খেলতে দেখে
- A. অন্যের কাছ থেকে শুনে ও প্রশ্ন করে
- V. নির্দেশনায় ব্যবহৃত ছবি দেখে
- R. নির্দেশনা পড়ে

৮. একটা খেলা সম্পর্কে পড়ার পর আমি যা করতে আগ্রহী হই-

- R. খেলাটি সম্পর্কে লিখতে
- K. সেই খেলার যেকোনো একটি অংশ খেলতে
- A. খেলায় হয়েছে এমন কিছুর ছবি আঁকতে
- V. খেলার বিবরণী পড়তে

৯. আমাদের বাসায় নতুন কম্পিউটার আনা হলে আমি যা করবো-

- R. এর সাথে দেওয়া নির্দেশনা পড়বো
- A. কোনো বন্ধুর সাথে যোগাযোগ করে জেনে নেবো কীভাবে এটি স্থাপন করতে হবে এবং সংযোগ দিতে হবে
 - K. বাক্স থেকে বের করে বিভিন্ন অংশ জোড়া দিতে শুরু করবো
 - V. ছবিতে যেভাবে দেওয়া আছে সে অনুযায়ী কাজ করবো

১০. কেউ আমার কাছে কোনো বাসায় যাবার নির্দেশনা চাইলে, আমি–

- K. তার সাথে যেয়ে দেখিয়ে দেবো
- V. আমি একটি কাগজে যাবার পথের একটা ম্যাপ এঁকে দেবো
- R. যাবার পথের নির্দেশনা তালিকা আকারে লিখে দেবো
- A. যাবার পথ মুখে বলে দেবো

১১. পায়ে ব্যথা নিয়ে ডাক্তারের কাছে গেলে. আমি আশা করি ডাক্তার আমাকে-

- V. ছবি এঁকে বুঝাবেন আমার কোথায় ও কী সমস্যা
- R. এ সম্পর্কে তিনি আমাকে একটি প্রবন্ধ পড়তে দেবেন
- A. আমাকে আমার সমস্যার কারণ মুখে বলে দেবেন
- K. পায়ের একটি ছবি দেখিয়ে সমস্যা বলে দেবেন

১২. একটি নতুন ছবি দেখার পেছনে যে কারণ কাজ করে-

- A. আমার বন্ধদের এ সম্পর্কে কথা বলতে শুনেছি
- R. এ সম্পর্কে পত্রিকা বা ইন্টারনেটে অন্যদের মতামত পড়েছি
- V. এর ট্রেলার/ কিছু অংশ দেখেছি
- K. আমি যাদের পছন্দ করি তাদেরও এটা পছন্দ, তাই

১৩. আমি শিক্ষককে পছন্দ করি, যদি তিনি–

- K. কোনো কিছু দেখিয়ে পড়ান, মডেল ব্যবহার করেন এবং হাতে-কলমে কাজ করতে দেন
- A. ক্লাসে আলোচনা, দলগত আলোচনার সুযোগ দেন
- R. কেবল বই এবং নোট দিয়ে পড়ান
- V. চার্ট, চিত্র, ম্যাপ ইত্যাদি ব্যবহার করে পড়ান

১৪. আমি ক্যামেরা দিয়ে ছবি তুলতে শিখছি, তাই আমার দরকার-

- K. ভালো এবং খারাপ ছবির নমুনার পাশাপাশি কীভাবে ভালো ছবি তোলা যায় তার উদাহরণ
- R. স্পষ্টভাষায়, পয়েন্ট করে লিখা নির্দেশনা
- A. এ বিষয়ে বিশেষজ্ঞ ব্যক্তিকে প্রশ্ন করার সুযোগ ও পরামর্শ প্রাপ্তি
- V. ক্যামেরা কীভাবে ব্যবহার করতে হয় তার সচিত্র বর্ণনা

১৫. আমি কোনো পরীক্ষা/ ঘটনা/ প্রতিযোগিতা সম্পর্কে কিছু পরামর্শ চাই। আমি আশা করি-

- K. আমাকে কাজের উদাহরণ দিয়ে বুঝিয়ে দেওয়া হবে
- A. এমন কোনো ব্যক্তির পরামর্শ, যার সাথে আমার এ বিষয়ে আগে কথা হয়েছে
- R. আমার ফলাফলের লিখিত বর্ণনা
- V. আমার অর্জন গ্রাফে/ চিত্র দিয়ে দেখানো

১৬. আমার কোন ধারণা (Idea) আমাকে ক্লাসে উপস্থাপন করতে হলে, আমি-

- V. আমার বুঝানোর সুবিধার্থে গ্রাফ/ চিত্র তৈরি করবো
- A. কিছু মূল পয়েন্ট লিখে তা বারবার প্র্যাকটিস করবো
- R. আমার কথাগুলো বিশদ লিখে ফেলবো, তা বারবার পড়ে মুখন্থ করবো
- K. বিষয়টিকে বাস্তব ও আকর্ষণীয় করে তোলার জন্য প্রয়োজনীয় উদাহরণ সংগ্রহ করবো

Appendix-D: VARK Inventory (English Version)

VARK Questionnaire version 7.1

Choose the answer which best explains your preference and click the box next to it. Please click more than one if a single answer does not match your perception. Leave blank any question that does not apply.

1. I like websites that have:

- a) interesting information and articles in print.
- b) audio channels for music, chat and discussion.
- c) things I can click on and do.
- d) interesting design and visual effects.

2. You are going to make something special for your family. You would:

- a) find written instructions to make it.
- b) make something I have made before.
- c) talk it over with my friends.
- d) decide from pictures in magazines.

3. You are about to buy a new digital camera or mobile phone. Other than price, what would most influence your decision?

- a) trying it.
- b) reading the details about its features.
- c) it is the latest design and looks good.
- d) the salesperson telling me about it.

4. You need to give directions to go to a house nearby. You would:

- a) draw a map on a piece of paper or get a map online.
- b) write down the directions as a list.
- c) walk with them.
- d) tell them the directions.

5. After reading a play you need to do a project. Would you prefer to:

- a) write about the play?
- b) draw or sketch something that happened in the play?
- c) act out a scene from the play?
- d) read a speech from the play?

6. You are learning to take photos with your new digital camera or mobile phone. You would like to have:

- a) examples of good and poor photos and how to improve them.
- b) clear written instructions with lists and bullet points.
- c) diagrams showing the camera and how to use it.
- d) a chance to ask questions and talk about the camera's features.

7. You are about to hook up your parent's new computer. You would:

- a) unpack the box and start putting the pieces together.
- b) follow the diagrams that show how it is done.
- c) read the instructions that came with it.
- d) phone, text or email a friend and ask how to do it.

8. A website has a video showing how to make a special graph. There is a person speaking, some lists and words describing what to do and some diagrams. You would learn most from:

- a) listening.
- b) seeing the diagrams.
- c) reading the words.
- d) watching the actions.

9. Remember when you learned how to play a new computer or board game. You learned best by:

- a) watching others do it first.
- b) clues from the diagrams in the instructions.
- c) reading the instructions.
- d) listening to somebody explaining it and asking questions.

10. Do you prefer a teacher who likes to use:

- a) a textbook and plenty of handouts.
- b) class discussions, online discussion, online chat and guest speakers.
- c) an overview diagram, charts, labelled diagrams and maps.
- d) field trips, case studies, videos, labs and hands-on practical sessions.

11. You have to present your ideas to your class. You would:

- a) make diagrams or get graphs to help explain my ideas
- b) gather examples and stories to make it real and practical.
- c) write a few key words and say them again and again.
- d) write out my speech and learn it by reading it again and again.

12. You want to plan a surprise party for a friend. You would:

- a) talk about it on the phone or text others.
- b) draw a map and make a special design for the invitation.
- c) make lists of what to do and what to buy for the party.
- d) invite friends and just let it happen.

13. You have a problem with your knee. Would you prefer that the doctor:

- a) showed you a diagram of what was wrong.
- b) gave you an article or brochure that explained knee injuries.
- c) demonstrated what was wrong using a model of a knee.
- d) described to you what was wrong.

14. A new movie has arrived in town. What would most influence your decision to go (or not go)?

- a) you read what others say about it online or in a magazine.
- b) it is similar to others you have liked.
- c) hear friends talking about it.
- d) you see a preview of it.

15. You have been selected as a tutor or a leader for a holiday program. This is interesting for your friends. You would:

- a) start practicing the activities I will be doing in the program.
- b) show them the list of activities in the program.
- c) show them the map of where it will be held and diagrams about it.
- d) describe the activities I will be doing in the program.

16. You want some feedback about an event, competition or test. You would like to have feedback:

- a) that used examples of what I have done
- b) that used a written description or table of my results.
- c) from somebody who discussed it with me.
- d) that used graphs showing what I achieved.

Appendix-E: Achievement Test

Complete the passage with the suitable verbs from the list. Put them in the correct tense. Use negative where necessary.

solve	build	keep	create	turn	try	face
At present	Bangladesh	(a)		unemplo	vment pr	oblem. This
			an ala			
			cope with the			
			vast populati			
into human		II Oui	vust populut	ion (c)		
mto numan	resource.					
2. Use <i>ar</i>	ticles where i	necessary. P	ut <i>cross (X)</i> w	here an arti	cle is not	needed:
0.5X10	=5					
Hazrat Om	ar (R) as a kin	nd and just rul	er. He ensure	d (a)	sec	urity of even
			kingdom. He			
			ne out (d)			
			his people.			
			rd (g)	_		
			w that some c			
			d weeping.			
poor mou		_	may be (j) _			
the present	rulers of all c				execuent	example for
the present	ruicis of all c	over the work	1.			
3. Put sui	table <i>preposi</i>	tion in each	blank.			1X5=5
Man's dig	nity denends	s on his act	rivity. As a	social being	he has	to live (a)
)			
			out never be p			
			nember that di			
_	ever hankers a					

4. Complete the following sentence with the phrases or idioms from the list given in the box below: 1X5=5

By fits and starts	At a stretch	Hue and cry	
Far and wide	In a body	On the spur of the moment	
At any cost			

(a) We heard a	there.
(b) His popularity spread	·
(c) Students should not study	·
(d) They agreed to help us	·
(e) We should work	for the country.
5. Change the speech of the following passa	age: 5
The new teacher entered the classroom and s	aid, "Can you tell me what I should do
now?" "No sir," one of the students said. The	teacher smiled and said, "Try to guess"
"You should introduce yourself to us." anoth	ner student said. "Thank you," said the
teacher. "You're really brilliant."	
6. Read the following passage and transfor	rm the sentence as directed in the
brackets. 1X5=5	
(a) Mobile phone is one of the most wo	onderful inventions of modern science
(Positive).	
(b) It has now gained an unavoidable positi	on in our daily affairs (Interrogative).
(c) We use mobile phones to make essentia	l communication (Complex).
(d) It saves both time and energy (Negative	2).
(e) This small device can do a great job (Ex	xclamatory)
7. Add tag questions to the following senter	nces. $1 \times 5 = 5$
a) Practice makes a man perfect,	?
b) Everyone is for everyone,	?
c) She hardly comes here,	?
d) The mother rose in her,	
e) Don't avoid duties	

8.	Comp	$1 \times 5 = 5$	
	a) He could gain success if		
	b) If I were a scientist		
	c) He assured me that		_
	d) Many years have passed since		
	e)	Strike the iron while	<u></u>

9. You know what load-shedding is doing to us. Now, write a paragraph on

'Load-shedding' by answering the following questions:

10

- a) What is load-shedding?
- **b)** What are the causes behind it?
- c) How does it hamper our daily life?
- **d)** What effect does it leave on our economy?
- e) How can we get rid of it?

10. Write the summery of the following passage. Give a suitable title it:-

Self-confidence is an essential quality for every person. It is such a virtue that increases ones mental courage and physical strength. Self-confident person never fail in life. They are never afraid of facing the reality. They can always take the right decision as they are well guided by their high confidence. Lack of confidence weakness one's heart and skills his/her potentiality and skill. He/she losses the hope of life. Hesitation and fear always work in confidence less person. A student who has enough confidence is never afraid of any of his/her subjects. Rather he/she always tries to overcome the problems with courage. As a consequences, he/she gains his expected success.

Appendix-F: Translation and ELT Experts

Translation Experts

1. Sraboni Nasrin

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2. Saira Hossain

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EFL teaching Experts

1. Sadia Afrin

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2. Gul-A-Zannat

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Appendix-G: Letter of Consent

To,

Date: -----